



ATS6038 SoundClear® Music Enhancement for Bluetooth Devices

A Superior Music Experience... ..With Seamless Hands-Free Voice

Premium Stereo Sound

To meet consumer desires for musical excitement and realism beyond ordinary stereo sound, the ATS6038 solution delivers. OEMs and ODMs can pair sophisticated spatial expansion with either multi-band equalization or psycho acoustically constructed bass boost and mid/high frequency enhancement to bring vibrant and lively sound to wirelessly transmitted music. The solution also includes anti-saturation dynamic range control to ensure consistent high quality playback. Together with Acoustics' performance leading SoundClear Voice, it is easy to create stereo Bluetooth products with dynamic music and crystal clear hands-free voice.

The ATS6038 is optimized for the CSR BC5-MM and is based on robust, patented, field proven technology. A small footprint and compatibility with CODECs such as SBC and apt-X make the solution ideal for all types of stereo Bluetooth devices. Music parameters are tunable thru the RAPID2™ tuning GUI seamlessly integrated with hands-free voice tuning, and the entire solution is complemented by SoundAdvice™ audio consulting. SoundClear music is pre-proven and in production today with seamless interoperability to SoundClear Voice products.

Choose Acoustics' SoundClear Music combined with SoundClear Voice to enable the highest performing and most feature rich stereo Bluetooth hands-free products on the market. Also configurable as advanced equalization only for non-stereo products.



Key Features

- 3D Spatial Expansion
 - ✓ Enlarges acoustic image beyond physical speaker
- Bass Boost
 - ✓ Low frequency energy boost
 - ✓ Brings warmth and presence
- Mid/High Frequency Enhancement
 - ✓ Adaptive spectral effects
 - ✓ Restores natural sound to compressed audio
- Sophisticated and Flexible Equalization
- Dynamic Range Control
 - ✓ High efficiency anti-saturation solution
 - ✓ Eliminates output distortion
 - ✓ Ensures consistent high quality playback
- Seamless Interoperability with SoundClear 2-Mic Hands-Free Noise Reduction and Echo Cancellation
- One-Stop Solution: Algorithms, Tools, Support
- Tunable for Varying Product Configurations and OEM Sound Preferences



CSR Partner

Acoustic Technologies is a member of the CSR eXtension Partner Program.



A Complete Bluetooth Hands-Free Solution for Music and Voice



SoundAdvice™ Audio Consulting Services

Acoustics' experienced software, hardware, system, and audio engineers utilize state-of-the-art audio equipment to assist with customer projects. Audio consulting includes test and measurement, electrical analysis, mechanical analysis, recommendations on transducers and plastics, and tuning.

For complete product improvement, Acoustic prepares a comprehensive report citing the acoustic analysis results and detailed recommendations for achieving optimal sound quality of the end product. SoundAdvice audio consulting service helps customers get products to market quickly and with the highest quality audio performance.

SoundClear® Hands-Free Voice

For hands-free call processing, the ATS6038 solution comes bundled with the highly trusted and widely deployed SoundClear Voice hands-free solution to eliminate noise, remove echo, enhance speech quality and provide full-duplex voice communication. Both dual microphone and single mic devices are supported. Its flexible dual-mic technology works with varying microphone types and configurations, allowing the freedom to create stylish and innovative products with enhanced noise cancellation. Combined with intelligent adaptive features including Instant Adapt™, automatic volume control, and automatic level control along with FlexEQ technology, SoundClear Voice delivers loud volume, premium sound, and superior call-to-call consistency over a wide range of usage conditions. Highly optimized for the BC5-MM, this voice solution has shipped in over 30M units worldwide delivering remarkably clear voice quality without the distraction of unwanted noise or echo.

RAPID2™ Tuning and Optimization

Acoustic Technologies offers RAPID2 (Real-time Audio Perfection and Integration Diagnostics), a PC-based tool that allows developers to easily and seamlessly monitor and modify programmable parameters in real-time for both the SoundClear Music and Voice software via a simple Graphical User Interface (GUI).

- Fast and Easy Tuning
- Intuitive Block Diagram View
- Seamlessly Supports Music and Voice Solutions

