Subject: To Wayne Parham regarding time alignment.
Posted by Mr Vinyl on Wed, 30 Aug 2006 20:52:38 GMT
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Hi Wayne,A couple of times you mentioned the silliness of time alignment in speakers. Being a novice in such matters could you please explain to me, why time alignment is snake oil? I mean it seems to make sense to me.Thanks for your time.

Subject: It's not for me to say but
Posted by wunhuanglo on Wed, 30 Aug 2006 23:32:17 GMT
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think about it - 1150 feet per second or so? and the drivers are out of sync by say 6" (to make the numbers simple)?Then the difference in path length results in one signal arriving 0.5/1150 or 0.4 milliseconds later? Not likely to be noticable even by a bat.And then you get to the really silly part - on what axis are the voice coils equidistant from your ears? Maybe you have to put some paint cans under the couch legs to make sure you're on axis.

Subject: Re: It's not for me to say but
Posted by Bill Martinelli on Wed, 30 Aug 2006 23:37:19 GMT
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People change blue wire for orange wire. At least there is math behind time alignment!

Subject: Re: I think he only wants to hear from Wayne on this.
Posted by Manualblock on Wed, 30 Aug 2006 23:41:55 GMT
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If I read the heading correctly. We had better all quiet down now.

Subject: Re: To Wayne Parham regarding time alignment.
Posted by Wayne Parham on Thu, 31 Aug 2006 00:23:34 GMT
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It's not silly, but it also is impossible. Reactive systems are, by nature, moved in time with respect to resistive systems. The drivers are reactive, the cabinet is reactive and many of the components in the audio stream are reactive. So time alignment is impossible.What is possible, is

other, then they'll sum properly and won't exhibit frequency anomalies. This is possible, and it's desirable.To tell the truth, most good loudspeakers sum true at least on-axis. If they don't, it shows up as a spiked dip in the response curve. But no loudspeakers are actually time aligned through the audio band. Use of the phrase "time aligned" is just sales rhetoric.

Subject: Re: It's not for me to say but
Posted by Wayne Parham on Thu, 31 Aug 2006 00:30:00 GMT
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Bingo. That's part of it. Also think of the phase change in the crossover and in the cabinet, horn, Helmholtz resonator, and so on. There are a lot of places where phase changes and a lot of others where fixed time-offsets occur. You can't correct one with the other 'cause they're not the same thing. A good loudspeaker design comes close, and as long as sound sources are within

the audio band is just not possible, not with current technologies using coils and capacitors and motor-driven loudspeakers.

Subject: Of course I don't mind if you respond.
Posted by Mr Vinyl on Thu, 31 Aug 2006 01:23:44 GMT
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I just directed my question to Wayne because he had brought the subject up in a couple of threads.

Subject: LOL very good.
Posted by Mr Vinyl on Thu, 31 Aug 2006 01:26:00 GMT
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Noticeable by a bat! Funny. Good answer too. I now see why it would be silly. Thanks

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Subject: See, I'm learning already. Thanks. (NT)
Posted by Mr Vinyl on Thu, 31 Aug 2006 01:27:33 GMT
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NT

Subject: Re: Isn't It Funny...
Posted by Manualblock on Thu, 31 Aug 2006 11:25:45 GMT
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How not one of the respondents has mentioned how the DBT was to be set-up or implemented? And no one has offered a rebuttal from some of the very qualified and serious scientists who refute the argument and who study acoustics and post on this site; such as Earl Geddes and others?

Subject: Re: Yep there was a guy who built a turbo-design that could ..
Posted by Manualblock on Thu, 31 Aug 2006 11:28:06 GMT
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by-pass a lot of the issues. They wrote him up in stereophile a few years back. He mortgaged his home to start a business but it became too expensive to produce these speakers.