
Subject: Does Volume Matter?

Posted by [Concorde](#) on Tue, 31 Dec 2013 01:42:19 GMT

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Is it true that when the volume is at 5 out of 10, half as loud as it can possibly get, that it's at the optimal level for transmitting sound? I know every system is a bit different, but is that the general rule of thumb?

Subject: Re: Does Volume Matter?

Posted by [gofar99](#) on Tue, 31 Dec 2013 03:20:52 GMT

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Hi, A good question that many assume the answer is like you said. There really is no set standard for what the control is set at in relation to the loudness. First most volume controls are logarithmic not linear. So the mid point on the dial is not 50% of its electrical value. To complicate things.... there are three common places in electronic equipment for volume controls. One is sort of a relative of another though. The volume control (AKA gain) is often just after the stages that have the most gain and most inherent noise. So low settings, say less than 25% rotation of the control will minimize the noise going to the following stages or equipment. The variation of this is placing the volume control at the output of the device such as is done in some line stage preamps. The other main location is at the input of a given piece of equipment. This is valuable if the device can be easily overloaded by strong input signals. The down side is that there is no attenuation of noise. In things I design I usually place the volume control at the input of line stage preamps as they have rather low gain and thus are quiet. I also place the control at the input of power amplifiers for a similar reason. Other designers will often use the alternative locations. There is no right or wrong way. I find that if you pair the power amps I design with the line stage preamps I design that the normal ... comfortable listening level with most speakers will be with the control set in the 25-33% of rotation range. Full power output with normal sources (phono, CD etc) is at about 75% of rotation.

Sorry for the long dissertation but the answer while simple needs explanation.

Subject: Re: Does Volume Matter?

Posted by [Headphones](#) on Sun, 02 Feb 2014 02:40:32 GMT

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I'm not sure, but that is interesting to hear. I have never really thought about it too much. Gofar's explanation is really long, but it makes sense.

Subject: Re: Does Volume Matter?

Posted by [WorkingWoman2017](#) on Sat, 01 Jul 2017 19:07:11 GMT

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Yes, too much volume will damage your hearing. It may not be noticeable at first, but over time you

will start to lose certain ranges of tones. Maybe it's the high tones and maybe it's the low. You should teach your children how to protect their hearing for life!

Subject: Re: Does Volume Matter?

Posted by [Keven](#) on Sat, 08 Jul 2017 18:18:35 GMT

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I have always hear that the louder the music, the more damage it does to your hearing. However, I think that the damage happens over time.

Subject: Re: Does Volume Matter?

Posted by [gofar99](#) on Sat, 08 Jul 2017 18:23:25 GMT

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Hearing loss can be either immediate or upon long term exposure. Impulse noise (like a gun shot) can do the damage immediately. Music (or any sound) over 85 dba is listed as possible hearing damage by numerous standards. (some jurisdictions use 90 dba). This is a level much lower than concert level music and often personal stereo levels. IMO if you want to be able to hear music in future years you need to take precautions now.

Subject: Re: Does Volume Matter?

Posted by [Wayne Parham](#) on Sun, 09 Jul 2017 16:20:28 GMT

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Over and above the important matter of hearing loss, there is another thing to consider which is qualitative and that's dynamic range.

Continuous loud volumes may not be a good thing because of the risk of hearing loss. But the ability to reach high volume levels is important for accurate music reproduction. So a sound system should be able to reach high instantaneous SPL levels.

This is the main reason why I think high-efficiency speakers with high-power handling capacity are much better than low-efficiency speakers. Low-efficiency speakers simply cannot reproduce crescendos and impulses properly. Even when hit with large bursts of power, they transform the electrical signal into heat rather than into motion and ultimately to sound.

It's also why I think that power amplifiers should be at least ten watts even with very high-efficiency speakers. Even if a loudspeaker were 100% efficient, there are plenty of things that require more than an acoustic watt to reproduce. Most speakers need at least a hundred watts input power to generate an acoustic watt, and many speakers cannot even reproduce one acoustic watt, no matter how much power you throw at them. An acoustic watt is 120dB over the

So while I would agree that continuous loud volume levels are probably not desirable, I also think that the ability to reach high volume levels is important. That's what dynamic range is - the ability to play a wide range of soft and loud sounds - and it should be done effortlessly and without distortion.

Subject: Re: Does Volume Matter?

Posted by [GoldenOldie](#) on Sun, 09 Jul 2017 23:51:24 GMT

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I agree with WorkingWoman2017. Listening loud is really the way I like it, however, in my recent years my hearing has suffered. When I was young, I made the windows in my car vibrate but no longer.

Subject: Re: Does Volume Matter?

Posted by [johnnycamp5](#) on Mon, 10 Jul 2017 20:35:43 GMT

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I agree with Wayne 100% in respect to dynamic range (high sensitivity) in loudspeakers.

But I also believe you can enjoy loud music in moderation, without hearing damage, when the content itself is dynamic.

In other words, music content that was not "crushed" with dynamic range compression while being mixed by the mixing/mastering engineer. Those types of recordings can start to hurt your ears before you even get very loud.

Code word for something having been crushed down dynamically will sometimes be called "remastered", although some remastered material is done well.

I own a plethora of Elvis live concert events on DVD and bluray, and all but one boast of having been "remastered", with a purchase price to match.

Ironically, the most "dynamic" of Elvis dvds I own is an older (not remastered) Disc called "The lost Performances".
It cost me \$6.00.

If you like more classic rock or metal, a couple of albums that come to my mind right now , that are dynamic as hell, are Tom Petty's "Wildflowers" or Rage Against Against the Machine "Rage Against the Machine".

Metallicas "Death Magnetic" is an example of massive dynamic range compression. Please do not

play this loud! Your ears will beg forgiveness lol!

This site is a good source for finding dynamic music recordings, and/or avoiding compressed content-

<http://dr.loudness-war.info/>

Subject: Re: Does Volume Matter?

Posted by [drake](#) on Wed, 12 Jul 2017 14:46:29 GMT

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Interesting discussion and I think I'm more alive to the fact hearing loss doesn't have to be immediate. In this case then, are there convenient apps that you can use to measure noise levels?
