Subject: Psychoacoustics: Science of How We Hear
Posted by GoldenOldie on Sat, 25 Nov 2017 22:20:17 GMT
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Psychoacoustics is where the sound is adjusted by the engineer for the individual listener's preference. Since most listeners prefer adjustments outside of the neutral curve, does that eliminate the need for the curve?

Subject: Re: Psychoacoustics: Science of How We Hear
Posted by Wayne Parham on Sun, 26 Nov 2017 04:40:23 GMT
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There's more to psychoacoustics than just the response curve. I think that's one of the more important features though - Consider the Fletcher / Munson loudness curve, for example.

There are also aspects of sound that are measureable but inaudible. Look at phase, for example. Phase shifts are measureable but not audible unless they create an anomaly in the frequency domain. And certain kinds of distortion are much less audible than others too.

Psychoacoustics deals with a lot of aspects. The bottom line is we're trying to create the most natural impression of reality, and to do that, it's important to know what matters most.

Subject: Re: Psychoacoustics: Science of How We Hear
Posted by WorkingWoman2017 on Mon, 27 Nov 2017 01:11:24 GMT
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Thanks for that in-depth explanation. I wondered if there were some engineers around this forum that could really give a good explanation of this. Thanks.

Subject: Re: Psychoacoustics: Science of How We Hear
Posted by Charlie82 on Mon, 27 Nov 2017 07:11:10 GMT
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What a great explanation, Wayne. I hadn't thought of it on so many levels but you're absolutely right. I need to do some more research about this to fully understand all of its complexities.

Subject: Re: Psychoacoustics: Science of How We Hear
Posted by Pique on Fri, 01 Dec 2017 20:13:29 GMT
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This is the first time I'm coming across this word, but having looked it up, I now understand a little more about psychoacoustics. It makes sense that if sound is vibration, then we'd all have different perceptions of it. Thanks for explaining it.