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Press Release

Sony Launches “Gaming Virtualizer by 360 Reality Audio” - a plug-in software for game developers that enables easy production of spatial game sound played via headphones

Collaborating with various game developers to implement in mobile and PC games



Gaming Virtualizer by 360 Reality Audio

Hong Kong, August 19, 2024 – Sony announced the launch of “Gaming Virtualizer by 360 Reality Audio,” a plug-in software for game developers that enables easy production of spatial game sound that can be played via headphones. This software plugs into Wwise® (Audiokinetic Inc.), an integrated cross-platform audio middleware used by game developers around the world for developing games for a variety of platforms. This enables the creation of natural spatial game sound for listening with headphones with low load, low latency.

Recently, the number of 3D games that support spatial sound has increased, and they are being developed for various platforms such as mobile and PC. Alongside this, more gamers are preferring to use headphones to game and there is a demand not only for multi-channel speakers, but also enable gamers to enjoy spatial game sound using headphones. In response to these changes in game development and play styles, Sony has introduced “Gaming Virtualizer by 360 Reality Audio,” which makes it possible to create spatial game sounds that can be played through headphones, leveraging the 360 spatial sound technology cultivated through the development of “360 Reality Audio,” an immersive music experience. By developing games using this software, it is possible to realize an immersive gaming experience using headphones in mobile and PC games.

Main Features

1. Newly designed signal processing for game sound utilizing 360 Reality Audio’s technology

Signal processing for playback of spatial sound via headphones in 3D games and other games requires the high processing power of the game hardware. “Gaming Virtualizer by 360 Reality Audio” enables optimized and efficient signal processing and reduces the load on the hardware. This allows gamers to enjoy immersive, spatial game sound using headphones even on devices with limited processing power, such as mobile devices.

In addition, by utilizing the spatial sound technology and know-how cultivated through 360 Reality Audio, “Gaming Virtualizer by 360 Reality Audio” achieves a low-latency, natural, spatial sound field.

Thanks to its excellent sound positioning, it is easy to understand the position of sounds coming from above or behind in the game. Plus, processing with little phase interference moves surrounding sounds smoothly when the player's viewpoint moves significantly.

2. Integration with Wwise, the audio middleware used in many game development projects

“Gaming Virtualizer by 360 Reality Audio” was developed with the cooperation by Audiokinetic, and is used as a plug-in for “Wwise,” the audio middleware. “Wwise” is used by game developers globally to develop games for multiple platforms.

Utilising the plug-in “Wwise” eliminates the need to adjust sound design for mobile and PC games separately and improves game development efficiency. Additionally, rather than adjusting all sounds in the game at once to create a spatial sound field, you can separate the sounds and adjust them individually. For example, sounds that you want to clearly locate, such as people's voices and sound effects, can be spatialized using this software, while sounds that are not coming from a specific location, such as environmental sounds, can be processed in another way. It is now possible to create game sounds design that match each sound, allowing for greater freedom in spatial expression that more precisely reflects the game creator's intentions.

3. Validation from games developers

“Gaming Virtualizer by 360 Reality Audio” is currently being validated by various game developers in Japan, the United States, the United Kingdom, and China to implement into their games.

Main game developers¹ validating “Gaming Virtualizer by 360 Reality Audio”:

COLOPL, Inc. / Cygames, Inc. / Frontier Developments plc / GungHo Online Entertainment, Inc. / Niantic, Inc. / Respawn Entertainment, LLC / SQUARE ENIX CO., LTD.

Additionally, in the adventure game “PRINCIPLES PROLOGUE” by COLOPL, Inc., the new sound design was created by implementing this software which allows gamers to experience a realistic, spatial sound field, for example footsteps, sounds leaking from exposed electrical circuits, reverberations within caves and more.



“With the introduction of ‘Gaming Virtualizer by 360 Reality Audio’, the sense of positioning of the sound image has been improved, and changes in sound positioning can now be felt with less discomfort even when moving the viewpoint, etc.” said Taiki Watanabe, Audio Programmer of COLOPL, Inc. “It can be easily introduced into development environments that use the game engines “Unity” and “Wwise,” and another great feature is that it has a processing load that allows it to be used without any problems in mobile games.”

“We are confident that by incorporating spatial sound into games, we can achieve a richer, more realistic sound expression.” said Keigo Ozaki, Senior Sound Creator of GungHo Online Entertainment, Inc. “Because the ‘Gaming Virtualizer by 360 Reality Audio’ technology does not depend on a specific equipment environment like a surround system, we believe that it will become a service that can be enjoyed by a wide range of people.”

“There aren’t many users who own devices that output spatial sound through actual speakers, making it difficult to deliver a meticulously crafted audio experience to a large number of people.” said Ryoji Makimura, Acoustic Research Laboratory Manager of Cygames, Inc. “If we can deliver highly realistic spatial sound via headphones, regardless of platform, we believe a wider audience could enjoy the full experience, and that is why we validate this software.”

Main Specifications

For main specifications and further details, please visit the website below.

[360 Reality Audio developer site](#)

For customer enquiries, please contact Sony hotline service at (852) 2833-5129.

About Hong Kong Marketing Company

Hong Kong Marketing Company (HKMC), a division of Sony Corporation of Hong Kong Limited, provides sales, marketing and after sales services for Sony's consumer electronics products as well as broadcast and professional products in Hong Kong and Macau. For more information on Sony's products and services, please visit our website at <http://www.sony.com.hk>.

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¹ As of August 2024. Alphabetical order.