Subject: Say Wayne; What Do You Mean BY Wood Tweeter Horn?
Posted by Manualblock on Sun, 20 Aug 2006 15:41:01 GMT
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Is this a horn loading a conventional dome tweeter or an actual compression driven HF horn? And what series will the horn be part of? The Pro series?

Subject: Wood tweeter horn
Posted by Wayne Parham on Sun, 20 Aug 2006 17:40:00 GMT
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If you're talking about the wood horn my cabinetmaker is doing, it's a tweeter horn for compression drivers made out of wood. It's the same kind of thing that Martinelli and I worked on a few years back, but the new one has curved top and bottom walls and (nearly) straight side walls - A radial flare. It's 15" wide, 9" tall and 8" deep.

Subject: Re: Wood tweeter horn
Posted by Manualblock on Sun, 20 Aug 2006 20:56:11 GMT
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Is that the HF for the Premium 3PI?

Subject: Re: Wood tweeter horn
Posted by Wayne Parham on Mon, 21 Aug 2006 13:28:24 GMT
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The tweeter horn can be used on any model that uses a compression horn tweeter. That includes

Subject: Give us the "pitch"...
Posted by Greggo on Mon, 21 Aug 2006 23:37:39 GMT
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Wayne,I seem to recall a little more excitement and detail leading up to the launch of certain speaker models, mid horn, and bass horn... I think others would share my enthusiasm in learning more about your plans for this horn tweeter. If you are being careful with competitive issues, that is fine, but if not....1) Good options for high efficiency tweeters seems hard to come by, I recall you will only be selling these as complete horns rather than kits. Is this just the horn or horn plus a driver that you intend to market?2) Tell us a little about what inspired you to come up with something specific here, anything that in your mind makes this offering a bit different from the other options out there?3) Have you done any prototype testing with any specific compression drivers? Plan on recommending the same compression drivers that are part of your kits now or are there others you would recommend for use with this horn?4) What frequency range do you feel is the best fit for your new horn tweeter?5) Price plan/options, if still waiting for details on manufacturing costs, then at least a ballbark or range based on what you know thus far?I think there is a good chance I will be ordering a speaker kit from you soon, and even if I don't, then there is a good chance I will order this tweeter (combo?) horn as part of my own diy project, that is assuming you can convince me (and it normally doesn't take much...) that this is a smoother, more dynamic, and more readily integrated with the directivity at crossover of a mid horn or a 10-12 inch pro woofer/midrange cone driver.Come on Wayne, don't be humble, get us fired up over this latest project of yours!!!Regards,Greg JensenAsheville, NC

Subject: Re: Give us the "pitch"...
Posted by Wayne Parham on Tue, 22 Aug 2006 03:17:29 GMT
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Thanks for the questions - I'm really excited about the tweeter and would love to go on and on about it. But I don't want to get excitement started without being able to follow up. That's why I've had my cards close to my chest.If interested, I'll tell you the story. I could just tell you the technical details, but that doesn't explain things very well. So if you have a minute, read on.Set the clock back about five years when Bill Martinelli and I met. I wanted to have a vendor in the USA that made nice wood radial horns. Yuichi Arai made beautiful radial wood horns, but he was in Japan and I'm not sure they were for sale anyway. Fostex made them and so did TAD, but the prices were high. So I was looking for someone that would make fine wood horns, and Bill Martinelli stepped up to the plate.Bill and I had many discussions over the next few months, and I did a couple dozen Hornresp models to find throats and flares that would work best, with the constraints of what could be made on a lathe. That was the biggest problem really, the fact that the lathe set limits and the throats needed to have certain dimensions. So we quickly kicked out ones that weren't suitable and settled on the best ones. That left the rest of the flare, and I wanted a radial flare with certain area expansion rates.What Bill eventually sent me was very close, but instead of having straight side walls and curved top and bottom walls, it was reversed having curved sides and a straight top and bottom. But its measurements were good and I thought it sounded nice too. So in spite of the fact that the shape was different than what I wanted, I used and recommended them.Eventually, Bill was making all of my speakers for me. Most people bought kits and did their own DIY thing, but those that wanted finished loudspeakers got boxes made by Martinelli. We did that for a few years, and I think everyone enjoyed the arrangement.Fast forward a few years. Bill got busy or whatever and decided he couldn't build cabinets for me anymore. I think he may still build loudspeaker cabinets on occasion, but they're

very expensive. I can understand - It's a lot of work to make loudspeakers, especially when you are meticulous with your work.So that left me to find another cabinetmaker. I eventually settled on Brad Smith because he does excellent work. He had done a lot of custom cabinetry work in some of Tulsa's finest multi-million dollar homes, and his work was outstanding. So I knew I wanted him to do our cabinets from the first time I met him.Brad's first project for me was midhorns, and he quickly developed flat-pack kits that are cut on CNC machines and use Miller dowels for assembly. I was impressed with his resourcefulness and the quality of the flat pack kits. Assembly for DIY builders was much easier than earlier kits and the quality was better too because of the CNC cuts. Since then, he's filled plenty of orders for finished loudspeakers and each one has been a work of art.Last year, Brad and I started talking about the tweeter horns. I told him what I originally wanted and showed him the drawings. We started planning to make them on CNC, hoping to have them ready by GPAF 2006. That was my plan, to unveil them at

subwoofer. I finished the design and preliminary tests late summer / early fall and did the Prosound Shootout in October. I expected it to do well, but it really exceeded my expectations.

and he doesn't have time to do some of the other projects for me that I'd like. Paying customers have to come before new development work.So that brings us up to date. Brad and I talk about the tweeter horn every time we see each other. We make a firm committment to get back to work on them, to clear off time for him to be able to setup the CNC to make the pieces. But then we look at the orders in front of us, and put it off another month.Sometimes I think maybe it's time to

we'll do it again now.I know this, I know that I really want to get moving on the wood tweeter horn

designed and look fabulous on paper, so I'm confident the finished models will be great. I'm very eager to have them both done and ready to show. But until they're ready or at least close, I don't want to publish preliminaries and get excitement started. When I'm sure I'm only a month or two out, I'll post an announcement here.

Posted by pstollie on Tue, 22 Aug 2006 17:43:21 GMT
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Posted by Wayne Parham on Tue, 22 Aug 2006 20:57:48 GMT
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straight-sided 32" long horn having 28"x28" mouth, 7.5"x7.5" throat, 800in3 front chamber and

1200in3 rear chamber. It also has a 10" JBL 2012 or Delta 10 midrange driver on a 16" long straight-sided horn with 18"x18" mouth, 4.5"x4.5" throat, 33in3 front chamber and 80in3 rear chamber. The tweeter is a JBL 2446 2" exit compression driver on a 12" long horn with 18"x18" mouth.

Posted by Matts on Wed, 23 Aug 2006 02:27:00 GMT
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what's the overall efficiency on this? I assume that combining the 12 and the 9 would be too much for the SET's, huh? Can't see them driving that sub...

Posted by Shane on Wed, 23 Aug 2006 02:28:29 GMT
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ALRIGHT!!!! If I knock about 6 walls down in my house they would work perfect in the living room! I've got 10 foot ceilings so they should fit. Pump about 1200 watts into those puppies and BOOM!, really tick the neighbors off.

Posted by Wayne Parham on Wed, 23 Aug 2006 03:43:43 GMT
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Posted by Wayne Parham on Wed, 23 Aug 2006 03:48:53 GMT
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Each horn is about 106dB/W/M. You could drive them with a SET, but I think they're pretty big for home hifi use. I've definitely worked extra hard to make them as high-fidelity as possible though, so I think they're pretty hard to beat. If a guy has the space, they're really excellent speakers, all the right stuff used in all the right ways.

Subject: Re: He who WAF's wast, WAF's best!
Posted by Bill Epstein on Wed, 23 Aug 2006 18:08:12 GMT
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I need a 9Pi!They're going back soon and I've been wondering how to replace the XLH 1812's 'cause the bass definition from the 2241's is just too good to be w/o.But I won't miss their bulk! Maybe building really shallow, wider cabinets to accomodate a direct radiator 2241, a direct 10" whether 2123 or 2012, and the 2442 with a waveguide instead of a horn?That's basically the XLH without the 31"x31" horn.I don't remeber if the 2241 wants 9 or 11 cu ft.?How does 30x42x14 sound?

Subject: Re: He who WAF's wast, WAF's best!
Posted by Wayne Parham on Wed, 23 Aug 2006 19:45:02 GMT
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I really like the JBL 2241 driver. It works well in cabinets from 4.0ft3 to 12.0ft3 tuned to ~32Hz. A JBL 2241 in ten cubic feet tuned to 32Hz provides nice flat response with f3 of 35Hz and f10 of 25Hz.

Subject: Re: Front chamber/Rear chamber???
Posted by Bill Epstein on Wed, 23 Aug 2006 23:52:00 GMT
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Rear chamber encloses the driver but what's the front chamber?

Subject: Re: Front chamber/Rear chamber???
Posted by Wayne Parham on Thu, 24 Aug 2006 00:40:47 GMT
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The front chamber area is the space between the diaphragm and the throat. It is between the driver's cone or dome and the horn's throat baffle plate or phase plug.