

The Role of the A/V Design Consultant

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Introduction

Presentation media (such as video, multimedia, VR, and audio) are playing an increasingly important role in exhibit, themed, and architectural environments. From kiosks and interactive displays to mixed-media theatres and exhibit galleries, sophisticated audio-visual systems are more and more prevalent. *These technologies are changing so rapidly that one year often represents one or two generations of products!*

Further, these are no longer separate systems. There is often need to integrate the various media technologies into a seamless unit, and interactivity is becoming a common requirement. It is not reasonable for an architect or exhibit designer to keep up with the trends and changes of the technology spiral. **You need to offload the design and specification of these systems to a specialist** – just as is routinely done with mechanical and electrical systems.

The Design Process

Technical design is a creative and dynamic process that should parallel the other design aspects of your project. Your A/V design consultant should become involved early in the project – preferably at the conceptual stage. As part of your design team, this consultant will provide guidance on the practicality of various technical solutions and media technologies, present you with options and working budgets, and suggest alternative approaches. If your concept depends on “*cutting-edge hardware*,” advice on the risks inherent in early adoption of these particular technologies will be provided.

Your consultant will continue to work with your team to refine the agreed-upon design towards a clear definition of the scope and quality of the finished audio-visual systems – ensuring that they integrate with the other aspects of your project. The consultant will research the best technologies and products to apply to your specific situation. At this point, the A/V budgets will generally be refined and finalised.

The design consultant will also provide electrical power and conduit needs to your electrical engineer, and specify heating loads and special ventilation requirements to your mechanical engineer. Your consultant will then prepare the working drawings and technical specifications needed to obtain competitive bids and to instruct the contractor. The A/V consultant will provide any input and co-ordination required to your Division 1 documents and will write the technical specifications for the audio-visual systems such that they can be inserted into Division 11 or Division 16 of your construction package. Alternatively, your consultant will prepare a stand-alone bid package for your audio-visual and media systems as a separate contract. In addition, they can help you pre-qualify bidders and evaluate bids.

Relying on a contractor or manufacturer to design your systems is not a good idea. Vendors and contractors make their profit by selling and installing equipment. Unfortunately, the equipment they are authorised to sell may not be the best choice for your particular application. Even amongst the brands that a vendor sells, there will be those that are more profitable than others. It is only natural for a salesperson to try to talk you into the most *profitable* option, rather than the *best* option. The bottom line is that contractors, vendors, and manufacturers have a **clear conflict of interest**. In fact, **no one should design or specify systems that they will supply or install**. Who will monitor and accept their work? Who will hold up payment until deficiencies are corrected?

The Installation Phase

Retaining your design consultant's services during the installation phase protects your design investment. Contractors will sometimes cut corners, and without a technical project representative looking out for *your* interests, the installed system may not be what was designed. Without an A/V consultant, how can you be sure that the installation meets the specifications and performs as it should? Without your consultant reviewing the contractor's work, how will you know if there are deficiencies – this needs to be known *before the contractor is paid*.

During the construction phase, your audio-visual consultant can help develop an installation schedule to which the A/V contractor will commit. The consultant will periodically review the site work to ensure that the equipment is being installed to best professional practice and required standards, that the cabling and equipment meet the required safety standards and approvals, and to identify any potential schedule conflicts or slippages. Your consultant will review applications for payment by the A/V contractor, and advise you whether or not to pay the amounts claimed. Once the A/V contractor claims Substantial Completion, your consultant will review the installation, perform acceptance testing, and prepare a deficiency report. Your consultant will continue to monitor the “wind down” of the installation; supervise commissioning; review the project record drawings and required documentation; and review the warranty certificates. Your consultant will not issue a final certificate of payment to the A/V contractor until all contractual obligations have been met. **This approach is all too often the only way that system documentation and staff training are ever completed.**

The Cost

A presentation space is much more than a room. The core message or entertainment feature depends entirely on the quality of the audio-visual, multimedia, and control systems design and installation – these will establish the effectiveness of the space for its intended use. A good system design will have built-in flexibility to accommodate foreseeable changes and variations between the intended use and the actual use.

A poorly implemented media system will hamper communication and presentation, rather than enhance them. The audio-visual design consultant's services increase the value of your project by developing a design that is tailored to your project's present and future needs, and by monitoring the quality and workmanship of everything from equipment selection to final installation. The fees charged represent a surprisingly small percentage of the overall project budget. **A common pitfall is to not include the A/V consultant's fees in the global project budget from the beginning** – later in the project, when this oversight is recognised, there is seldom enough money available for a proper design. The solution: include the consultant's fees in your project budget **from the beginning**.

Summary

To be effective, the technical requirements of today's exhibitry and themed environments dictate that you routinely incorporate an independent A/V design consultant into your design team – at the start of the project. Your consultant will work with your team to develop the technical solutions required to realise your concepts – with as little compromise as possible. The audio-visual consultant will prepare the technical drawings and specifications, co-ordinate these with the rest of the bid package, and help evaluate bids. During the installation, your A/V consultant will act as your on-site technical representative to ensure that the work is being performed as specified, to professional standards, and that all deficiencies are corrected before the A/V contractor is paid.

[Conceptron Associates](#) provide a total solution to the [audio visual, presentation, and media design](#) aspects of your projects. We are completely [independent](#) of any audio-visual manufacturer, A/V equipment vendor, or A/V contractor. As consultants, we design and [specify](#) video, presentation, multimedia, audio, and show control systems. Our [audio visual design projects](#) have included: exhibits, planetariums, mixed-media theatres, expositions, museums, theme parks, science centres, conference facilities, sports arenas, and institutions. Our principal has over 20 years of [audio-visual design and consulting experience](#), including pioneering experience with interactive theatres. We can be reached at (800) 871-4161 or on the web at <http://www.conceptron.com/>.

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