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Subject: He He....I traded Speakerman right out of his undies!!

Posted by [BillEpstein](#) on Mon, 04 Apr 2005 22:39:33 GMT

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He got my pair of 3677's, some horn slot covers, my truck and complete autographed Zampheer collection. But I got his Altec 902-B's with Tangerines. I love Tangerines. Oh and I got some other junk to make up for the loss of my Zampheer's. Oh those 902's. Could be the last piece of the puzzle. They go so much higher than the 806's I can't believe it. And just as the sand-boxes cleaned up the bass which released the potential of the mid-range, the extra extension on top gives a cohesiveness to the sound from top to bottom which blows away single drivers! You think life ends at 13kHz? Think again. I wonder how nice the pan flute would sound now.....

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Subject: Re: He He....I traded Speakerman right out of his undies!!

Posted by [Russellc](#) on Mon, 04 Apr 2005 23:24:40 GMT

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This is the same driver in my current A7s and I couldn't agree with you more. My 902 8b also had loading caps on the back of the diaphragm, which is the good one, not the symbiotic which I also have. Whip off the back covers and see what you see. If it is a shiny aluminum dome and there is felt in the back of the covers, then put them back together. More than likely, unless already removed, you will not see the shiny dome, but a dull plastic dome looking thing. That is the loading cap. Also, there will probably not be felt in the back of the cap. Call Bill at Great Plains Audio and purchase (VERY inexpensive) two felts and six short screws, (3 to each driver) which will replace the existing three screws which will be too long with the loading cap removed. Install the felts and reassemble. Much nicer on the high end, and a little more extension and air. Easily reversible, but you won't want to. This basically converts the 902 8B to a 902 8A. There can be other slight differences on some models, but soundwise you, I'll never tell. Sorry if you already knew all this. Apparently these loading caps closely hugged the back of the aluminum dome, creating a cushion of air to help control the diaphragm at crazy high (not home) volume levels. However, it shaves off a little of the high frequency transients. Enjoy. Great drivers, Russellc

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Subject: Re: He He....I traded Speakerman right out of his undies!!

Posted by [Russellc](#) on Mon, 04 Apr 2005 23:31:56 GMT

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Also, do your 806 drivers have the original diaphragm? It has usually been replaced with the basic aluminum diaphragm, which is the usually preferred one. However, the 806 and I think 807 drivers are slightly shorter in the body than the 802, and has a somewhat smaller magnet. I understand that the original diaphragms for these shorter drivers was "special" (and now made of 100% unobtainium) somewhat less mass. When traded out with the "preferred" aluminum diaphragm, there

was a loss on the high end due to the increased mass.cheers, Russellc

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Subject: You traded your truck?!!.....

Posted by [Wayne Parham](#) on Tue, 05 Apr 2005 07:43:57 GMT

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That's cool, Bill! I've been talking to Iconic/Great Plains Audio about Altec drivers. Now that they are making new production parts, I'm going to give them a try, maybe make an Iconic Series or something. We'll see.

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Subject: Bill's 902's came from GP!!!

Posted by [spkrman57](#) on Tue, 05 Apr 2005 18:18:30 GMT

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Russell, Bill went home with 902's from Bill H/Great Plains. These are new units other than me using them as I am the original purchaser. So these (even though they say 902T on the back are 902B's. Bill had no 902B decals, so I said better to have a wrong one for looks than none at all. The only reason Bill went home with them is because I have a pair of used 902B's with "push-terminals" and Bill sends them with industrial spade lugs that I can't use as I am always swapping out horns and drivers like most folks change underwear. The 806 is a smaller magnet version of the 802 (both having aluminum diaphragms). Putting a symbiotik diaphragm in a 802 becomes a 808, and the same in a 806 becomes a 807. Better power handling, poor HF top end response. There is always a compromise somewhere. All 4 of these models are alnico. The 902 is a ferrite magnet/tangerine phase plug. I just did a unofficial shoot-out with a JBL 2426 and found the 902 superior (to my ears). The 2426 is higher output in the upper midrange, the 902 is better on the upper HF area. Ron

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Subject: But he would not sell me "Muse", the cat!!!

Posted by [spkrman57](#) on Tue, 05 Apr 2005 18:32:39 GMT

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Wayne, If you get the "Iconic" 902's there will be some happy folks out there as long as they stay the way the original 902B's were built. I worry about companies that have lessened in quality to make ends meet. There are companies who are falling by the wayside on a regular basis. And some of those companies are very big. I don't know about the LF drivers you are looking at. Altec's lineup of 416/515 were their bread and butter series, but required large enclosures (416 - 8.5 cu' - tuned to 28hz), and the 515 is even more of a midbass driver. Not a prob if you have a sub underneath. Other topic here. I finally got my 2242H 18" JBL sub-woofer installed in a 8.8 cu' box

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Subject: Re: Bill's 902's came from GP!!!  
Posted by [Wayne Parham](#) on Tue, 05 Apr 2005 18:39:04 GMT  
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Subject: Re: But he would not sell me "Muse", the cat!!!  
Posted by [Wayne Parham](#) on Tue, 05 Apr 2005 19:03:52 GMT  
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see. I'll be interested to check out their compression driver too. Todd seems quite proud of it, and your impressions are promising. I also agree with your concerns about profits and quality. This is true for any of the speaker companies we deal with, of course. I surely hope Iconic Manufacturing can remain competitive, and continue to make a good product with consistent quality control. I don't know anything at all about them, so they may have that all locked up. But if anything frustrates me the most about loudspeaker transducer manufacturers, it's a lack of consistency. If they change products around all the time, then you are always playing catchup and it's no good for product consistency. Some companies have QC problems too, and then you never even know if the part you put in the system will even work. That makes logistics a nightmare, and return freight costs can eat you alive. Not to mention the hassle of it all. But I'm hoping for the best.

Subject: JBL 2426 and Altec 902  
Posted by [spkrman57](#) on Tue, 05 Apr 2005 20:26:33 GMT  
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Wayne, Are you saying that the JBL 2426 makes a better midrange horn than a mid/tweeter horn? Maybe a 1st order crossover might work better on the JBL than the Pi crossover. I know you can't go wrong with a Altec 902 driver, the top end response has a little HF magic in it, even if it only goes to 18Khz. Ron

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Subject: Re: JBL 2426 and Altec 902  
Posted by [Wayne Parham](#) on Tue, 05 Apr 2005 21:15:16 GMT  
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What I'm saying that the JBL 2426 response curve looks like this: That's what it will look like with a first-order crossover too. It's difficult to add compensation to a first-order network because filter crossover, and this is the response you can expect: Response above 4kHz is still reduced, but it forms a shelf that remains pretty flat from there on out.

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Subject: Re: Bill's 902's came from GP!!!  
Posted by [Russellc](#) on Tue, 05 Apr 2005 23:19:56 GMT  
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I'm sure if they came from Bill they have already had the treatment. If not, removal of the caps is an advantage. I hear you about switching drivers, I have at least 5 pairs of various Altec drivers. They are all (within a given format) more or less the same with differences in diaphragms and rear loading, felt or loading cap. And of course the Alnico/ferrite distinction. I have JBL 2425H which I have not tried but I understand from Wayne and others they are pretty much the same as the 2526, seems like I believe there is a slight magnet difference, or at least a few specs varied slightly. Now you've got me wanting to try the JBLs on the A7s... I have a 500 Hz crossover, will the JBLs be okay at home volumes crossed over this low? It's an Altec 2nd order crossover. I've been saving the 2425s and a NOS pair of 2123H and a pair of 2225H for a 7Pi corner horn with midhorn, but never seem to get around to the boxes. I have thought about building some crossovers like you have there, out of more modern parts. Regards, Russellc

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Subject: Re: But he would not sell me "Muse", the cat!!!  
Posted by [Russellc](#) on Tue, 05 Apr 2005 23:46:27 GMT  
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I may be dead wrong, but it was my understanding that the drivers are made by great plains, I'm not sure what the relationship is between great plains and Iconic. When I was first "back" into altec, I learned about Great plains from Todd's altec sight. Iconic started up and was announced on that board, stating they would be supplying repro boxes for some classic Altec, in particular the Model 19. They have been working on crossovers as well. Then came the Iconic drivers, but I don't believe Iconic manufactured them, I always understood it was great plains. Perhaps Iconic is going to be their distributor? As I am sure most of you know, Bill H. was one of the last altec engineers when the doors shut, and he wisely snagged up the tooling for many of the Altec products. Bill H. told me his 1" format driver was basically a 902 8A (for the 8ohm version) So Hopefully, bill's biz will boom. For Altec drivers, it is the replacement diagram to use, both for high frequency as well as replacement cones for low frequency drivers. Regards and enjoy, Russellc

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Subject: Re: That exact mid-horn is on the menu  
Posted by [BillEpstein](#) on Wed, 06 Apr 2005 00:27:20 GMT  
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Deep within the vault (Muse is scratching at it's door) lies a pair of 2123's, an extra pair of 2226's and a set of mid-horn parts. Do I listen to car speakers for 6 weeks and build a double 2226 with 902's or continue listening to the current speakers while building a single woofer 806A based unit. ?????? Muse the Cat

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Subject: Re: But he would not sell me "Muse", the cat!!!  
Posted by [Wayne Parham](#) on Wed, 06 Apr 2005 09:04:56 GMT  
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I'm not sure what relationship Iconic has to Great Plains, but I know that Bill and Todd work together. I don't know if they're essentially two business units of the same bunch, one for parts and repairs and the other for completed speakers, or if they're separate entities. Could be the latter and Iconic simply implements drivers that Great Plains makes or the other way around. Todd has indicated that he works closely with Bill, and that he does more public contact and PR than Bill does. That's pretty much all I know about the nature of their relationship at this point.

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Subject: Re: Bill's 902's came from GP!!!  
Posted by [Wayne Parham](#) on Wed, 06 Apr 2005 09:12:04 GMT  
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The 2425 is a 2426 with the bolt-on to screw-on adapter removed. There is no other difference.

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The 2425 is currently used in JBL loudspeaker systems, where the 2426 is not. JBL currently only makes the 2426 for sale as a raw driver, and they only sell 25 a year. That's amazing to me, since I sell about 10 a year of those, and about 10 a month of the Eminence PSD2002.

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Subject: Re: That exact mid-horn is on the menu  
Posted by [Wayne Parham](#) on Wed, 06 Apr 2005 09:15:19 GMT  
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The glove is a good idea. That way the chunks taken aren't your skin.

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Subject: Re: That exact mid-horn is on the menu  
Posted by [spkrman57](#) on Wed, 06 Apr 2005 09:59:38 GMT  
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Hey Bill, Don't forget to feed "Muse", Hate to see what she would eat if her bowl were empty!!  
LOL "dual 2226" we will have to talk!!!!Ron

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Subject: Then you should be very happy to try out a 902 driver then!  
Posted by [spkrman57](#) on Wed, 06 Apr 2005 19:45:21 GMT  
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Wayne, Now that I see the response graph, I understand what I heard while listening to. Bill E. feel free to chime in on this as you were at my house when we did the quick change up on the drivers. I thought the upper midrange response was high on the 2426 with little top end. When I swapped out the 2426 for the 902, Bill and I both looked at each other and I asked him if the night and day change I heard was the same for him. I believe he agreed with me. The 902 has that upper HF sparkle that the 2426 was missing. The test was done with Pi crossover modded with .68 ufd caps on the PE 1.6khz hi-pass crossover. I hope you get a pair of 902's soon to put a graph on also! Thanks Wayne, Ron

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Subject: Re: WTFDIK  
Posted by [BillEpstein](#) on Wed, 06 Apr 2005 20:07:34 GMT  
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I've become suspicious of the 902. It can't be that good. Seriously, tho, it might be a TAD hi-fi-ish with the .47 cap attenuation. Gonna try the .33 to tone down the upper mid a bit and see. I found the 2426 to be less forward but very well balanced. Ron and I were also A'B'ng round and tractrix horns and I had the galloping Zithromax "pucker" so don't pin too much on this. All the way back to Mansfield I was deathly afraid to fart! Certainly no horn that Sunday was going to sound "constipated"! What's the .68 by-pass cap doing?

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Subject: Re: WTFDIK

Posted by [Wayne Parham](#) on Wed, 06 Apr 2005 22:20:44 GMT

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One thing that is good about the 2426 is that response is a straight diagonal line. That makes a complementary slope possible to provide a flat response curve. There isn't quite enough there with passive EQ, and the collapsing DI of a tractrix or exponential horn doesn't do it either. But both methods increase top octave response, and in any case, it's a nice straight line with well behaved breakup. Other compression drivers with more HF energy sometimes have multiple peaks and valleys. If the dips and peaks aren't too large, then the added energy up high might be worth it. But you can't EQ that kind of behavior away.

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Subject: Re: But he would not sell me "Muse", the cat!!!

Posted by [Russellc](#) on Wed, 06 Apr 2005 23:26:31 GMT

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After again looking at Bill's site, I see thay this is the case. Iconic is going to be the distributor of the drivers that great plaines makes. Russellc

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Subject: Re: That exact mid-horn is on the menu

Posted by [Russellc](#) on Wed, 06 Apr 2005 23:37:01 GMT

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I still need to buy the midhorn kits, so you've gone a step or two further than me, hopefully I will harass some cabinet maker into building my cabs for the Pi 7s this summer. If they just blow me away, I may consider dumping my altec A7s....but they will have to sound way better. who am I fooling I'll keep it all. maybe a larger house? Russellc

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Subject: Re: WTFDIK about attenuation  
Posted by [BillEpstein](#) on Wed, 06 Apr 2005 23:44:57 GMT  
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I was listening tonight to the Szell/Cleveland "Live In Tokyo" Sibelius Second. I always thought it the very best example of a non-audiophile recording as well as one of the Clevelanders best efforts. And Szell died just 3 months later.....Anyhow, it sounded better than ever; more "live", more "dynamic" and all the instruments with breath and tone; downbows and sharp pizzicato attacks. It struck me that perhaps I had struck a better balance between the low and high frequency drivers. On Patricia Barber's "Cafe Blue" I heard brushes on the snares together with the well-known 8 foot apart cymbals that were lost before. And on James Taylor "Hourglass" the skins of the big Tom-toms stretched even further on Gaia. That's not hi-fi detail, that's balance. The Altec Heritage site says that the 902-B is 107dB efficient. I have a 30 Ohm shunt and 60 Ohm series resistor together with the .47 cap. The crossover is 16 ohms but the driver is 8. You want to think the 902-B at coming in at 1200 Hz is overpowering the 2226 but it isn't. Is it?

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Subject: Re: WTFDIK  
Posted by [GM](#) on Thu, 07 Apr 2005 00:01:25 GMT  
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Greetings! They're not too shabby! The 909s are just higher power handling 902s, so.....GM  
909

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Subject: Re: WTFDIK about attenuation  
Posted by [Wayne Parham](#) on Thu, 07 Apr 2005 10:05:50 GMT  
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From what you've said, the 902 is a very nice compression driver. I'm anxious to hear one. As for attenuation, I'd probably use a 10dB or 12dB circuit.

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Subject: Use 4 Pi-pro crossover  
Posted by [spkrman57](#) on Thu, 07 Apr 2005 18:54:19 GMT  
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Bill, Go back to a 8 ohm crossover and use 14 ohm shunt, 30 ohm series and .33 ufd bypass on the 30 ohm resistor. That is what I have currently that you heard. To answer your previous question about the .68 ufd caps bypassing the 8 ufd and 22 ufd caps on the PE 1.6khz hi-pass



crossover. I have been following the Lansing Heritage forum and checking out JBL's research into crossover design and noted that back in the older days JBL has standard crossovers like most everyone else. Then they found out that the larger mylar caps could be improved upon by using low value Metallized Poly Propylene (MPP) caps to bypass the larger caps in the crossover. The larger value caps are less likely to pass the upper HF components by themselves. This might be a minor tweak, but after having the regular Pi crossover for years and now having the "tweaked" crossover with the bypass caps, I think the upper frequency range comes across with more detail and sparkle. Of course this could be my way of justifying the cost of 4 caps at around a buck apiece. I ordered everything for my crossovers from PE. The recommended caps by the JBL guru's were the "Theta" caps, but the price was too much for my wallet, so the Dayton MPP caps were inexpensive enough to try out. I will continue to do this on all my future crossovers as I really think it makes a difference. All I know is that the 902's on the 650hz Edgar saladbowls sound killer to me now. And thanks to JBL for having a 15" driver that is so versatile to use. Just a single coil for the 1.6khz crossover makes life easy. The real fun comes when I get the 2242 18" JBL driver in the system as a sub. I will be using a PE 250 watt plate amp and might even dial in some EQ (swapping resistors on the plate amp). I have come to the conclusion that with the 902/Edgarhorn and Pi crossover (tweaked) that I don't need a tweeter. With the JBL 2426, I highly recommend a tweeter and do away with the HF compensation on the Pi crossover. That's all for now! Ron

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