

Auro Technologies and Galaxy Studios introduce a groundbreaking audio format that deals with all current as well as future speed, quality and compatibility issues

WE CRACKED THE CODE!

What does this mean and how could it affect you?

Due to bandwidth limitations, Surround formats use codecs (data compressors like mp3, iTunes AAC, Dolby AC3 for DVD) that reduce audio file sizes by 6 to 12 times in order to make them more manageable. Unfortunately, what are commonly referred to as *lossy codecs* remove significant sound information in the compression process that cannot be restored when the signal is played back. Moreover, masking effects used in these techniques produce audible distortion that results in listener fatigue. Clever marketing has convinced the consumer that listening to sound processed in this way is normal and free of side effects.

Because of widespread misinformation, people do not realize that they are listening to incomplete sound.

Few are aware that tests designed to sell the quality of lossy codecs often use flawed methods. Researchers collect data using imprecise measurements with relation to conscious brain activity and ignore the importance of the subconscious.

Neurologists claim that after periods of longer than 20 minutes listeners experience noticeable stress due to the brain's struggle to reconstruct the missing parts of compressed audio. This leads to the conclusion that listening to natural, uncompressed sound is more enjoyable because it simply sounds better.

Lossless codecs (unlike their lossy counterparts) can deliver this authentic reproduction quality but have their limitations. Although they feature uncompressed sound, these codecs are technically unsatisfactory as their compression ratio can never be higher than a factor of 2. This does not allow for the bandwidth reduction necessary to accommodate multi-channel formats in uncompressed PCM quality (original recorded sound).

Regardless of whether these codecs are lossy or lossless, you also need the related data compressor decoder to hear an encoded signal. In this way, poor compression schemes and issues of incompatibility have prevented the advancement of sound reproduction technology. Since there is no standard, a confusing array of incompatible codecs is driving the market back to uncompressed PCM.

The fact that today's audiences expect a combination of convenience, quality and deeper immersion in audio poses further challenges. These demands are at odds with current limitations. The call for higher audio resolution and realism beyond 5.1 Surround appears to have reached an impasse in the industry.

Any next-generation format would have to overcome multiple issues if it were to gain widespread acceptance. Given the requirements implicit in managing the size and quality of an increased number of audio channels, all foreseeable solutions would require an even lossier codec compared to those now available.

With **Auro-3D** we've quite literally *cracked the code* in order to bring you the next step in audio quality, convenience and immersion.

Auro Technologies and **Galaxy Studios** introduce a groundbreaking audio format that deals with all current as well as future speed, quality and compatibility issues. Thanks to the Auro-codec, you can enjoy audio files in either an original Stereo or Surround mix while remaining in the uncompressed standard of PCM. This means no problems of compatibility or the degradation associated with compression. These qualities make the Auro-3D Octopus Codec's rich, lossless audio and unique compression technology nothing short of revolutionary.

Equally remarkable is that this entire process operates within the PCM domain, allowing PCM Stereo or Surround sound playback without the use of a decoder. In order to hear an original Auro-3D 9.1 mix, the user need only have the recommended speaker arrangement and hardware equipped with the Auro-3D codec. The Auro-data is conveniently hidden in the PCM stream making access to native and enhanced Mono, Stereo, Surround as well as Aurophony (sound in 3D) virtually hassle-free. It's that simple.

Welcome to Auro-3D, a magical new sound experience.

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