

# Low Voltage Technology Consulting, Design, Engineering & Aftercare Services

Axiom Design was founded in 1992 as the country's first technology consultant focused on providing design services for a homeowner's entertainment, control, communication, and security needs. This includes audio/video, security, home control, wired and Wi-Fi networks, access control, surveillance, phone systems, cellular boosting, and more. All such home amenities are vital to a clients' enjoyment of their home.

As a true consultant that is not compensated by product sales or installation, you are assured of unbiased and valuable advice in determining which technology systems and products best satisfy a project's budget, performance, and aesthetic needs. To learn of the many benefits of the objective consultant versus engaging design/build low-voltage contractors directly, please contact us to request our Why Design plus Build? document.

We share vital space-planning requirements for all technology equipment and any specialty areas (private home theater, mechanical rooms, etc.). We define related project requirements, such as the technology system's electrical and cooling needs that others need to perform their duties. As a design team member, Axiom Design helps vet the visual impact of all technology with the team, helping maintain the home's architectural and interior beauty. Most, if not all, of our design fees are offset in various ways throughout the project. Please contact us to request our Axiom Fee Offsets case study to see this demonstrated.

Beyond serving as the clients' technology advocate initially, Axiom Design is the only technology consulting firm that guides a client through all phases of the project. Through Axiom's Technology Concierge™ aftercare service, we serve the clients' technology needs into the future. This gives your client a single company to call for service, maintenance, monitoring, and future upgrades. The following services have been refined over several hundred projects domestically and internationally to ensure client satisfaction and safety:

# Phase 1 – Technology Consultation & Budgeting

- Educate and consult with client on all low-voltage home technology options
- Discover and define clients' technology needs.
- Provide installed cost estimates for each technology system
- Show where technology will be available throughout the property

#### Phase 2 - Design & Bid Documentation

- Technology space planning with design team for all equipment locations. Includes head-end & home theater space requirements.
- Coordinate with design team (architect, interior designer, etc.) on integration & placement of all visible technology items
- Compile and share cut sheets and drawings of the electronic system components
- Create equipment lists, scope of work, and vendor RFP's to procure low-voltage bids. *(Emphasis that Axiom Design is a consultant and not compensated by product sales or installation)*
- Produce equipment and rack layouts
- Create heat load calculations & cooling recommendations
- Share electrical recommendations & guidelines with electrical engineer/electrician



# Phase 3 – Engineering Documentation \*

- Creation of detailed wiring diagrams that identify all component wiring connections.
- Define exact conduit and electrical requirements, outlet placement, and electrical connection diagrams for all low-voltage equipment
- Create construction documents that the low voltage contractors will use as the "instructions" to build each technology system efficiently and cleanly
- Allows home control systems to be programmed before final installation, greatly shortening the time it takes to bring a home "online".

## Phase 4 - Home Management

- Establish integration and programming needs between all home subsystems (climate, security, pool/spa control, etc.)
- Configure home control / smart home / home automation system software for intuitive home control
- Ability to customize user interface to clients' unique needs

## Phase 5 – Technology Concierge<sup>™</sup> Aftercare \*\*

- Proactive monitoring of network-connected technology systems to ensure maximum uptime and early warning of potential service issues
- Bi-annual technology checkups include firmware updates, suggested technology refreshes, check & fix functionality of all control systems, check video projector lamp life (if installed), and more.
- Serve as the clients' lifetime Technology Concierge™

\* Most assume that design/build technology contractors create engineering documentation to vet their design and serve as the basis for future servicing. The reality is that very few contractors provide this, and this leads to: 1 - less efficient installation, 2 - greater occurrence of change orders, 3 - longer onsite time for control system programming/configuring, and 4 - more expensive service calls in the future due to extra troubleshooting time needed.

\*\* Axiom Design's Technology Concierge™ Aftercare service is for clients who value efficiency and customer service. Assuming all the home's technology systems have been designed and engineered by Axiom Design and installed to our exacting standards (ensured through our Construction Administration service), we are able to serve as the clients' single point of contact for all things technology-related both now and the future.

#### **Additional Services:**

Each of the individual services described in the Phases 1 - 4 is available as an "a la carte" service. Additionally, Axiom Design offers the following additional services:

- Bid Analysis
- Peer Review
- Construction Administration
- Coordinated Device Placement Drawings
- Technology Takeover / Rescue
- Due Diligence
- Expert Witness / Insurance Claim Specialist



## Definitions of additional services:

**Bid Analysis –** comparing submitted bids from subcontractors, clearly explaining the differences between each functionally and financially

**Peer Review –** based upon examination of the subcontractor bids, design, control system programming or installation, we will prepare an objective analysis identifying whether the work performed meets or exceeds industry standards, performance standards, as well as expressed client needs and budget.

**Construction Administration –** includes bid analysis, attend project meetings (via conference call, online, or onsite), inspection of low-voltage systems work performed at various stages of installation, review and document course of construction changes, serve as the central resource for all technology questions and ongoing coordination throughout the build process, final punchlisting

**Coordinated Device Placement Drawings –** detailed drawings that show exact placement of visible technology devices (speakers, televisions, keypads, etc.) in reflected ceiling plan, floor plan, and elevation view. Completed in coordination with the design team to eliminate potential placement conflicts and helps ensure best possible aesthetic detail

**Technology Takeover / Rescue –** when the clients' existing technology systems are no longer working properly and they have lost confidence in their current subcontractor's ability to fix the issues, we will take over the project to document the current systems and create the plan to fix the unresolved issues

**Due Diligence –** many of Axiom Design's clients rely on us to evaluate prospective home purchases to determine if the home's currently installed technology and wiring infrastructure will support their needs and desires. If not, we will provide estimates to bring the home up to specification, which can be used as a negotiation tool when making purchase offers

**Expert Witness / Insurance Claim Specialist –** Axiom Design's over two decades of practical experience with technology has made us a subject matter expert within the industry. This knowledge has been leveraged by insurance companies to assist in insurance claim settlements and the legal community as an expert witness in construction litigation cases involving technology