entry**LHT16**

Briefly describe the objectives in creating this theater.

The theater serves as a multi-functional entertainment room for a family with teenagers. With its noise-friendly design, the theater is conducive to having multiple activities going on throughout the house. The family wanted to be able to entertain different guests at the same time in the theater, adjoining media/bar room or the upstairs living room without disturbing each other. This way, the clients can entertain adult friends in one area, and their teenagers can have fun with their peers in a different area without having to worry about noise levels. The theater effectively addresses the needs of the entire family.

What technical features are notable in this project (control system, acoustics, video features, audio features, etc.)?

The most salient technical feature of this project is the acoustics. The room housing the theater was acoustically designed to be completely isolated from the rest of the house. This required us to be inventive with our approach to installation. The speakers were installed in acoustically treated soffits for optimal sound and isolation. In terms of video features, the focus of the theater's video system is a Sim2 C3X, which is absolutely stunning with any 1080p source. In addition, all audio components were selected for a higher level of performance and aesthetics, as the equipment rack is located within the theater and in full view. Theater seating was sourced from Acoustic Innovations and aptly matched the decor of the room. The theater was outfitted with Deco motorized reclining chairs for style and comfort.

What decisions did you make to compensate for the room's layout, interior design, or other challenges in the requirements of the job?

The most prominent aspect of designing this room was its total acoustic isolation from other areas of the house. The client was concerned that acoustic transmissions would travel from the theater throughout the rest of the house. Therefore, very careful considerations were taken when designing this room. We paid special attention to acoustic separation and environment. First, we interviewed our client to determine what the goal was for the level of noise reduction to the rooms adjacent to the theater. The clients did not feel that isolation was actually warranted. But they felt that acoustic separation was necessary to enable the adults and children to be able to enjoy adjoining spaces without disturbing each other.

Addressing issues relating to the acoustic environment was more challenging. The interior designer was adamant about maintaining complete control of the major design aspects of the theater. The room had contained an oddly-shaped ceiling and a curved wall that could potentially have been an acoustic disaster. The surface and sub-surface material was simulated to make certain that the response in the room had an optimum delay time, effectively voiding any potential problems such as standing waves. To meet the overall acoustic requirements, we relied on the expertise of SoundSense LLC, which specializes in providing products and services for noise reduction, acoustical consulting, and sound design engineering.

Please discuss the specific audio and video calibrations performed and their results.

Audio calibration was performed with an SPL meter in conjunction with Digital Video Essentials Calibration software. Final audio adjustments were made with room analysis software. Video calibration was completed to ISF standards.

What makes this system worthy of recognition?

The theater deserves recognition because of its elegant appearance, high-quality equipment and truly functional design. The room performs wonderfully, allowing entertainment to take place inside without detracting from the peace and quiet outside. In addition, the painstaking detail that went into creating the theater makes the system a collaborative masterpiece.

TIME AND EXPERTISE

Task	Hours
Client Interviews	6
Electronic Design and Engineering	15
Proposal and System Documentation Preparation	12
Project Management	20
Pre-wire/Rough-in	24
Trim-out	8
Shop Time for Racking and Testing	12
Programming	24
Final Installation and Calibration	32
Client Instruction	3
Interior Design and/or Architecture by your Company	4
Interior Design and/or Architecture by Others	0
Project Management by Others	8
Other time	0
Total Hours to Complete	**168**

Qty: 8
Manufacturer: Acoustic Innovations
Model#: Deco Theater Chair

Qty: 9
Manufacturer: Acoustic Innovations
Model#: Deco Chair Arm

Qty: 1
Manufacturer: Acoustic Innovations
Model#: Deco Tabletop Console

Qty: 1000
Manufacturer: Alliance Wire & Cable
Model#: 12 gauge 2 conductor

Qty: 200
Manufacturer: Alliance Wire & Cable
Model#: 2x2 Multimedia cable

Qty: 200
Manufacturer: Alliance Wire & Cable
Model#: RGB-HV

Qty: 200
Manufacturer: Alliance Wire & Cable
Model#: RG-6

Qty: 200
Manufacturer: Alliance Wire & Cable
Model#: 18 Gauge 2 Pair

Qty: 1000
Manufacturer: Alliance Wire & Cable
Model#: Category 5E

Qty: 2
Manufacturer: B&W
Model#: 804S

Qty: 1
Manufacturer: B&W
Model#: HTM3S

Qty: 4
Manufacturer: B&W
Model#: Signature 7NT

Qty: 4
Manufacturer: B&W
Model#: BB-W8

Qty: 4
Manufacturer: B&W
Model#: PMKW8

Qty: 1
Manufacturer: Chief
Model#: RPA-U

Qty: 1
Manufacturer: Chief
Model#: CMA-110

Qty: 1
Manufacturer: Crestron
Model#: TPS-6X

Qty: 1
Manufacturer: Crestron
Model#: CP2E

Qty: 1
Manufacturer: Crestron
Model#: PW-2410RU

Qty: 1
Manufacturer: Creston
Model#: CEN-HPRF-GATEWAY

Qty: 2
Manufacturer: Liberty Wire
Model#: 15 Meter HDMI

Qty: 2
Manufacturer: Liberty Wire
Model#: 10 Meter HDMI

Qty: 1
Manufacturer: Middle Atlantic
Model#: AXS-35

Qty: 1
Manufacturer: Middle Atlantic
Model#: TRACK50

Qty: 1
Manufacturer: Middle Atlantic
Model#: TS1640

Qty: 1
Manufacturer: Middle Atlantic
Model#: AXS-WT-50

Qty: 4
Manufacturer: Middle Atlantic
Model#: RSH-4A

Qty: 7
Manufacturer: Middle Atlantic
Model#: EVT-1

Qty: 2
Manufacturer: Middle Atlantic
Model#: BL-3

Qty: 1
Manufacturer: Panamax
Model#: MAX 5100PM

Qty: 1
Manufacturer: Pioneer
Model#: Elite BDP-51FD

Qty: 2
Manufacturer: Rel
Model#: R-505

Qty: 1
Manufacturer: Rotel
Model#: RSP-1069

Qty: 1
Manufacturer: Rotel
Model#: RMB-1095

Qty: 1
Manufacturer: Rotel
Model#: RB-1080

Qty: 1
Manufacturer: Sim2
Model#: C3X 1080T2

Qty: 1
Manufacturer: Stewart Filmscreen
Model#: SNDQ123HST13wez

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EQUIPMENT LIST