

REPRINTED FROM

AUDIO VIDEO INTERIORS.com

SEPTEMBER 2003

PRIMEDIA
The Authoritative Source



Real Rooms Have Curves

Real Rooms Have Curves



A small, unused transition area in a California beach house is cleverly crafted into a stylish home theater that wows guests every time.

STORY BY KRISSY RUSHING
PHOTOGRAPHY BY BRYAN MAR

As we learned from the cautionary tale *Goldilocks and the Three Bears*, some porridge is too hot, some porridge is too cold, and some porridge is just right. The same goes for home theater spaces—some are too big, some are too small, and some are perfect. In the case of Ray Somers' home theater space in his second home in Newport Beach, California, it was definitely a little on the compact side. In fact, the home itself is not that large, which makes the efficient use of space a necessity to create a comfortable living environment. Having accomplished this goal throughout the modern, but warm, home, accented with earth tones, curves, drywall, and stainless steel, Somers wanted to extend that same illusion of spaciousness to a home theater that was yet to be created.

Somers' beach house had a transition hallway between the downstairs garage, a guest bedroom, and a patio area that seemed like a waste of space. "To me, what is interesting about the home theater is that it's built in a space that wasn't a room originally," says Anthony Grimani of Performance Media Industries (PMI), the acoustician working on Somers' theater. "It was built like a room, in between other rooms, but served no purpose except to get from one room to the next."

Real Rooms Have Curves

Tuned to perfection, the theater includes absorption, diffusion, and bass-trapping devices—all hidden behind the wall fabric. With seating for seven, the motorized Acoustic Innovations chairs automatically recline when the system is activated.



The hallway status of the space had to be changed by addressing the four entrances to the room: the patio's sliding-glass door, the garage door entrance, the door to the guest bedroom, and the stairwell descending from the upper level. Luckily, Somers had already closed off the patio door by building custom cabinetry in front of it in which to store equipment—a unique solution that gave Mark Ontiveros of Audio Images, the project manager and A/V contractor on Somers' home theater, access to the gear's back panels from outside of the house. Luckily, some wiring was installed in the room when the home was built, but electrician Jim Kausch came in and installed proper high voltage wiring to power the equipment, along with the necessary wiring to support the lighting systems.

Ontiveros, with a little goading, got Somers to agree on an automated sliding door to shut off the stairwell. The custom door, executed by ATU Fabrication from Orange, California, and Audio Images' Joe Guercio, rides on its own pistons and disappears into the wall, leaving no trace of its existence. As guests descend into the theater from



A stainless steel door adds an ultra modern touch to the space. As guests descend into the theater from the upper level, motion detectors sense their approach, and the sliding door retracts automatically.

the upper level, motion detectors sense their approach, and the sliding door retracts automatically. The door can be preset by the Crestron control system to stay open or closed if several guests are accessing the theater. In case of a power failure in the home, the door has a built-in clutch mechanism, which allows the door to be disengaged from the motor and moved manually. On one side, the door is stainless steel to go with the stairwell; on the other, it's covered with the same fabric as the walls, making it truly stealth while soundproofing the theater and isolating it from the rest of the home. "It is a modern touch that really stuns people every time they see it," says Somers.

The door to the guest bedroom is completely hidden with the same matching fabric as the rest of the walls. In fact, if you didn't know it was there you'd never guess there was a bedroom hiding behind the theater's wall. Ontiveros was also able to persuade Somers to block off the doorway to the garage, which he covered with an acoustic wall treatment.

Now that the doors were properly concealed, Ontiveros and Grimani were left with an odd-shaped room. One



Theater

Acoustic Innovations ISO Blocks
Acoustic Innovations Randomizing Diffuser
Acoustic Innovations Metro Cinemachairs
NEC 61-inch Plasma
Chief plasma mount
Crestron ST-1700C RF Touchpanel
Remote Control
Crestron CNRFGWA 1-Way
Remote RF Receiver
Crestron CP2E Compact Fixed Resource
Control System w/Ethernet
Crestron PW-2420U Power Pack
for Control System
Dish Network 6000 HDTV DSS
Satellite Receiver
Faroudja Native Rate Native Processor
Goldline Channel parametric
digital equalizer
Lutron GrafikEye 4 Zone Lighting
Control System
JVC HM-DH 30000 DVHS HDTV VCR
Lexicon MC-12B Flagship Digital Controller
Lexicon LX-7 THX Ultra Certified
7 Channel Amplifier
Marantz DV-12S1 Reference series
THX Ultra DVD video player
Owens Corning Absorption Material
Triad InWall Bronze/6 PowerSub
InWall Powered Subwoofer
Triad InWall Silver Surround
InWall Surround Speakers
Triad InRoom Silver PowerSub
InRoom Powered Subwoofer
Triad InRoom Silver Monitor
Freestanding Vertical Loudspeaker
Tributaries Various Audio/Video Wires
Bruck Lighting

of the walls was curved, which can be an asset or a liability when it comes to home theater design. "A concave curve falls inward, which means that sound will hit that curve and bounce back into the room, becoming concentrated at points, and causing sound reflections and different sound at different seats in the room," says Grimani. "With a convex curve, which is angled outwards, sound bounces off of it and disperses in all directions, which is desirable sonically." Luckily, the wall in question followed the shape of a convex curve, making acoustics that much easier to perfect.

The room, approximately 19 feet long and 11 feet wide to begin with, was lined with a stretch-fabric wall system. Hidden by the fabric wall system are the speakers and acoustic treatments, which consist of a combination of absorption, diffusion, and bass-trapping devices. For absorption, Grimani used 2-inch-thick Fiberglas panels on 1.5-inch furring strips, a construction that extends the frequency range of absorption to at least 300Hz. Diffusers help to add to the room's sense of sonic spaciousness, which is very important in a room this small. Bass traps control bass resonance, which can be problematic in a small space. Of course, you don't see any of these treatments, thanks to Modern Interiors, who installed a Nova Wall sys-



tem using a dark-toned Guildford of Maine fabric chosen by interior designer Regina Alvarez. After these treatments were installed, the visible size of the room was even smaller, at 16 feet, 10 inches long by 9 feet, 9 inches wide.

The next challenge was making seven seats fit in the compact space. "You can always put seats in a room—what matters is to arrange them at locations that yield optimal acoustics and video," says Grimani. "But by having proper acoustic treatments, we had more latitude in seat-positioning because sound was even throughout the room." Lance Richard of Audio Images installed one 6-inch riser and seven motorized Marbella leather-wrapped Acoustic Innovations chairs. The front row of seats automatically recline when the system is activated, so that the viewers in the back row (the best seats in the house) are in unobstructed earshot of the speakers.

The video installation was somewhat painless. Somers already owned a 61-inch NEC plasma that he



wanted to use in the home theater. Being as the space was limited, the plasma worked out well. Rob LaCour, one of Audio Images' lead technicians, did a fantastic job getting all of the A/V components installed, including the 61-inch monster. Nicholas Greico, Joe Kane's (founder of ISF) right-hand man calibrated the plasma to video perfection utilizing a PhotoResearch SpectraRadiometer analyzer. The NEC looks so good now, it's the only TV in the house!

The audio, however, was relatively sticky. Somers knew he wanted Triad Silver monitors for audio duties, which, according to Ontiveros, "were the exact speakers to do the job." The speakers all had to be hidden in cabinetry, which can give speakers a "cupped hands" effect. To avoid this, Grimani and LaCour built the speakers into a baffle system within the cabinet. They treated the baffle faces and the cavity behind the baffles with absorptive Fiberglas, then perforated the cabinet's wood so that the speaker could "breathe." By doing this they eliminated the cabinet resonance, but simultaneously boosted the bass of the speaker, which at first was too boomy. Grimani corrected the boominess with a fully digital equalizer.

"If you take the speaker on its own, it has smooth sound; put it in the cabinet, the sound is rough, when you baffle the cabinet, it's no longer rough, but bass heavy," says Grimani. "So when you apply an EQ to the system, you get smooth sound again." Because the baffled speakers automatically got a boost in bass energy, Grimani took out some of the bass going to the speaker through equalization, so the speaker has to work less to produce high volumes. Therefore, you increase the efficiency of the speaker and it doesn't have to strain to produce low frequencies. "The 200-watt per channel amplifier is on vacation, drinking a piña colada," says Grimani. "The response curves

plainly show how much efficiency we gained with the addition of baffles. It's way worth it!" Ontiveros calls the sound "very accurate, tight, exciting, and easy to listen to—never fatiguing."

The same care that went into creating the theater was also taken in setting the mood for the rest of the home. Crestron control systems programmed by Rolling Thunder Software are integrated in the theater and on the main floor of the house, automating the theater's audio/video, as well as the whole-house music and lighting-control systems. To control the ambience and set the mood of both the home and home theater, a Vantage RadioLink lighting control system was specified and programmed by Neil Splonskowski, of Splonskowski Lighting Design, and a Lutron Grafik Eye was installed in the theater. Dimming systems and Bruck Lighting fixtures, courtesy of electrician Jim Kausch, complete the lighting design. A carefully crafted multiroom/multisource Crestron audio system that uses B&W inwalls, an Escient Fireball music system, and Crestron TPS 2000L in-wall touchpanels makes Somers' love of music and entertaining apparent.



Accented with earth tones, stainless steel railings and dark hardwood floors, the home's interior is a flawless example of how a modern home can be a warm, comfortable environment.

Try as it may, the fancy music system upstairs doesn't coax visitors out of the theater. "It's funny," says Somers, "you don't drive all the way to the beach just to watch movies; you want to get out and do stuff. Now, when I have friends to the house, they don't want to leave the theater!" Like Somers says, Ontiveros, along with Grimani and the rest of their teams, took what Somers had—a nice car with no engine—and got it running like a Ferrari. And they did it in a way that made the small theater feel cozy, not cramped—spacious not stifling. After all was said and done, the home theater turned out to be just right. Luckily, Mr. Somers doesn't have to worry about any Bears crashing the party... ♦

Audio/video design & installation by Audio Images, 1582 Parkway Loop #F, Tustin, CA 92780, (714) 258-7238, www.audioimages.tv. **Acoustic design and installation** by Performance Media Industries, 9A Mono Ave., Fairfax, CA 94930, (415) 454 2087, www.pmlifd.com