Subject: Subsonic Speakers?

Posted by vhfspeeks on Sat, 15 Apr 2017 07:47:00 GMT

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I was reading up on how subsonics, noises below human hearing, can create emotion. Are there any commercial speakers that use this effect to enhance the audio, or are they all limited to the range of hearing?

Subject: Re: Subsonic Speakers?

Posted by Wayne Parham on Sat, 15 Apr 2017 17:19:12 GMT

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Yes, that's what subwoofers do.

Subject: Re: Subsonic Speakers?

Posted by vhfspeeks on Tue, 18 Apr 2017 11:58:54 GMT

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Wayne Parham wrote on Sat, 15 April 2017 12:19

Yes, that's what subwoofers do.

Not all of them. A lot of the commercial ones are simply deep bass and bottom out at 25hz which is still in human hearing. I was after true infrasonics, 16Hz or below if possible.

Subject: Re: Subsonic Speakers?

Posted by Wayne Parham on Tue, 18 Apr 2017 12:47:12 GMT

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That's true, but the point I was making is that subs radiate the bottom octaves and are what create the tactile vibrations as well as the auditory deep bass.

Subject: Re: Subsonic Speakers?

Posted by Kingfish on Wed, 19 Apr 2017 18:32:31 GMT

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You might have better luck building your own than buying.

http://www.instructables.com/id/Build-an-Infrasonic-Subwoofer/

Using this to help set someone's mood is serious business. You are essentially altering their emotional reality through sound waves. The military has had this capability for decades now. You would do well to keep those facts in mind before setting up a system like this.

Subject: Re: Subsonic Speakers?

Posted by AudioFred on Thu, 20 Apr 2017 13:14:08 GMT

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A subsonic subwoofer is one that produces sounds below 20hz at a meaningful level, typically 100dB or more. Subsonic subwoofers do cause an emotional response that's impossible to describe, but it only happens if there's subsonic information in the source. An example of a traditional subsonic sub design is the Allen Organ SR-1 seismic radiator, with a single 15" driver and four passive radiators. The -3dB point is 14.8hz. The lowest fundamental on a pipe organ is 16hz, which is low C of a 32' pipe. The Allen produces this digitally, and it sounds the same only if the speaker can handle that frequency. Try tuning low C on a cathedral organ, with your ears only a foot from the mouth of the pipe, and tell me it doesn't make your hair stand on end.

https://www.allenorgan.com/www/products/speakers/sr1subwoofers.html

But the champion of subsonic radiators is the Eminent Technology TRW-17. Here's a quote about two of their experimental projects with the TRW-18. "The first project took place in Nelspruit South Africa where we exposed elephants to the infrasound component of a rainstorm at an equivalnet distance of 25Km and the elephants immediately detected the sound. The second project took place in Orlando where we exposed alligators to 19Hz with underwater and airborne sounds independently. Each time we introduced the airborne infrasound the alligators responded by bellowing".

http://www.eminent-tech.com/main.html

So when the asshole with the fartbox-in-the-trunk pulls up next to you at a stoplight, and you have a TRW-18 in your trunk, you can at last retaliate.

Subject: Re: Subsonic Speakers?

Posted by gofar99 on Fri, 21 Apr 2017 02:00:34 GMT

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Hi All, As I recall the Electrovoice 30W (30 inch woofer) was able to get to about 8HZ in an infinite

baffle set up. They were used in a theater I worked at for a while for special effects. BTW the main speakers were Altec VOTs. It made for a great stereo about row 10. I figure a van with a pair of opposing 30Ws and about a kilowatt or so of amp power would destroy anyone who thought their car system was really the ultimate. Of course you ought to exit the van before turning it on. It might crush your chest or at least cause ear bleeds.