

DTS Technology for PC Entertainment

DTS Premium Suite™: Ignite Your Senses!

In recent years, consumers and manufacturers alike have focused on transforming the PC into a true entertainment device. No longer is the PC just for creating documents or graphs and presentations, instead, the PC is mainly being used to watch videos, listen to music, play games, and chat online. DTS provides the enhanced audio experience that is integral to this engaged interaction.



DTS Premium Suite is the ultimate technology suite for today's PC to home theater entertainment. A PC with this logo is packed with a host of audio technologies from 7.1 channel lossless audio decoding to high quality surround from stereo

sources, maximizing the current PC potential*.

DTS Premium Suite includes:

- DTS-HD Master Audio™
- DTS Connect™
- DTS Surround Sensation | UltraPC™
- DTS Symmetry™
- DTS Boost™

DTS-HD Master Audio™

Identical To The Studio Master

For the best in class audio decoder, there is no other choice but DTS-HD Master Audio. Blu-ray Disc™ movies and music with DTS-HD Master Audio can deliver audio so pure and clear it is identical to the studio master – up to 7.1 channels of discrete lossless audio – giving consumers the ultimate audio experience on their PC.

DTS Connect™

Expand Your PC Audio Experience

To get the most out of your audio entertainment no matter what format or quality it is, DTS Connect is your answer by combining two enabling technologies. DTS Neo:PC™ upmixes stereo sources (CDs, MP3s, WMAs, Internet radio) into as many as 7.1 channels of incredible surround sound. Consumers can then connect their PC to a home theater system



using a digital audio connection (S/PDIF) where DTS Interactive passes thru the DTS audio bit streams.

DTS Surround Sensation | UltraPC™

Elevate Your PC Experience

DTS Surround Sensation | UltraPC enables the entertainment enthusiast who wants to experience the world of surround sound but is confined to stereo speakers or headphones, to experience sound that is more immersive and spacious than they may have thought was possible for a PC. DTS Surround Sensation | UltraPC is a combination of these technologies:

- DTS Surround Sensation | Speaker™
- DTS Surround Sensation | Headphone™
- DTS Neo:PC™
- DTS Boost™

Through post-processing of significant psycho-acoustic information that alters human perception, DTS Surround Sensation | UltraPC is able to make one believe that sounds are actually occurring outside the boundaries of the two-speaker/headphone system through a complex response function known as Head-Related Transfer Function (HRTF), which is essential to our spatial awareness.

DTS utilizes proprietary Voice Clarification Technology, Bass Enhancement Technology, and Sound Stage Expansion Technology along with HRTF processing

to create a truly immersive and enjoyable virtual surround experience that is immediate and dramatic.

DTS Symmetry™

Balanced Volume Levels

Consumers finally have in their hands the capability to automate and achieve balance in overall loudness level. Research shows that if available, consumers want to set a preferred loudness level so there is no change in volume between different programs, input sources, or while playing back from the same device. DTS Symmetry offers this solution by constantly monitoring and balancing the level differences between all types of digital audio formats – from low bit-rate MP3 files and streaming audio to high-resolution lossless audio on Blu-ray Discs.

DTS Boost™

Maximize Acoustic Power

Consumer research studies show undeniable proof that consumers wish their laptop PCs could sound louder. The solution is DTS Boost, a post-processing technology that enables audio systems to deliver a much bigger sound without additional hardware costs. The music comes through loud and clear, true to the artists' original intent. Consumers and manufacturers alike now have at their fingertips the ability to truly maximize the acoustic power of their PC systems.

DTS Premium Suite II™

DTS steps up the game in its unparalleled audio offering to Personal Computers in 2011. Coming soon to a PC near you is a whole new level of technologies that will enhance the way you engage with your computers.

DTS Premium Suite II enables exciting interactions with your Personal Computer by combining input and output technologies. Complementing our first-generation DTS Premium Suite technology, OEMs can now design into their next generation platforms:

- DTS Clear Voice™
- DTS Clear Audio™
- DTS Audio Restoration™
- DTS Enhance™

DTS Clear Voice™

As a high performance, low latency microphone array processing technology, DTS Clear Voice enhances the voice communication experience on the PC. It enables clear speech capture in noisy environments with proprietary algorithms:

- Noise Suppression Technology
- Acoustic Echo Suppression Technology
- Beam Forming Technology

DTS Clear Voice suppresses audio feedback from local loudspeakers. It additionally rejects contribution from undesired ambient noises resulting in a sharper and clearer vocal input into the computer and therefore, crisper and clearer output to the receiving computer. This enables an improved video chat experience similar to what consumers are used to with mobile phones.

DTS Clear Audio™

An environment noise compensation technology, DTS Clear Audio intelligently increases the gain at specific frequencies to counterbalance the undesired noise. It automatically adjusts when and where the correction is needed in the time and frequency domain. For example, if you're watching a movie on your laptop with DTS Clear Audio turned on in an airport and the ambient noise around you increases, your computer will automatically amplify only those audio elements that would have become inaudible. Then when the ambient noise goes away, your computer will automatically readjust its audio response back to your original setting.

DTS Audio Restoration™

DTS Audio Restoration is an adaptive dynamic enhancement technology that can intelligently analyze the audio signals for restoration of compressed or "re-mastered" percussion and transient sounds. Much of today's digital music is treated with aggressive dynamic range compression, cutting out the natural accents present in the original recordings. This results in muddy sound which undermines the artists' original intent. DTS Audio Restoration, however, brings back the lost punch and clarity of the percussion instruments, breathing life back into the music.



DTS Enhance™

DTS Enhance intelligently augments low and high frequencies to maintain the desired timbre balance and brightness of vocal and musical tones. For low-bit-rate encoded audio material such as MP3, streaming audio, and internet TV, DTS Enhance automatically provides bandwidth extension to restore missing high-frequency audio components.

All of these technologies together bring an unparalleled high definition audio experience to the PC. For more information on licensing DTS Premium Suite, DTS Premium Suite II, and DTS Surround Sensation | UltraPC, please contact: LicensingAdministration@dts.com.

**Ability to playback audio in multiple channels depends on the outputs of the user's PC and the user's specific speaker configuration.*