Subject: Newbie Question
Posted by Observator on Wed, 29 Aug 2001 11:53:30 GMT
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Hi all,I am just found this site, readed Wayne's white papera tried PiAlign soft. Well, my question is a newbie q:is this Pi-alignement destinated only to a big JBL driversor can also be used for a more conventional drivers ?Is there some rules (based on T/S) determining which spkr is good and which isn't ? Can also Pi-horn be used with a small full-range drivers such as RS 40-1354?Thanks in advance,O'Tor

Subject: Re: Newbie Question
Posted by Wayne Parham on Wed, 29 Aug 2001 20:20:29 GMT
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Pi Alignments are for any type of speaker. They are not for a specific brand or type or characteristic. In fact, the formula describes an alignment that is very, very similar to Davies' 1982 optimal implementation of Thiele/Small analysis.As for usage, it's a general pupose alignment for full range speakers. Other alignments are generally better suited for subwoofers and other specialized applications. PiAligned speakers tend to be fairly small and slightly overdamped. This alignment works very well for woofers used in full range loudspeakers.

Subject: Re: Newbie Question
Posted by Observator on Thu, 30 Aug 2001 05:48:13 GMT
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Hi Wayne,Thank you for your immediate response! I will start asap. I would also ask you for sometechnical details about Pi 40-1354 construction:Entering T/S params to your PiAlign Soft:Vad=0.459 cu ft, Qd = 2.174, and Frd = 56Hzthe PiAlign for BR cab propose:Encl Vol = 0,211, Ideal Fr = 45.65, Ideal Q=2.21.Next there is a Encl Fr=54.28 and Encl Q=2.16,and Port Len = 0.82 and Port Area = 0.31My question is: are those the final values OR I have to do iterate

Subject: Re: Newbie Question
Posted by Wayne Parham on Thu, 30 Aug 2001 12:11:03 GMT

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PiAlign iterates through dozens and perhaps hundreds of values for you. It's suggestions are the end result of hundreds of calculations. After it calculates cabinet volume and port tuning, it is up to you to enter your own dispacement volumes, to reflect how much space is offset by parts inside the cabinet. If need be, you can also sometimes modify box volume a little bit up or down as space permits, using BoxPlot to verify the response curve. Smaller boxes generally offer less bass extension while larger boxes tend to offer more. PiAlign suggestions are generally pretty overdamped, which is pretty forgiving of parameter shift.

Subject: Thanks a lot, Wayne !
Posted by Observator on Thu, 30 Aug 2001 13:45:51 GMT
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