Subject: Sound distortion
Posted by cwemoy on Sun, 04 Jun 2017 07:25:05 GMT
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I'm aware that input noise isn't factored when talking about measurement. Having said this, how is sound distortion measured and what does 1% sound distortion mean? I'm saying this with the understanding that we still have different types of distortion.

Subject: Re: Sound distortion
Posted by Wayne Parham on Sun, 04 Jun 2017 18:18:57 GMT
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Actually, noise is usually factored in when making distortion measurements. One should know the noise floor, and realize that beneath it, harmonics and other distortions are "invisible" to the measurement gear. They are said to be lost "below the noise floor." The term THD+N is total harmonic distortion plus noise.

Subject: Re: Sound distortion
Posted by gofar99 on Sun, 04 Jun 2017 19:13:46 GMT
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I agree, my HP distortion analyzer considers noise as distortion.

Subject: Re: Sound distortion
Posted by drake on Mon, 05 Jun 2017 11:38:11 GMT
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This gets me confused at times. Much as THD comprises of all harmonic distortion products in a measurement, how does it differ from selective harmonic distortion?

Subject: Re: Sound distortion
Posted by Wayne Parham on Mon, 05 Jun 2017 15:36:01 GMT
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Some harmonics are more discordant than others. Odd harmonics sound worse than even harmonics do, and higher harmonics sound more edgy than lower ones. So if you have 5% second harmonic in one environment and 3% fifth harmonic in another, the latter will sound worse even though the percentage of distortion in the first case is higher.