Technology Overview

QSurround®Mobile

surround virtualization engine



About QSurround®

QSurround is a well-established QSound Labs technology that renders multi-channel surround audio with maximum spatial impact over stereo headphones, stereo speakers and multi-speaker surround systems.

QSurround has been implemented in a broad range of consumer entertainment devices including computer sound cards, notebook computers, DVD players, televisions, portable stereos and home theatre systems from manufacturers such as AIWA, Philips, RCA, Sharp, Sanyo and Toshiba.

QSurround® Mobile Feature Set

QSurround Mobile delivers QSurround functionality with a feature set and footprint optimized for mobile platforms in a variety of flexible stand-alone and integrated configurations.

QSurround Mobile handles discrete multi-channel surround, with target-specific processing for earphones, narrow and wide geometry (mobile vs. docked) speaker systems.

QSurround Mobile maximizes the sonic potential of Mobile TV formats such as DVB-H, T-DMB and ISDB-T as well as downloaded DVD content.

Surround & Mobile Platforms

The availability of multi-channel surround audio for mobile television broadcast and downloadable movies is on the rise. The introduction of new stereo-compatible multi-channel surround formats for digital networks will only accelerate this trend.

Yet the devices receiving this multi-channel content are typically limited by their very nature to two-channel output. To benefit from multi-channel audio, these mobile devices must decode the extra channels of information, then combine ("down-mix") those channels using a process known as surround virtualization. This produces a two-channel output that retains surround sound spatiality re-encoded in the form of psychoacoustic cues.

Given the limitations and multi-function nature of the mobile platform, a reliable, field-proven, compact and low-overhead process is required.



The QSurround Mobile Competitive Edge

- Virtualises 5.1 decoded surround material as well as stereo and mono audio
- Unparalleled efficiency for low resource consumption
- Small memory footprint
- Supports earphones and narrow or wide geometry speaker systems



QSurround Mobile Transforms Your Audio Experience

Conceptual illustration of QSurround Mobile surround virtualization over headphones. Audio is experienced as coming from virtual speakers outside the head.



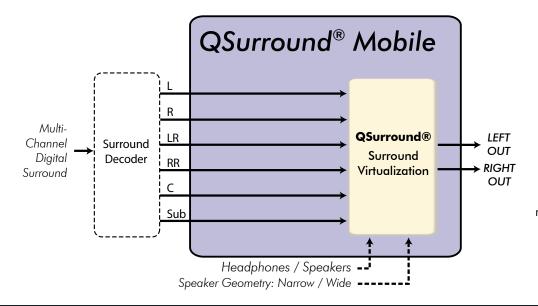


QSurround Audio Experience





Ordinary Audio Listening



Platforms and Implementations

QSurround Mobile can be implemented at various system levels, e.g. within a driver, as a plug-in, or as a user application.

QSurround Mobile can be provided in the form of object code, or custom ported by QSound Labs to suit your specifications.













QSurround Mobile Applications



Media Players



Docking

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