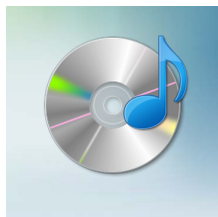


16 November 2007

By: Marius Oiaga, Technology News Editor

Windows Vista Sounds
Microsoft

[Windows Vista and Digital Microphone Arrays](#)

[Access information related to Vista optimized microphone array geometries](#)

The evolution from Windows XP to Windows Vista is a multifaceted growth that involves a variety of aspects, and the audio experience offered by the operating system was not ignored. Vista brings to the table superior audio quality and fidelity, and nowhere is this more evident than when it comes down to recordings performed via the platform. Vista enables users to benefit from the advantages synonymous with microphone array technology, and Richard Fricks, Program Manager, Windows Sound Team, revealed that digital microphones are simply tailored for the latest Windows client. Fricks explained that single-chip digital microphones are virtually immune to RF interference in comparison to multi-chip or analog products. On top of this characteristic, single-chip devices are designed to integrate into microphone-arrays. "Another advantage of the digital microphone is the flexibility it provides in placement. A good place to position a microphone is in the screen's bezel. However, this is also a location where there is a lot of RF noise. With its excellent immunity to such interference, the digital microphone can easily be placed in this area where it is not only less susceptible to keyboard, hard-drive and other physical noises, but also allows for a position that is more directly aligned with the talker's voice", Fricks added. Vista is optimized in accordance with two and four microphone array geometries. The two elements arrangements involve microphone placement at distances of 100 mm and 200mm apart. Similarly, four elements arrays come in various geometries in accordance to distance and positioning. Fricks has in fact managed to offer a complete description of the Vista microphone array geometries accessible via this link. "If you are shopping for a computer equipped with a microphone array for use with Windows Vista, you need to keep in mind the various microphone array geometries that are supported. The array geometry refers to the number, type, and position of the microphones. The microphone array technology on Windows Vista was carefully tuned to provide the highest level of support for two and four microphone array geometries", Fricks said.