Subject: How close can you sit to a frontloaded bass horn without compromise?
Posted by Peter Krojgaard on Sun, 30 May 2004 19:39:17 GMT
View Forum Message <> Reply to Message

With the new bass horns I am planning to build, I will be sitting about 9 feet away from the mouth of the bass horns. Will this cause any compromises regarding lack of bass (or any other problems)due to the rather short distance to the horns? (FYI, I will sit much longer away from the mid horns, so this is not the issue:-)I thank you a lot in anticipation and look forward to hear from you!RegardsPeter Krojgaard

Subject: Re: How close can you sit to a frontloaded bass horn without compromise?
Posted by Bill Fitzmaurice on Sun, 30 May 2004 20:46:09 GMT
View Forum Message <> Reply to Message

You can sit in them if you wish. Distance from the source is not a factor. Ever wear headphones? There is a persistent myth out there regarding both listening distance and room size vis-a-vis bass reproduction. The operative word is myth.

Subject: Re: How close can you sit to a frontloaded bass horn without compromise?
Posted by Peter Krojgaard on Mon, 31 May 2004 05:11:05 GMT
View Forum Message <> Reply to Message

Hi Bill,Thanks a lot for your reply! Your answer implies some degress of freedom although I will probably settle on sitting outside the hornes:-).RegardsPeter Krojgaard

Subject: Re: How close can you sit to a frontloaded bass horn without compromise?
Posted by andreas paulsen on Mon, 31 May 2004 06:02:38 GMT
View Forum Message <> Reply to Message

Hi Peter and WayneMyth Or Myth, I have the subjective sensation that the bass is better when i play with the same (Large) loudspeakers in a large room compared to a small one?.CheersAndreas

Subject: Re: How close can you sit to a frontloaded bass horn without compromise?

Posted by andreas paulsen on Mon, 31 May 2004 06:03:27 GMT
View Forum Message <> Reply to Message

Sorry Bill and WayneI meant Bill not Wayne :)Cheersandreas

Subject: Re: How close can you sit to a frontloaded bass horn without compromise?
Posted by Bill Fitzmaurice on Mon, 31 May 2004 11:52:17 GMT
View Forum Message <> Reply to Message

That sensation is not a myth, it's room reinforcement. The response of the speaker doesn't change, but larger room dimensions do allow reinforcing nodes to develop. Those nodes are response peaks over narrow frequency bands, peaks that the ear is very sensitive to. They don't improve bass response, in fact they degrade it from the standpoint of flat response, but they do have the psychoacoustic effect of making the bass seem stronger. Another factor with larger rooms is sheer SPL; with a larger room there is a tendancy to turn things up louder, and that can have a huge effect on the perception of the bass content. To understand why just look at the Fletcher-Munson response curves and see what happens to the response of the human ear/brain to bass at different SPLs. Music program played at 100dB will sound completely different than the same material at 80dB, sounding far stronger in both the bass and the treble even though the relative frequency response is no different; what is different how your auditory system responds to sound at differing levels.

Subject: Re: How close can you sit to a frontloaded bass horn without compromise?
Posted by Mark Seaton on Tue, 08 Jun 2004 14:18:32 GMT
View Forum Message <> Reply to Message

Hi Guys,Another factor people often overlook with large bass horns and speakers in general are where the dimensions place the source relative to boundaries.  Many times someone will have a very deep box which places the mouth as much as 4' from the front wall.  Well friends, the reflection from that boundary places a big null at 70Hz.  Curious how so many say that they can't get that "punch" from big bass horns up close...  Take that box and turn it 90 degrees and fire it along the wall or into the corner and most will change their tune.Just something else to consider.-Mark Seaton