



Mobile Phones



Music Players



Earphones



Speakers



Car Systems

About QSound[®] Bluetooth[®] Audio

In today's consumer environment, wireless means flexibility, freedom and mobility - no cables, no clutter, no hassles. Whether wired or not, consumers expect excellent performance and quality. QSound and CSR deliver exactly that - top quality Bluetooth wireless capability. CSR's BlueCore3/5-Multimedia single chip radio and baseband IC enhanced with QSound's leading audio technologies surpass consumer expectations with an impressively detailed audio experience.

QSound Bluetooth Audio is a compact, high-performance digital audio processing software solution drawn from QSound Labs' ground-breaking 3D spatial algorithms. This technology represents the culmination of over 20 years of PC host and DSP audio software development and product deployment by QSound Labs, Inc., a world leader in sonic innovation.



Feature Set Description

The QSound Bluetooth audio suite enhances the listening experience with:

- **QXpander[®]** earphone/speaker 3D sound stage expansion.
- **QSizzle[™]** active mid/high-frequency spectral enhancement.
- **QRumble[™]** active low-frequency spectral enhancement.
- **QEQ[™]** static multi-band equalization.
- **QLimiter[™]** anti-saturation dynamic range control.

QXpander[®]

QSound's proprietary QXpander 3D spatial processing literally adds new dimensions to music playback, expanding the sound stage beyond the physical limitations of speaker locations, and enlarging the acoustic image outside the listener's head when using headphones. QXpander employs purpose-specific algorithms for maximum spatial impact on headphones or speakers. Speaker-targeted 3D processing is optimized for narrow speaker geometries and can be OEM-tuned for peak performance on front, rear, or side-firing speaker configurations.



**QSound Labs, Inc., Partner
CSR eXtension Program**

The QSound Competitive Edge

- Top quality audio enhancement algorithms for stereo headphones, speakers / docking stations
- Industry's best performance:
 - Lowest memory and MIPS
 - Ultra low system overhead
 - Minimal effect on headset playback times
 - Tunable for all narrow geometry speaker configurations
- Proven track record and established brand recognition



Feature Set Description continued

QSizzle™

An adaptive mid to high-frequency spectral enhancement, selectively adding upper spectrum energy according to the real time characteristics of the input signal. QSizzle restores a natural sounding sonic punch to highly compressed audio formats like MP3 resulting in lively, sparkling highs without the harsh side-effects of simple frequency boosters.

QRumble™

The low-frequency counterpart to QSizzle, QRumble also adds energy selectively, bringing substance and warmth to the low end of the spectrum without overloading on loud passages.

QEQ™

Multi-band equalization for custom shaping frequency response with presets of Classical, Jazz, Rock and Pop.

QLimiter™

A high-efficiency, anti-saturation dynamic range controller, QLimiter handles any combination of signals and extreme effects settings, eliminating output distortion with surprisingly little CPU bandwidth.

Proven Technology, Brand Recognition & Implementation Experience

QSound Labs' audio software is well known as one of the wireless industry's highest quality, most compact and efficient solutions for enriching the users' audio experience. Since its inception in 1986, QSound Labs, Inc. has established itself as one of the world's leading audio technology companies. QSound's expertise was born out of its roots in pro-audio recording for artists, television shows and movies such as Pink Floyd, Madonna, Sting, X-Files, Ally McBeal, Robin Hood Prince of Thieves and more.

Today, QSound Labs is highly regarded for its proprietary audio solutions that include virtual surround sound, positional audio, and stereo enhancement for mobile devices and consumer electronics. A partial list of our partners:



Technical Specifications & Implementation Data

Audio solutions by QSound Labs have been rigorously optimized with the participation of our major industry partners focusing on three critical requirements:

- Quality
- Processing performance
- Memory footprint.

You can expect at least 25 to 50 percent savings on MIPS and memory footprint when compared to competing solutions. For detailed technical information and implementation data, please contact a QSound representative.

Contact Us

QSound Labs, Inc.

400 - 3115 - 12th Street NE
Calgary Alberta Canada T2E 7J2

Tel: +1-403-291-2492

Fax: +1-403-250-1521

Email: info@qsound.com

www.qsound.com

Worldwide & Americas Sales

Tel: +1 403 291 2492

Mobile: +1 403 701 1468

Europe Sales

Tel: + 44 (0) 1673 860955

Mobile: +44 (0) 7785 344667

Japan Sales

Tel: +81 3 5321 7340

Mobile: +81 80 3206 0670

Asia-Pacific Sales

Tel: +852 2165-4700

Mobile: +852 9365-9212