



Visit us at www.shivelyacoustics.com and follow us on-line    

Audio Consulting & Engineering Services

Specializing in advanced OEM acoustic systems and audio products to the worlds leading manufacturers for over 13 years.



Striving for perfect sound.

Whenever innovative, top quality technology is required, Shively Acoustics is your partner. The company offers Consulting and Engineering Services in audio design, concept and product development, tuning and evaluation for Automotive, Consumer, and Personal Audio.

High competence and distinguished know-how in Audio Solutions makes SAI a recognized partner in its industry.

About Shively Acoustics

Consulting and Engineering Services

Automotive Audio,
Consumer Audio,
and Personal Audio.

More than 38 years of worldwide
experience in Original Equipment
Manufacturer (OEM) and Original
Design Manufacturer (ODM) design
and development.

Areas of Expertise

Audio system design (Consumer & Automotive)

Automotive and Room Acoustics

Mathematical simulation and optimization

Audio research and development

Acoustic research

Loudspeaker design

OEM business development

Marketing and brand audio development

Engineering management

Competitive Benchmarking Analysis





Audio Solutions

Audio solutions at the highest level of quality.

Shively Acoustics offers Consulting and Engineering Solutions in audio design, concept, and production development, tuning, and evaluation for Automotive, Consumer, Pro and Personal Audio to customers in the Automotive and Consumer Electronics Industry. The focus of SAI's business is on development and integration of anything from a single Audio component to a complex integrated system, from base-grade level quality to branded audiophile quality Audio.



HONDA



COMMANDSIGHT



Automotive Audio

Inspiring sound for pure driving pleasure

Creating authentic sound for all listeners in cars is the ultimate objective of Shively Acoustics. Every car requires a tailor-made solution.

- ❑ Unique Vehicle Equalization
- ❑ Market Research
 - Market Share
 - Competitive Vehicle Segment Benchmark
- ❑ Audio Components
 - Modeling
 - Simulation
 - Design
 - Electronic Design (amplifier)
- ❑ Design Audio System Features
 - Surround Sound, Personal Audio Fields, etc.
- ❑ Full Audio System Integration
 - GUI development, Porting EQ Parameters into Firmware
- ❑ Communication Networks
 - MOST, CAN, A2B
- ❑ Product Evaluation & Design Services
- ❑ Concept Cars



The highest sound quality - so faithfully reproduced exactly as it sounded in the recording studio or at the live event.

Consumer & Pro Audio



Sound that creates pure joy

- Evaluation of Audio Product Performance
- Design of Audio Components
- Full Simulation & Prototyping
- Design of Audio System Features
- Full Audio System Integration
- Unique Equalization
- Competitive Benchmarking Analysis
- Testing





Personal Audio

Inspiring Sound

Shively Acoustics supports manufacturers of the consumer electronics industry in the development of new products (such as smartphones, tablets, in-ear headphones, over-ear headphones, wearables etc.) to further bring their products to perfection.

- ❑ Evaluation of Audio Product Performance
- ❑ Competitive Benchmarking Analysis
- ❑ Audio and Electronic Design and Design Enhancements
- ❑ Integration of Electronic / Audio Features
 - Active Noise Cancellation
 - Bluetooth Technology
- ❑ Evaluation of Manufacturing Processes
- ❑ Design of Manufacturing Controls
- ❑ Design of Manufacturing In-line Testing
 - First-time Product Yield
 - Defect Analysis

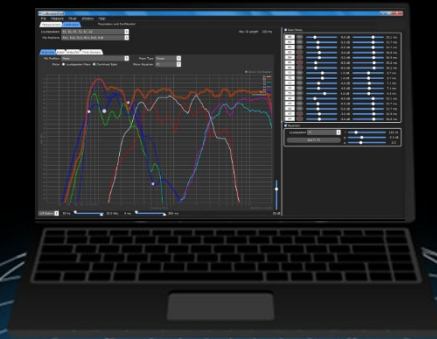


Automotive (Remote) Measurement Tuning



An innovative approach to vehicle cabin measurement and evaluations

Tuning remotely, supporting quick-tuning and objective remote tuning. Automobile is measured in place A and reliably tuned by expert in place B.



Automatic Vehicle Measurement with Virtual Sound Staging & Voicing, and Auralization. Seamless Firmware Integration of Tuning

- ❑ Unprecedented measurement analysis.
- ❑ Parametric, Tuning Tools, Delay, Phase
- ❑ Based on measurement and tuning parameters computes tuning result:
 - simulation of impulse responses
 - simulations of frequency responses
 - Any mean combinations, thereof
 - Any acoustic combinations, thereof
 - Bass combinations and cancellation
 - results relating to any routing matrixes
- ❑ HRTF model auralization, simulates the effect of a head and torso based on two mic inputs (in the ear positions) and simulates subtle head movements to aid in sound localization virtually.

Product Test & Measurement



A legacy of excellence and experience in Test & Measurement

Industry veterans with a combined 65 + years of expertise in quality acoustic measures: precise and accurate.



- Anechoic Measurements
 - 30 x 30 x 30 ft Chamber
 - 13 x 13 x 13 ft wedge tip-to-tip
- IEC Baffle Measurements
- Klippel Measurements
- Anechoic Chamber Calibration
- Headphone & Earphone Measurements

Room Acoustics Solutions



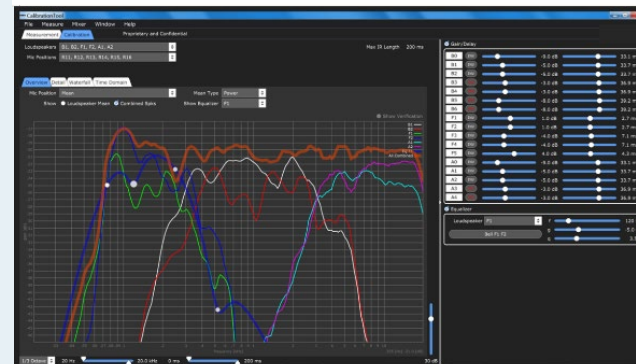
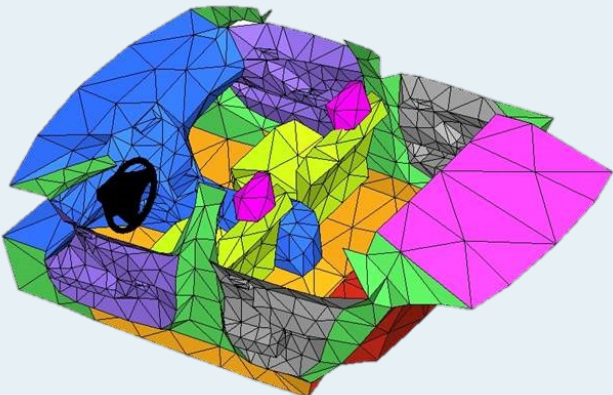
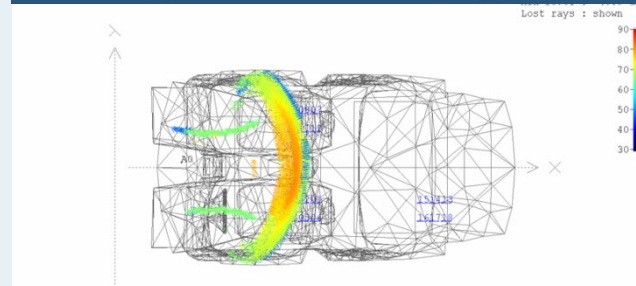
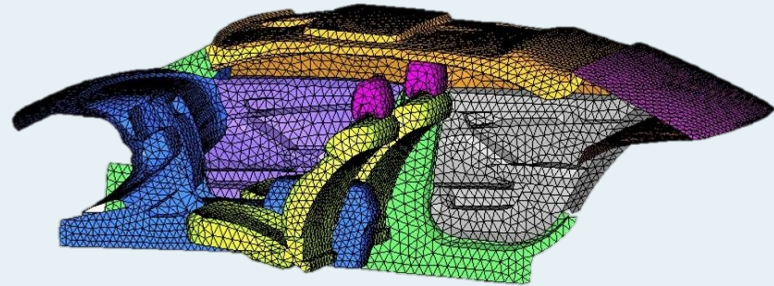
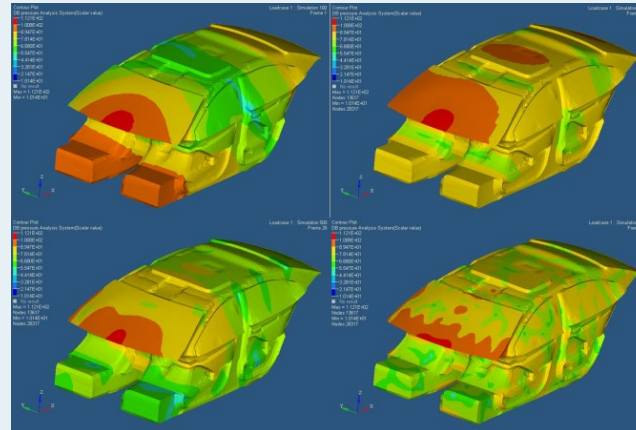
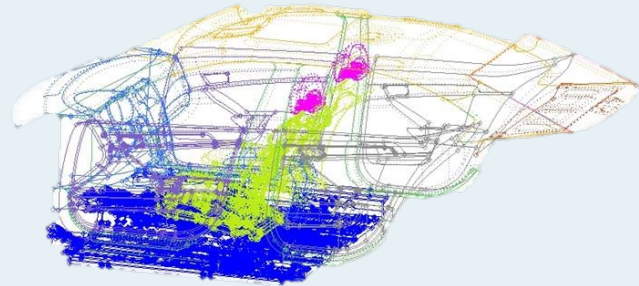
A balance of creative design and technical expertise to deliver optimal acoustical environments

From theaters to boardrooms, casinos to churches, courthouses to convention centers, Shively Acoustics uses our expertise and the latest technologies to customize your acoustical solutions:



- Architectural Acoustics
 - Room shaping, sizing
 - Structures & Finishes
 - Assessment & evaluation
 - Impact noise & vibration control
 - Sound isolation
- Mechanical Noise & Vibration
- Audiovisual Design
- Environmental Industrial
- Forensic Acoustics

Multidisciplinary simulation solutions combining digital physics & auralization.



Companies can make optimal design decisions already on the virtual model, development cycles can be shortened and project risks and project costs can be reduced.

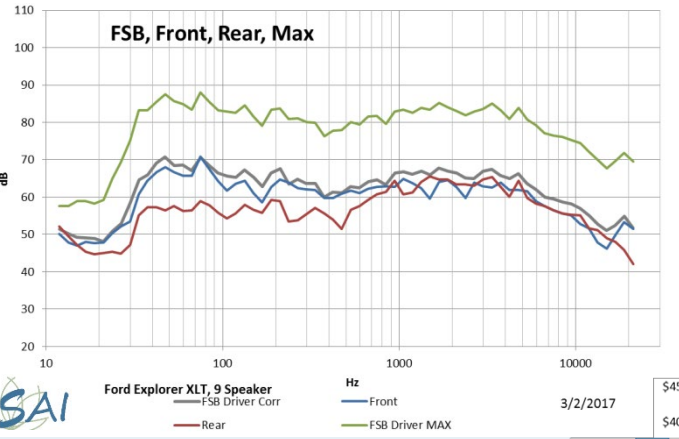
- ❑ Vehicle data to define multi-physical parameters for each of the loudspeakers in the system, to define their ideal positions & integration for a full system optimization.
- ❑ Virtual acoustics and sound design and expertise in the modeling of simulation processes brought together.
- ❑ Accumulative multidisciplinary simulation: safe analysis enables a continuous evaluation and improvement of products and systems throughout the complete development process while at the same time validates acoustic properties.

Benchmarking



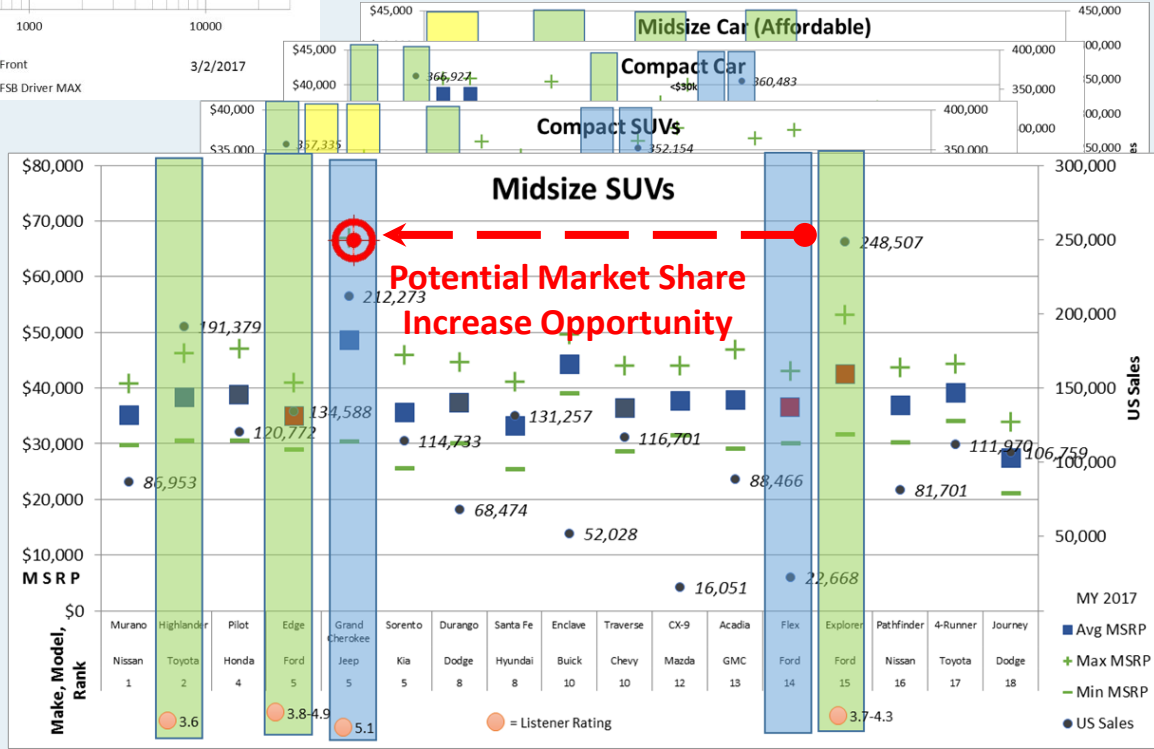
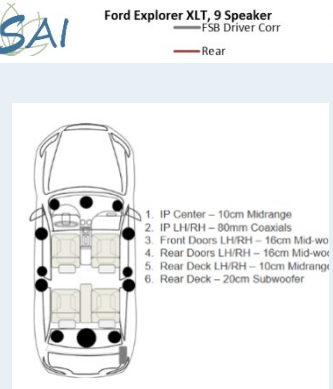
Supporting and Participating in Benchmark Driven Product & System Development

The Source for System Level Data Targets is Market Research & Benchmarking. The Source for Component Level Data Targets is System Level Targets.



Subjective Evaluation

Attribute:	Spectral	Spatial	Dynamic	Overall
Preference Rating:	6.45	6	7.85	6.25

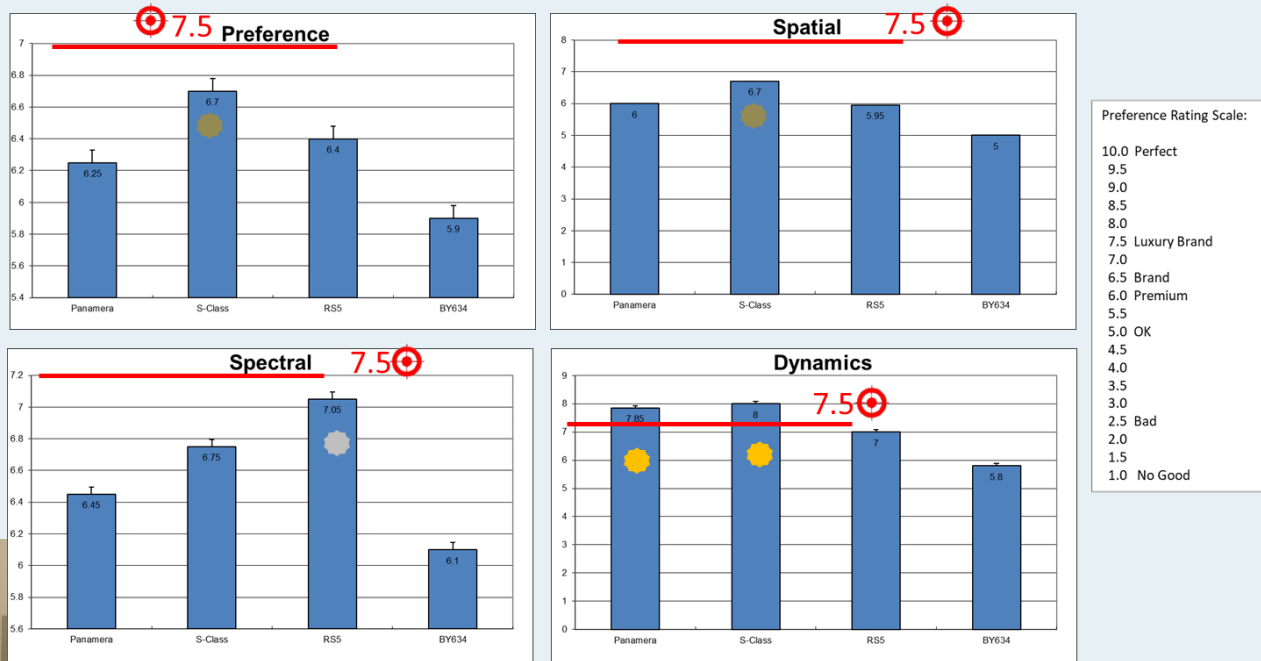


- Market Research
 - Vehicle Segment Benchmarks
 - Customer Preference
 - Segment Data Analysis
 - Acoustic Data Analysis
 - Listener Rating
 - Market Share Assessment
 - External Data
 - Internal Data

Scientific Listening Evaluations



Unbiased Subjective Evaluation



Valuable listening tests with repeatable, statistically significant, quantitative results, useful for design, marketing and management.

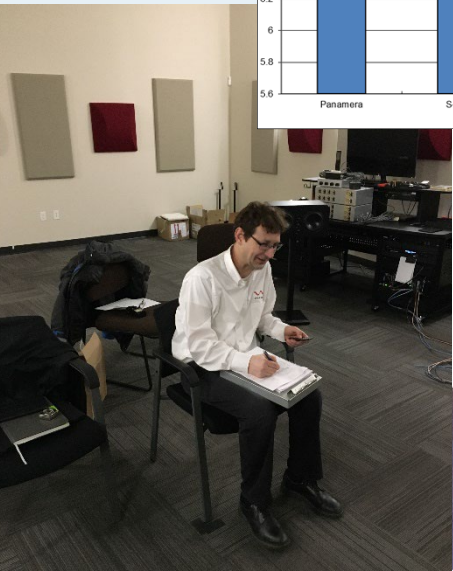
Subjective Evaluations

- Trained Listeners
- Spectral, Spatial, Dynamics, Overall Ratings (0-10)
- ANOVA of Results (Test for Listener Interactions and Mean Ratings with 95% Confidence Levels)

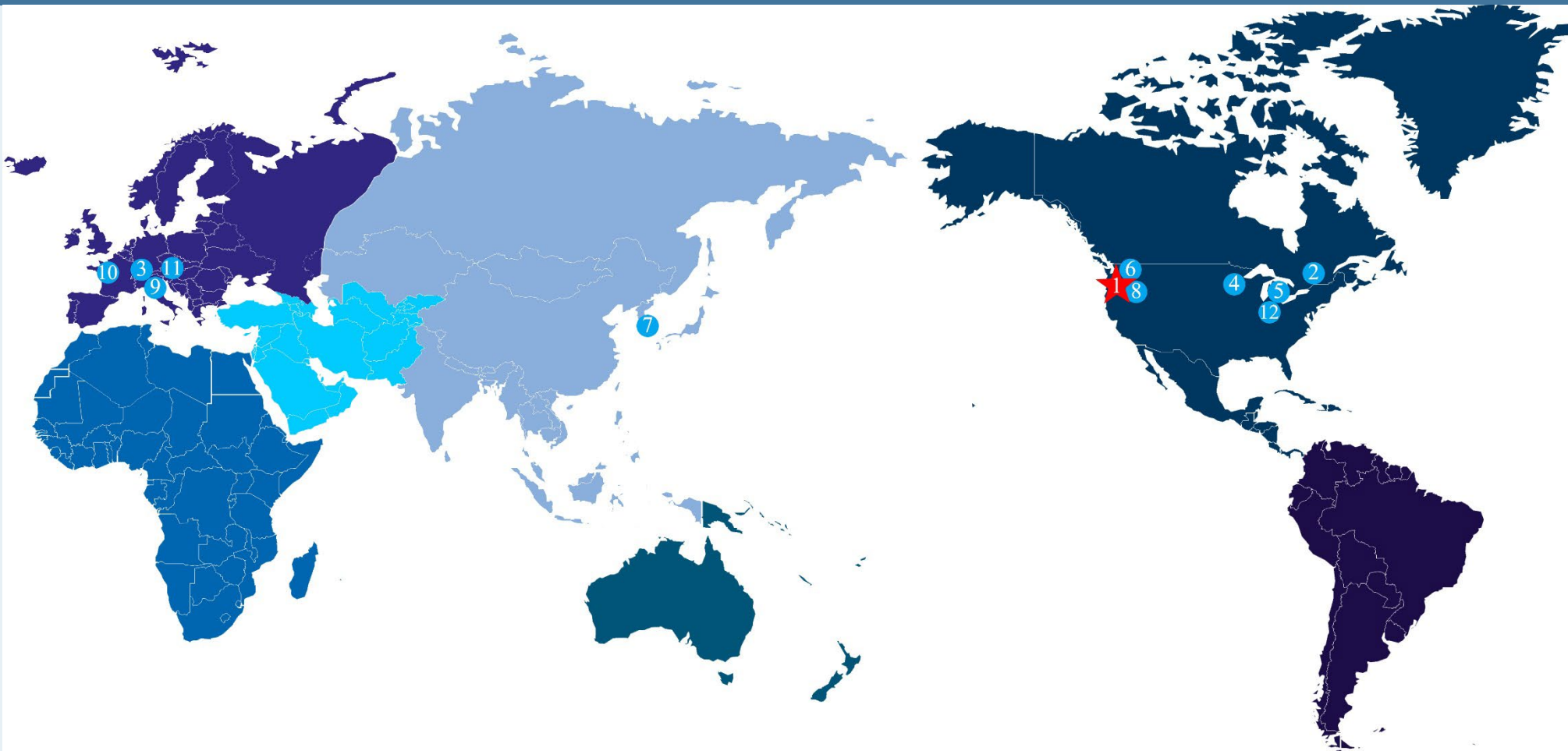
Listening Location

- Listening Room
- In-Vehicle
- Virtually via Auralization

Significant, Merit-based, results



Your Sound Partner, around the corner & around the world



1. SAI Offices: Seattle, WA - **Headquarters**
2. Ottawa, Canada - **DSP Development**
3. Uster, Switzerland - **Audio Signal Processing R&D**
4. Saint Paul, Minnesota - **Klippel Test Facility**
5. Howell, Michigan - **DSP Development**
6. Woodinville, Washington - **Loudspeaker Test Facility**
7. Seoul, Korea - **Business Development and Engineering**
8. Seattle, Washington - **Market Research and Marketing Support**
9. Reggio Emilia, Italy – **Simulation and Design Support**
10. Tours, France - **Simulation and Design Support**
11. Vienna, Austria - **Simulation and Design Support**
12. Indianapolis, Indiana - **Communications Support Center**

Shively Acoustics and its associates have offices in seven countries on three continents. There are highly qualified people around the world working on groundbreaking audio products and systems for the automobile and consumer electronics industry.