

Audio Systems Logic, borne out of the success of Acoustic Logic Consultancy, a specialist noise and vibration engineering consultancy now provides a practice to bring the successful formula of an innovative approach and that of time and cost effective practical solutions to fields of electroacoustics and room acoustics by integrating these two distinct fields of acoustics.

By having a detailed knowledge of these two inter-related disciplines, Audio Systems Logic takes advantage of the complex electrical and mechanical behaviour of a loudspeaker system within any acoustic environment presented by an office, conference room, studio, church right through to an open air stadium.

The traditional approach of initially designing a space to achieve a certain acoustic quality for occupants and only then to begin the implementation of a sound or speech reinforcement system has always been problematic.

This traditional approach typically adopted by an acoustic consultant invariably leads to the over-specification of costly and at times, difficult to implement room treatments such as the introduction of absorptive, diffusive and reflective acoustic finishes to ensure that the reverberation time of the room is suitable, speech is intelligible and music having the required levels of clarity.



electroacoustic modelling and design for performance venues

It is at this point that the acoustic consultant completes their work only to “hand over” either to an audio-visual engineer or to an electrical consultant to begin the design and installation of the speech and sound reinforcement system, working within an environment of which the details are unknown.



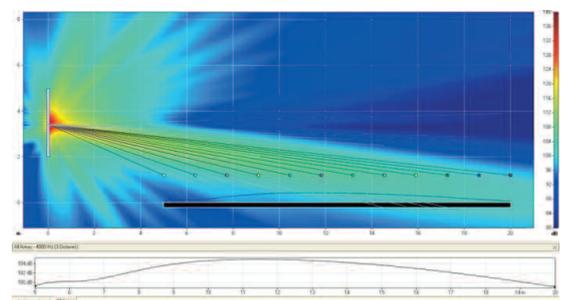
speech reinforcement systems for places of worship

Audio Systems Logic deletes this cumbersome “hand over” stage by integrating the design of the speech or sound reinforcement system with room acoustics. The balanced approach of determining the cost-benefit of room acoustic treatments versus the ability of implementing a system which can overcome issues associated with the natural acoustic environment of a room is where time and cost effective solutions are to be found.

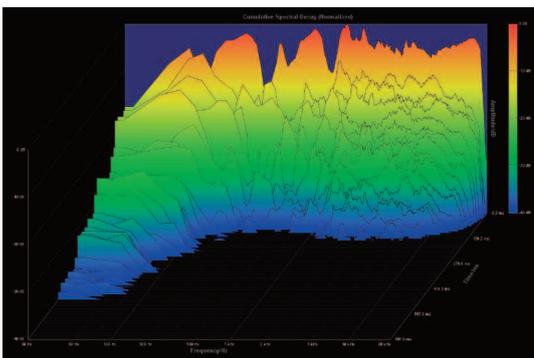
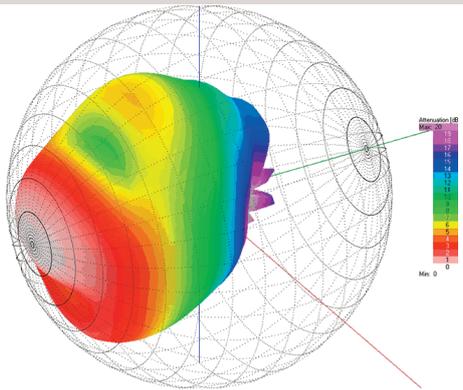
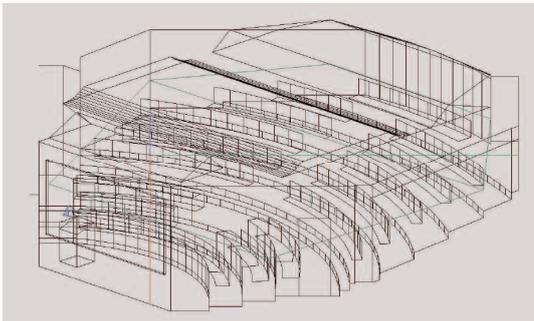
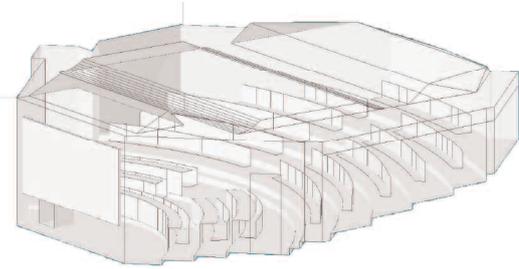
Audio Systems Logic utilises state-of-the-art electroacoustic and room acoustic modelling software in addition to an MLS-based electrical and mechanical measurement system capable of undertaking measurements in compliance with ISO 3382.

Acoustic Systems Logic also utilises an exclusive true omni directional loudspeaker with an extended bandwidth to undertake detailed room acoustic measurements.

By virtue of the relationship with Acoustic Logic Consultancy, a rare skillset of true integration of all acoustic disciplines can now be obtained.



modelling of beam steered arrays for a cathedral



The Directors of Audio Systems Logic has been involved in a number of high-profile projects, some of which are:

- Speech reinforcement system for St Mary's Cathedral
- Sound reinforcement system for Sydney Opera Theatre
- Sound Reinforcement system for La Bodeguita Del Medio
- Speech reinforcement system for Church of St Thomas, Greece
- External public address/EWIS system for High Wycombe, UK
- Spatial acoustics for La Bodeguita Del Medio
- Dolby critical listening rooms spatial acoustics
- Spatial acoustics for AGSM UNSW lecture theatres
- Speech reinforcement system for AGSM UNSW lecture theatres
- Peer review Brisbane Supreme Court spatial acoustics
- Peer review Brisbane Supreme Court speech reinforcement
- Corrective spatial acoustics for Vector Arena, New Zealand
- Corrective spatial acoustics for Optus NMC
- Corrective spatial acoustics for Optus Boardroom and VC Rooms
- Custom loudspeaker designs for Channel 10, ABC, EMI Studios
- Spatial acoustics for Fairfax broadcast studios

Audio Systems Logic can provide their unique service from a concept stage through to detailed design and commissioning. Our services in spatial acoustics, speech and sound reinforcement system design will benefit projects such as:

- Commercial and Office Developments
- Meeting, Conference and Boardrooms
- Public Venue and Facilities (*Galleries, Railway Stations, etc*)
- Videoconferencing and Telepresence Rooms
- Television, Radio and Music Studios
- Clubs, Pubs and Associated Outdoor Areas
- Places of Worship
- Concert Halls and Auditoria
- Stadium (Open-Air and Enclosed)
- Schools
- Retail Developments
- Public Address Systems
- Emergency Warning Intercommunication Systems (*EWIS*)
- Custom Loudspeaker Design
- Room Acoustic Measurements (*to ISO 3382 Requirements*)

Audio Systems Logic has the capacity to undertake projects in line with all Acoustic Logic Consultancy Offices.

SYDNEY - MELBOURNE - BRISBANE - CANBERRA  
UNITED ARAB EMIRATES - UNITED KINGDOM - SINGAPORE - GREECE