Listening just got a new meaning

OZO Playback brings an ultimate listening experience for mobile devices. **Playback Panorama for loudspeakers** surrounds the listener with sound when any type of audio content is played back through the device's stereo speakers. It expands the stereo image in music, videos and game audio in such a way that it appears to surround the listener at a much wider angle than the space between the physical locations of the device speakers, while keeping the vocals and the dialogue clear. Bass can be boosted at frequencies that that seem impossible for most small devices.

When plugging in headphones, **Playback Panorama for headphones** processing ensures that the listener is surrounded with sound. Music, videos and games sound bigger, wider and clearer thanks to advanced algorithms that adjust the spectrum for the ears, providing an optimal and pleasant headphone listening experience.

When paired with OZO Audio, OZO Playback can result in a sonic experience that defies all expectations in device audio.

Benefits

Makes the device sound big

Playback Panorama offers the best quality for listening to any stereo audio content with the integrated stereo speakers on the device.

Get immersed with audio

After being surrounded by the rich audio playback, playing games or watching movies will never be the same anymore.

Optimized for all types of content

Different processing modes can be tuned, for example for music and movie consumption.

Complements OZO Audio capture solution

Content captured with OZO Audio-processed soundtracks sound stunning with OZO Playback.

Tuned for optimal quality

The enhancement is carefully tuned for each product for reproducing the details of the stereo mixing and the sound spectrum of the playback content.

Loud and clear

Bass enhancement and dynamic range control maximizes the loudness of the speaker playback, enabling the best possible performance also in noisy conditions.

Features and formats

Product integration and support

Playback Panorama for loudspeakers can be tuned flexibly to both symmetric and asymmetric speaker positioning

- Symmetric speakers enable optimal stereo quality
- Asymmetric speakers can be tuned to overcome the limitations set by the differences between the speakers and their positioning (for example, using of front-firing earpiece speaker and side-firing bottom speaker)

Playback Panorama for headphones introduces adaptive spatial audio processing that is done in the device (e.g. smartphone)

- Tuned to provide optimal audio quality and listening comfort for any audio content while reducing the listening fatigue
- Processing adapts to audio content

Android (ARM) audio processing SW library implementation with API specification and documentation for easy integration

Integration documentation, example code about the library API usage

Guidelines for optimal speaker selection and integration

ISO 9001 certified quality-management system

Audio quality assurance support

Playback Panorama

Audio input

PCM stereo/2-channel audio, floating point format, 44.1 and 48 kHz

Processing

High-quality audio processing, optimized for preserving the stereo quality, spectrum, and loudness during the playback

Runs on ARM application processor

Support for multiple listening modes

Output

PCM stereo/2-channel audio, floating point format, 44.1 and 48 kHz

High-quality playback taking the best out of the stereo speakers on the device

Individual tuning optimized for each device characteristics