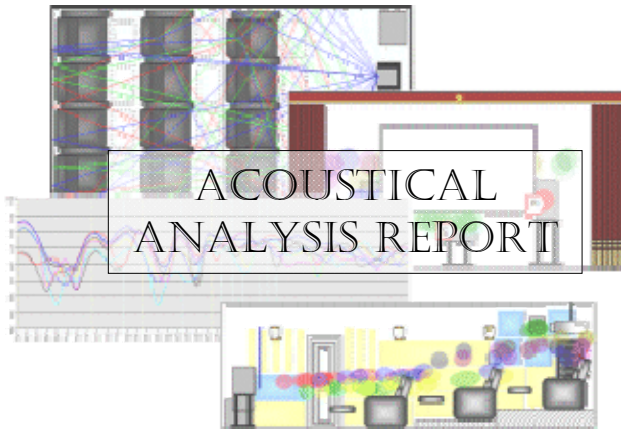




Affordable Audio and Video Engineering



The QuestAI Acoustical Analysis Report is your key to delivering on the promise of a professional home theater project. It is available only through QuestAI Dealers. It is a powerful planning tool that gives the AV Dealer access to a full array of technical support products tailored by the QuestAI Acoustical Team. Unlike other more costly alternatives, the Quest Acoustical Analysis Report is not an all-inclusive "design" but rather an in-depth consultation based upon the Dealers own design. You retain full control over the project armed with our drawings and technology. In effect, QuestAI becomes

your engineering staff advising you and your client on the most difficult decisions that control the audio and video performance of the project. It is priced to be useful for every project and yet contains state-of-the-art technical information usually found only on the most sophisticated acoustical plans. QuestAI puts the dealer in the driver seat providing the audio and video framework you need to build your full design around.

Benefits:

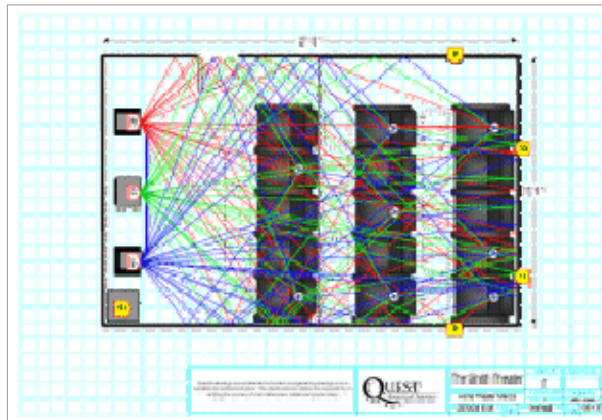
- 1) With beautiful detailed drawings; it presents the client with a professional image of your company.
- 2) Is scalable, allowing you to purchase only the information you need.
- 3) Is affordable, allowing you to include professional acoustical and video engineering on more of your projects.
- 4) Is honest; we'll tell it like it is, helping you explain to your client the best alternatives to an acoustically challenged interior design feature.
- 5) Video engineering is now available; many design decisions require a state-of-the art analysis of the video framework simultaneously with the acoustical; a real balancing act.
- 6) Easy to Use: Framework and Treatment Strategy drawings are ready to use showing you where to install all key audio and video components.
- 7) Is backed up by telephone consultations including discussions with your client if desired.

Stage One: Acoustical Design Review



This is our entry level product designed to provide the dealer with a review of an existing acoustical design. Your input to us consists only of a basic drawing, pictures of the site or plans, and a complete equipment list. We'll review the design looking for potential acoustical problems and provide a list of issues in bullet form. In addition, we'll create a set of basic drawings showing plan view, reflected ceiling and elevations of the four walls. We'll also show ray-traces and predicted response curves of the project in its "as-designed" form. The "pay-off" for this product is a summary of design issues which identify areas where changes are needed or further steps in QuestAI design analysis are warranted. In addition, the Acoustical Review can be used to inform and persuade your client to improve a potentially flawed design. Adding it to your project documentation gives an air of professionalism and reinforces the client's confidence in your company.

The Acoustical Review is always the first stage of any analysis report. It provides the starting point for further design development and is required when purchasing any of the other design support products; the Acoustical Framework, Acoustical Treatment Strategy, or Video Framework.

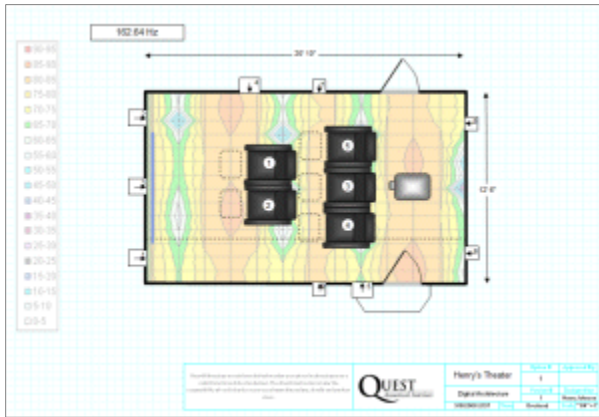


Contents:

- 1) Review Summary: A discussion of design issues in bullet format. (1 – 2 pages)
- 2) Dimensional Analysis: Plot of modal distribution as well as calculation of mode frequencies. (2 pages)
- 3) Plan Drawings: A basic drawing of planned layout including plan view and elevations including notations on observed acoustical or visual issues. (6 pages)
- 4) Ray-trace Drawings: Overlay of critical sonic reflection points on all surfaces shown on plan drawings.
- 5) Response Model: A predicted response plot for selected seating locations. (1 page)
- 6) Audio/Video Sight-lines: Elevation drawing showing listener viewing and listening angles. (1 page)
- 7) (2) twenty minute telephone consultations with the dealer and/or client.

Note: All acoustical predictions delivered in the Acoustical Review are based upon the current design of the project as depicted by the Dealer's drawings. QuestAI discussion bullets are written to show areas where deeper analysis is required. Development of specific changes to the design is accomplished by rigorous analysis accomplished in the further steps shown in the pages ahead. Drawings are basic showing representations of furnishings and interior details for positional information only. Selected images are not always exact representations of actual equipment or furnishings.

Stage Two: Acoustical Framework

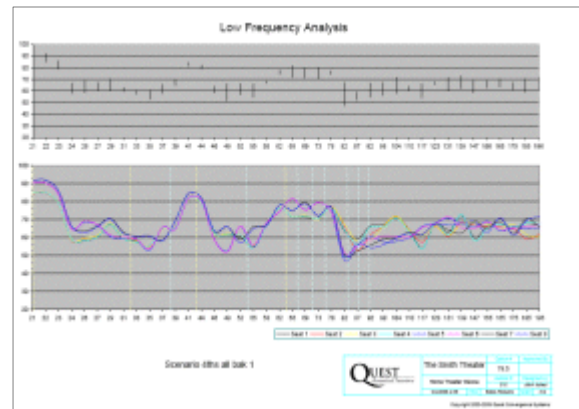


This next step of the product suite combines the Design Review's conclusions with input from the Dealer/Designer; add acoustical modeling and we deliver the "bones" of a sonically great design. The Acoustical Framework is scientifically derived speaker positioning, sub-woofer placement and seating positioning. While evidence of problems with these factors can be identified by the Design Review, true solutions require rigorous analysis and trial-and-error problem solving accomplished by a seasoned acoustical practitioner using state-of-the-art technology.

The Acoustical Design Review identifies the issues. The Acoustical Framework is the solution; the result of extensive modeling and insightful analysis to yield the best layout for great audio performance. The Audio Framework can be requested for:

- 1) Two-channel Stereo
- 2) Home Cinema (5.1 or 7.1 channel)
- 3) Multi-channel audio systems.

Check our catalogue for pricing of each.

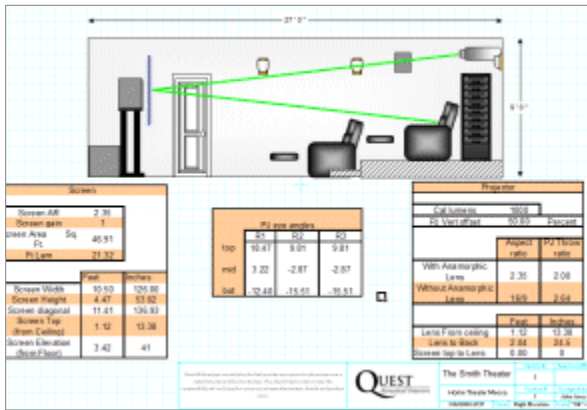


Contents:

- 1) Calibration Plan: A discussion of remaining acoustical issues or calibration suggestions and variables in bullet format. (1 – 2 pages)
- 2) Dimensional Analysis: If necessary, the Acoustical Framework adds a recommendation of optimal room dimensions as well. (2 – 3 pages)
- 3) Plan Drawings: A basic drawing of optimized layout including plan view and elevations including notations on observed acoustical issues or additional suggestions. (6 pages)
- 4) Response Model: A predicted response plot for optimized seating locations including, if necessary, analysis of optional scenarios. (1 – 3 pages)
- 5) Audio/Video Sight-lines: Elevation drawing showing listener viewing and listening angles. (1 page)
- 6) Plan View drawings showing surface plots of major modal frequencies in relation to seating positions.
- 7) (2 additional) twenty minute telephone consultations with the dealer and/or client.

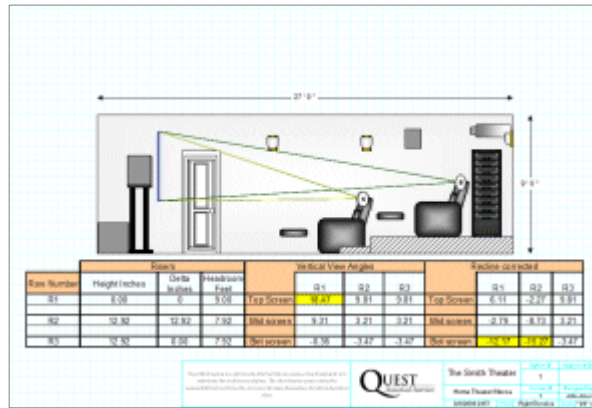
Note: Development of the Acoustical Framework requires completion of an Acoustical Review as the starting point for analysis. The Acoustical Framework may contain up to two speaker placement options at the time of delivery. An additional option or version ordered later will require an additional fee.

Stage Three: Video Framework



In most cases the design of a video projector and screen is conducted independently from the acoustics. This is a serious error which can often degrade not only the full enjoyment of the visual but also the sonic performance of the system. The QuestAI Acoustical Team personnel are also certified and expert video calibrationists. They will balance the delicate requirements of state-of-the-art video design with the stringent needs of the Audio Framework. Because of the integrated nature of these two Frameworks, Stage Three (if purchased) is required to be performed in unison with Stage Two.

The prime advantage of a “professionally” installed imaging system is the use of superior products which are precisely aligned to yield the best possible performance for all viewers. This can be highly technical process and therefore is the advantage a Pro AV Contractor holds over lesser competitors. Today’s 1080P technology is especially unforgiving of even minor alignment mistakes to the trained eye. Using a unique visualization technology, QuestAI will simultaneously model the Acoustical and Video Framework elements. Any change in the speakers vs. listener geometry automatically changes the geometry of optimum video imaging. Prioritizing the acoustical versus video design decisions, QuestAI will determine optimal installation specifications for the specific projector and screen used thus taking the guess work out of the installation.

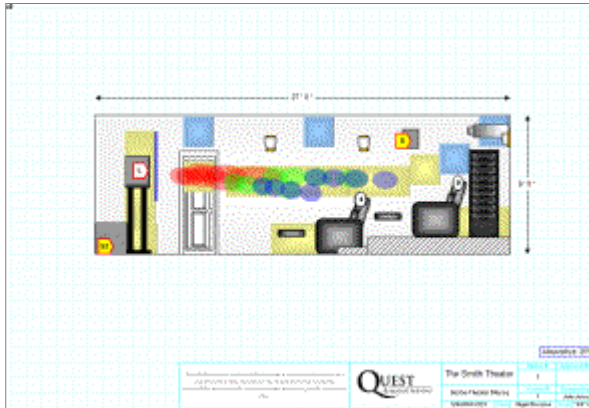


Contents:

- 1) Calibration Plan: A discussion of remaining acoustical issues or calibration suggestions and variables in bullet format. (1 – 2 pages)
- 2) Sight Line Elevation: A visual and data representation of the viewing geometry including specifications for each seating rows optimized viewing angles and riser heights (if required). (1 page)
- 3) Projector Installation Elevation: A visual and data representation of the projector/screen geometry including recommended screen size and specs, projector installation specs, optimized eye angles and image brightness. (1 page)
- 4) Horizontal Viewing Plan View: Examines each seat for optimum horizontal viewing angle against projector/screen type.. (1 pages)
- 5) (2 additional) twenty minute telephone consultations with the dealer and/or client.

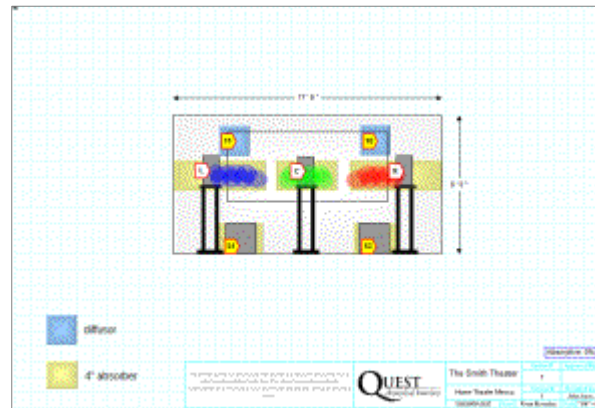
Note: As with the Audio Framework, any additional options or versions of the Video Framework will require an additional fee. Due to the integrated nature of the Acoustical and Video Frameworks, adding the Video Framework to your order after-the-fact will likely require a rework of the Acoustical Framework and an extra fee.

Stage Four: Acoustical Treatment Strategy



The Acoustical Treatment Strategy provides the technical specifications of an acoustical plan based upon input from the Acoustical Framework. It is here that not only reverberation control is optimized but key ingredients to optimize the soundstage are added. A properly crafted soundstage relies on optimized speaker positioning but equally on precise placement of both absorptive and diffusive elements. Each reflection or echo is reviewed to determine if it's beneficial to envelopment or if it merely degrades focus and clarity; good reflections are enhanced while bad ones are blocked.

QuestAI's unique modeling approach not only identifies reflection points on surfaces but recognizes the specific treatment requirements of each type of reflection based upon its source, reflection point, and destination. We truly craft a soundstage. If desired, a complete proposal detailing the QuestAI products that are required to complete the project can be created as well.



Contents:

- 1) Calibration Plan: A discussion of remaining acoustical issues or calibration suggestions and variables in bullet format. (1 – 2 pages)
- 2) Treatment Plan Drawings: A detailed drawing showing treatment type, placement, and dimensions with overlays of critical sonic reflection points on all surfaces. (6 pages)
- 3) Documentation of treatment characteristics and installation suggestions.
- 4) OPTION: For an additional fee drawings of final appearance of walls can be constructed providing your customer with a vision of the project look.
- 5) OPTION: At no charge the QuestAI Sales Team will create a proposal detailing acoustical products necessary to build-out the strategy.

Note: The Acoustical Treatment Plan is directly dependent on the results of the Acoustical Framework. It is advised that if there are multiple Framework options or versions, that work on the Treatment Plan be held until the Framework is finalized. There is an additional fee for each version of the treatment plan created. A Treatment Strategy is determined by room layout and acoustical issues only. The final plan while dependent on the Strategy is often changed by interior design or furnishings requirements. The QuestAI Sales team will take the Treatment Strategy as a guideline and work with the Dealer to integrate the best acoustical approach into the final plan. For best results we recommend use of **QuestTrac** stretched wall system to allow the highly tailored Acoustical Treatment Strategy to be most fully realized.