Subject: Multiple subs and reverb?
Posted by Rapid on Tue, 28 Aug 2007 16:19:10 GMT
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Hi,Multiple subs make the frequency response smoother but does it also reduce the reverb in bass? (don't remember the correct word). I mean, if the Q of the peaks are reduced, the timedomain should decay faster, if it's a linear system?Best regards,Mattias

Subject: Re: Multiple subs and reverb?
Posted by Mike.e on Tue, 28 Aug 2007 20:11:34 GMT
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Do you mean the Q of the ROOM peaks ? Id have to agree with you - Im abit rusty though[Ive been focusing on IT lately]Another important question is, what is audible? Low Q peaks are much more audible than high Q ones - Im not sure if this is the same vs frequency or different.Must be some AES with data on this?I noticed last time I looked it was hard to find info on the

Subject: Re: Multiple subs and reverb?
Posted by Wayne Parham on Thu, 30 Aug 2007 13:33:03 GMT
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There's a thread about this in the Room Acoustics forum, called "Computer Simulation of Room

sum very well. They'll effectively be the same acoustic source. If not, then there will be some lobes that form in the room.The thing is, wall reflections act as sound sources too. Each subwoofer in the room and each (wall, ceiling or floor) reflector acts as a sound source and they

that matter). Interaction between acoustically distant sound sources is nonminimum phase.The only indoor solution that presents itself is dense interference. Use multiple point sources to average the sound field. CARA is room modeling software that can help you find what positions are best to place your subs.

Subject: Re: Multiple subs and reverb?
Posted by Rapid on Sun, 02 Sep 2007 14:47:48 GMT
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Hi,ok, so it's not a minimum phase system. But do multiple subwoofers give faster decay?

Subject: Re: Multiple subs and reverb?
Posted by Wayne Parham on Mon, 03 Sep 2007 04:47:50 GMT
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You can't describe the system with a single group delay figure. Because there are multiple direct and reflected sound sources, some components will be shifted less than one wavelength, some greater. The interaction is complex, and can't be effectively corrected with delay or with electrical EQ. However, the use of several sound sources tends to average the amplitude response throughout the room, making the overall energy distribution more uniform.

Subject: Re: Multiple subs and reverb?
Posted by Duke on Wed, 05 Sep 2007 01:09:45 GMT
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The subjective effect of multiple subwoofers might be interpreted as faster decay, though that wouldn't really be what's going on.Large bass response peaks typically occuring due to room interactions are interpreted by the ear as "fat" or "slow" bass, and the averaging-out effect of multiple displaced low-frequency sources smooths the in-room response significantly. The subjective result is better pitch definition because we can hear the notes in their proper relationship, and we might well interpret that as faster decay.I have some experience in blending subwoofer systems with dipole speakers, and in that application multiple subs works very well. I can go into some detail about why if you'd like.Duke

Subject: When is your multiple subwoofer design coming out?
Posted by akhilesh on Wed, 12 Sep 2007 13:06:01 GMT
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HI Duke,ANy updates on that comng to market?thanks-akhilesh

Subject: Re: When is your multiple subwoofer design coming out?
Posted by Duke on Wed, 12 Sep 2007 17:24:41 GMT
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Hi Akhilesh,I ran into a production problem. A mistake was made in manufacturing the boxes, and that has delayed things.My two beta-testers were happy and want sets, and one will be getting his next week. I did sell one completed set to a customer as I had just enough correct boxes on hand to put together one set.Duke