

Home Theater Process Checklist

The Theater design process is divided in to eight sections:

- I. Discovery
- II. Assembling the Team
- III. Function Design
- IV. Interior Design
- V. Electronic System Design
- VI. Installation
- VII. Programming
- VIII. Project Management

Note: While the steps are presented in the general order in which they occur some occur simultaneously and some actually influence and/or require modification of previous steps. Not all steps are required for all theaters. Unique situations may require steps not listed here.

I. Discovery

Meet with clients to determine their goals, timeline and budget

Parameter to discuss:

- Has the space been selected?
- What are the neighboring spaces used for?
- Is the space existing or unfinished?
- How many seats does the client want?
- How important is noise isolation?
- What level of audio and video performance is desired, Good, Better, Best, Outrageous?
- Who will use this system?
- What level of fit and finish does the client want?
- What level of acoustical treatment will be required?
- How will lighting be controlled?
- Will the system support gaming?
- What is the time frame for this project?
- What is the budget?

After this meeting and assembling the "Team" the design process can begin.

II. Assemble Professional Team

Theater Designer/AV Specialist (Bravo AV Consulting)
Architect
General Contractor or Builder
Interior Designer
Acoustical Engineer
Subcontractors
 HVAC Specialist
 Electrician
 Rough Constructors
 Finish carpenter
 Wall/Ceiling Covering
 Painters
 Flooring

III. Functional Design

Dimensional analysis

Site visit to field measure and assess site conditions
With Architect create fully dimensioned shell plan. At this point you know how much interior space you have to work with.
Select projector and screen
Determine screen placement. Create screen wall layout elevation.
Determine projector placement give throw distance capabilities of the projector.
Determine speaker location
Determine chair type then layout seating and risers
Complete sight-line analysis.
Determine equipment rack type and location.
Layout equipment in the rack including heat management (cooling) for the equipment
Create lighting design, determine power requirements, locate switches and outlets with electrician
Create HVAC design with HVAC specialist. Should be dedicated to this room and very quiet during operation (<15dB).
Create engineering documents detailing above. These documents are to be signed off on by the customer.

Meeting with client to approve Functional design.

IV. Interior Design

Acoustical and Aesthetics Analysis

Design acoustical system for theater (Good, Better, Best or Outstanding)
Room Isolation. (Consider both structure borne and air borne sound)
In Room performance. (Music and soundtracks are crystal clear)

With interior decorator, and architect determine fit and finishes in the room (molding, wall coverings, rugs etc)

With Electrician document all outlet locations

Create interior design documents detailing the above. These documents are to be signed off on by the customer.

Plan view

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- Elevation of all walls
- Reflected ceiling plan
- All color choices and finishes

Meeting with client to approve Interior design

V. Electronic System Design

- Design and specify control system
- Select system electronics
- Design and specify sonic transducer system for seating
- Create theater low voltage wiring schematic
- Perform electricity load analysis and recommend circuit layouts
- Design and specify subsystem interfaces
- Create System Design documents detailing above. These documents are to be signed off on by the customer.

Meeting with client to approve electronic system design

After the functional, interior and electronic system designs have been approved installation can be scheduled

VI. Installation

If the theater is in an unfinished space then the following will be required:

- Apply for necessary permits
- Framing
- HVAC rough
- Electrical rough
- Insulation
- Necessary inspections

Prewire - Install all wiring and speaker brackets

Drywall

Flooring

Trim and Finish work

Painting

Where new construction took place:

- HVAC Final
- Electrical Final

Install Acoustical treatments

Assemble and install screen

Install Front Speakers

Install Subwoofers

Install Side & Rear Surround Speakers

Assemble and install theater seating

Assemble and install seating motion actuation system

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- Install projector
- Install game/PC jack interface
- Assemble Rack
- Wire the rack into the system
- Integrate power into the rack and all low voltage subsystems
- Install all necessary communication interfaces between control system and existing house sub-systems
- Calibrate projector video image to ISF video calibration standards
- Install necessary acoustical treatment systems for proper sound
- Calibrate processor and audio system for best acoustic results
- Test all electronics and connections to ensure system is 100% up and functioning
- Setup all components for communications, compatibility and highest formats of both audio and video
- Integrate rack and control system with existing house network
- Where new construction took place:
 - Final Certificate of Occupancy