

Starting in the 1990's, a new trend in music mastering began to manifest itself, one which would go on to have a significant effect on the audio quality of music recorded throughout that decade and the next. It had to do with what is called 'loudness', or the apparent volume of a record in relation to a specific reference level. Back in the days of analog recording, how loud a band or musician could be recorded was often limited by the sensitivity of equipment and the medium being used. For example, on a vinyl record if the bass was too loud it could actually force the needle to jump out of the groove. Once the compact disc appeared on the scene and digital recording began to infiltrate more and more studios, these previous limits were lifted and engineers and producers were free to experiment with sound levels as they saw fit.

What ended up happening was a minor revolution in the way producers approached the dynamics and volume of their recordings. Gradually throughout the course of the 90's, records began to get louder and louder. What this means is that the average peak value, in relation to the digital full scale (which is the ceiling above which a digital recorder cannot go), became higher and higher. While in the past there had been a clear separation between the louder sections of a track and the quieter sections, it was now fashionable for those softer parts to be amplified so that they were almost as loud as the heaviest guitars or biggest cymbal crashes. Generally, this was performed using increasing levels of compression, which reduces the difference between loud and soft in an audio signal.

Why did this happen? There are a number of theories as to what caused engineers, artists and producers to become obsessed with producing the loudest albums and singles possible. One is that record executives have bought into the idea that a louder song is easier to hear in a crowded room or busy bar, meaning that whoever has the loudest song in the jukebox or on MTV gets the most attention. Since these same executives are more concerned with record sales than audio quality, they see no reason to back down from the volume escalation that continues to this day. Some people also feel that a louder CD sounds 'hotter', more in your face, and more lively.

The effect of all of this increased compression and loudness in modern music is twofold. First of all, it has essentially taken the control of the volume knob out of the hands of the listener. Even if one turns down a track that has been mastered for maximum loudness, the level of the music stays the same and the monotonous characteristics of the track eventually cause ear fatigue. This ultimately means that the music in question can't be listened to repeatedly without taking a break. The second issue is that due to the extreme compression and the focus on loudness, much of modern music has lost its sense of dynamics. When all aspects of a song are equally loud, it becomes more difficult to attach significance or emotion to a particular crescendo or build, as it's just more of the same. This mixing style has effectively removed one of a musician's most effect tools from their repertoire – the ability to contrast different volume levels within the same piece of music.

So far, no one is backing down, especially when it comes to the genres of pop, rock and hip hop. Despite audiophile complaints, and a general acknowledgement that the music being produced does not sound its best, the loudness war continues unabated and unashamed.