Mobile Phones   **Music Players**   **Earphones**   **UMPCs**   **Docking Stations**

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™ Features

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 Sound & Mobile Platforms

As the availability of multi-channel surround audio for mobile television broadcast and downloadable movies rapidly increases, the demand for technologies capable of delivering enhanced audio content on mobile devices continues to rise correspondingly. The introduction of new high-capacity network technologies and new stereo-compatible multi-channel surround formats for digital networks will only accelerate this trend.

Yet, mobile devices receiving this newly available multi-channel content are typically limited by their very nature, to two-channel output. To benefit from multi-channel audio, these devices must decode the extra channels of information, then "down-mix" those channels using a process known as surround virtualization.

QSurround Mobile offers a reliable, field-proven, compact, low-overhead audio technology for producing two-channel output that retains surround sound spatiality re-encoded in the form of psychoacoustic cues for a rich, immersive mobile audio experience.

The QSurround Mobile Competitive Edge

- *Virtualises 5.1 decoded surround content 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*

QSoundLabs   *Leaders in Digital Audio Innovation*

QSurround Mobile Transforms Your Audio Experience

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

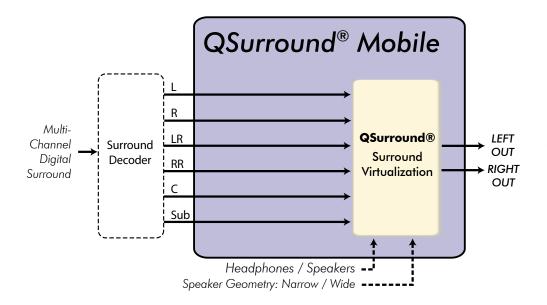**QSurround Audio Experience**

Ordinary Audio Listening

Platforms and Implementations

QSound's **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 also be provided in the form of object code, or custom ported by QSound Labs to suit your required specifications.

QSurround Mobile is optimized for ARM® processors including ARM7™ / ARM9™ / ARM11™ / ARM Cortex™ with ARM Neon™ extensions.

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QSurround® Mobile

Multi-Channel Digital Surround → Surround Decoder

L
R
LR
RR
C
Sub

→ **QSurround®** Surround Virtualization →

LEFT OUT
RIGHT OUT

Headphones / Speakers
Speaker Geometry: Narrow / Wide