

Home Theater Process Checklist

The Theater design process is divided into eight sections:

1. Discovery
2. Assembling the Team
3. Functional Design
4. Interior Design
5. Electronic System Design
6. Installation
7. Programming
8. Project Management

For the most part, these steps are listed in chronological order but they can also be performed simultaneously. For example, project management is carefully monitored throughout the length of our work. At Bravo AV, we know that a masterfully crafted theater is not something that can be easily drawn up and constructed. We approach every phase of our work with the focused goal of building the theater you envision.

1. Discovery

During this first phase, we meet with clients to determine their goals, timeline, and budget. Should you choose Bravo, we will discuss questions such as:

- Has the space been selected?
- What are the neighboring spaces used for?
- Is the space unfinished?
- What is your seating capacity goal?
- How important is noise isolation (isolating the theater from outside noises)?
- What level of audio and video performance is desired, i.e.: Good, Great, Awesome, Excellent?
- Who will use this system?
- What kind of trim are you expecting?
- What level of acoustical treatment would you like? (this relates to audio quality in the room)
- What kind of lighting controls would you like?
- Would you like to be able to play video games in your theater?
- Is there a date you would like this theater done by?
- What is your ideal and maximum budget?

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

2. Assemble Professional Team

Expertise is born out of specialization. Bravo AV specializes in home theater design and construction (among other things). There will likely be some work items in your project that will be outside of Bravo's expertise and capability. We are happy to work with contractors of your choice or we are able to bring together a team of contractors we have worked with that we know produce great results. A typical home theater build team consists of:

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

3. Functional Design & Dimensional analysis

- Site visit to field measure and assess site conditions
- Create a fully dimensioned shell plan with the architect. At this point you know how much interior space you have to work with
- Select projector and screen
- Determine screen placement
- Determine projector placement given throw distance capabilities of the projector
- Determine speaker location
- Determine chair type, seating layout, and riser geometry (if needed)
- 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.

4. Interior Design - Acoustical Analysis and Aesthetics Choices

- Design acoustical system for theater according to your selection
 - Room isolation (both structure borne and air borne sound transmission are considered)
 - In room performance (focuses on minimizing detrimental effect of reflected sound waves)
- Together with the interior designer and architect, Bravo can help guide your finishing selections for the room
- Finalize electrical layout (switches and outlets) after aesthetic design is finalized.
- Create interior design documents detailing the above. These documents are to be signed off on by the customer
 - Plan view
 - Elevation of all walls
 - Reflected ceiling plan
 - All color choices and finishes

Meeting with client to approve Interior design

5. 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 to electrician
- 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 and commenced.

6. *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 for proper sound
- Assemble and install screen
- Install surround sound speakers
- Assemble and install theater seating & seating motion actuation system
- Install projector
- Install game console/PC connection 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 (Image Science Foundation, a group that issues industry standards) video calibration standards
- Calibrate processor and audio system for best acoustic results
- Test all electronics and connections to ensure system is 100%.
- Setup all components for communications, compatibility and highest formats of both audio and video
- Integrate rack and control system with existing house network
- If new construction took place: Final Certificate of Occupancy

7. Programming

- Design program to control all standard audio/video functions of the theater
- Design program to control lighting
- Design program to control shades (if applicable)
- After equipment is installed, load program and thoroughly test all functionalities

8. Project Management

Bravo AV takes pride in being able to effectively lead a project to completion with minimal cost-overruns, delays, or deviations from the intended design. Below are some key moments or steps in our project management style over the course of our work:

- Kick-Off meeting: introduce professional teams to one another and establish communication channels and protocols (who contacts who with updates on work)
- Create schedule of work and identify critical path of work
- Order equipment in a timely manner
- Coordinate installation dates to coincide with construction (for new houses/renovations)
- Coordinate with all trades to keep contractors to the schedule and ensure the highest quality possible
- Closely manage our installation team and inspect build quality
- Client Training – we will teach you all the cool new features of your new theater and how to effectively take advantage of the high-tech electronics in your system
- Create client binder (includes all manuals, warranties & engineering documents)

We hope that in reading about our process, you can easily understand why we are an industry leader in the Northern New Jersey home theater market. If you would like to learn more about Bravo's processes or technical knowledge, please check out our knowledge center.

Home Theater Items and services NOT provided by Bravo AV

In an effort to clearly delineate the services we offer from the services we don't we have come up with a list of services we don't provide. We will be happy to introduce you to trades that will perform this work for you. Naturally we can coordinate all these trades for you.

- Framing
- Trim and molding
- Sheetrock, spackle and painting.
- Electrical including rough wiring, finishing of outlets or plates, outlets for any and all AV equipment.
- Floor covering including hardwood, carpet, linoleum and any other floor covering.
- HVAC installation or design.
- Lighting wiring and fixtures. Lighting control to be determined.
- Plumbing installation or design.