

# SYSTEMS Contractor News

46 www.SystemsContractor.com

FEATURE

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## Offering A Zoom With A View

■ Audio Design Group Gives Upscale Park City Ski House A Big Lift

by Karen Mitchell

It may not be an Olympic downhill race, but Richard Brathwaite, chief science officer for Salt Lake City's Audio Design Group, has been to the mountain. Brathwaite and crew recently completed the design and installation of an elaborate, customized Onken distributed A/V system for a new ski house in Park City's upscale Deer Valley.

The system contains more than 10 miles of combined fiber and Cat 5, runs and speaks wire, more than 50,000 lines of Creative code, 15,000 active digital signals and 2,200 active analog signals in the house, and more than 200,000 bytes of information. Great includes Eminent Technology Pro, Touchstream amps, and Sound Advances and Thiel speakers. A wall-mounted Zoom Cam with a 200mm lens and a slider provides views of all from and 100 times and will give the clients an up close and personal view of the snow's giant slabs in the Winter 2002 Olympics.

Located in Deer Valley's Gold Eagle area, the ski lodge-style house measures about 7,000 square feet, yet the A/V system is more than twice that of another recent Audio Design Group residential project for an 80,000 square-foot home in Telluride. Brathwaite said, "My partner, Karl Smith, did all the system programming for the Deer Valley house," he explained. "There are not many people in the U.S. who could have programmed this job. Karl was one of the first users of Creative certified programming."

Audio Design Group is the offspring of a Rochester, Salt Lake City studio originally done by the same name. The installation division was launched seven years ago and does about 50 percent of its business in the residential sector.

"The majority of our residential environments are architectural firms and interior designers," Brathwaite said. "We do a lot of work in Summit County (Utah) which includes Park City's Deer Creek and Deer Valley developments. We also work regionally in San Valley, Jackson, and in southern California."

One of the company's current California projects, still in its design phase, is a \$1 million house located in Rancho Santa Fe. The owner has no budget space house itself and three Audio Design Group projects located in the house.

"Our growth has been rapid lately," Brathwaite said. "Many of our local clients have given us a lot of work in the design space in their main residences."

The owners of the Deer Valley ski house are an East Coast investment banker and his wife. According to Brathwaite, the banker was looking for a new, white box with no windows. "But they were actually about their dream from the first interview," he added. "That's an attractive element for me as a designer."

What the clients requested included houses that Brathwaite had not previously encountered. They wanted very specific control of virtually everything in the house," he said. "That's a hard enough to grasp, but they wanted to know everything going on in



Located in Deer Valley's Gold Eagle area, the ski lodge-style house (shown) measures about 7,000 square feet, with a complex A/V system that incorporates control of everything from snow-melt to lighting.

A wall-mounted Zoom Cam (right) with a 200mm lens and a slider provides views of all from and 100 times and will give the clients an up close and personal view of the snow's giant slabs in the Winter 2002 Olympics.

any room—from anywhere else. They wanted to maintain the lighting conditions and temperature in every room as well as what media was going on and what source or channel was being used. They wanted the latest temperature and wind conditions in the ski area. There were a lot of integration issues."

The top end of the ski house, designed by local Lake architect Van White, made system design a demanding task. The house is constructed in seven or eight layers, cascading down a hill.

"On the very top layer, you can look out and see parts of the main house going down the hill," Brathwaite said. "It's amazing, from the road you can't really tell what's there, but you can get lost inside."

The construction of the space was told in its details. "We had to use several Creative switches to control the system," he said. "That alone would have been a lot but the client wanted priorities for these audio areas. Our own room had priority over others."

All of the system sources, except for some located in the owner's home office, are installed in a mechanical room. "That room is unheated and we started running out of



There were a lot of graphics involved, and when we teamed up with the storyboard, I felt like Walt Disney.

Michael Brathwaite, Audio Design Group

room. It was packed with equipment bags," Brathwaite said. "With 40 sources of audio, that's a lot of amplification. We went to Touchstream and got the RA 100 amp, the Refit amp, and made one entire wall of the mechanical room an amp rack."

The Eminent system was selected to integrate a 500-CD collection housed in a bank of large capacity Sony CDPs (20 models) that CD changers. Four Sony SLP 40 1000 systems handle audio. By using CDs on a LiveTouch keypad, a user may select a

genre, such as jazz, then select a specific disc or a random choice.

"Eminent brings up the title of the disc, the name of the track—all the information," Brathwaite said. "We custom made the key pads with help from LiveTouch and we used a Moditech display. That's a homemade joke, we've done that before. But once you get past the amount of transport, it's tricky."

It was the priority aspect of the design that was a new challenge, he said. "That was a little difficult. We had to pick which rooms

would have priorities. When a particular room with high priority takes over, people in other rooms would hear the audio selection but would lose control over it."

The system operates behind the scenes, Braithwaite emphasized. "The first person to hit 'music' brings up a satellite receiver with various channels. There are buttons for 'next' and for 'previous,' and the system will tell you the last genre that was played. If you're the fifth person in the house to listen to satellite music, it gives you the selection on the first."

In addition, a California Audio Labs high-end changer in the home office can be run through the house system, as can an automated piano. FM/AM and short-wave tuners are delivered to the control stations.

"We do Crestron for audio—period—because it's unlimited in what you can do versus preset configurations where you're limited," he said. "In the residential automation field, Crestron lets you deliver any request the client has, any dreams or features they would want."

One big goal for the project was to make it seamless, Braithwaite said, so that the house was simple and consistent. "We trained the clients, but it's pretty easy," he said. "If you learn how to operate any equipment, you can operate it anywhere in the whole house. All the custom made keypads look exactly the same, with as few buttons as possible. The basic audio layout takes nine buttons."

Braithwaite used Crestron VT3500 Touchscreens in six strategic areas. Music for rooms without touchscreens may be modulated through the house via TV, as indicated by the corresponding keypad.

"The VT3500s are wonderful touchscreens," he said, "and one benefit of the Escent system is that we can get information on what's being played in the house. And as a database, it spits out nice graphics displaying the cover art of the albums onto the touchscreens. We used Escent for the first time in the early 1980s when there were 45 just a couple of installs with it in the world. It's really fun, and customers like it because it brings back the pleasure of album covers on nice panels with a 10-inch screen."

Wherever there is a user interface, the information can be brought up in real time on the touchscreens.

"If music has been on in a guest room, you can press that room on the touchscreen and it will give a floor plan," Braithwaite said. "Every keypad is an icon on the touch-

(continued on page 48)

## Zoom With A View

(continued from page 47)

screen. If you want to see what's in that room, you can press it. The icon lights up if lights are on. The actual LiteTouch keypad will pop up a representation of what's on the keypad. You can turn off the lights in a particular room. The first time you bring up the keypad, it displays the whole house so you can ascertain which are on or off at a glance. There are also some global settings."

In addition, the system allows the user to bring up the temperature in every room and to change the setting if desired. "Occupied" and "Unoccupied" modes on the touchscreen allow further priorities to be selected.

"You can choose to put a room or several rooms in the unoccupied mode, to the setback temperatures at a lower level," Braithwaite said. "You could also choose to lock out audio in this system, although we did not use that function in this particular house."

If someone is playing the automated piano, their live sound can be heard anywhere

### EQUIPMENT LIST

#### DISTRIBUTED AUDIO SOURCES

- Escent Tunebase Pro
- (3) Sony CDPX-270
- ADA MT3000 Tuner (AM,FM,SW)
- (3) Sony SAT B2 DSS Receivers

#### PREAMP

- (2) Autopatch 4YDM (switch)
- (20) Crestron ST VC (volume controls)

#### AMPS

- (1) ATI 1502 Power Amp
- (24) Soundstream RA 100 Amps

#### SPEAKERS

- (20) Sound Advance SA 2 Speakers
- (2) Theil SCSS Loudspeakers
- (4) Near 1.2 Outdoor Speakers
- (5) Near 1.6A Outdoor Speakers
- (4) Triad In Wall Gold Power Sub
- (6) Speakercraft MIT 6.5

#### DISTRIBUTED SOUND USER INTERFACES

- (28) Custom Made LiteTouch Keypads (with LED displays for CD and DSS channel, and temp)
- (18) Crestron CNRFHT 30A RF Remote Controls

#### DISTRIBUTED VIDEO SOURCES

- (13) Sony SAT B2 DSS Receivers
- (2) Door Cameras
- (1) Vicon Camera with a 200mm zoom lens, 2X doubler enclosure, and pan and tilt (with Crestron CN CAM)
- Weather Channel (local weather running through a Crestron vision PC, with inside temp provided by temp

sensors in each room, and outside temp, wind speed, barometer, etc. provided by a Rainwise system 12 rackmount weather station, then output to a scan converter, and finally fed into a Blonder Tongue CAMS 60 modulator)

#### VIDEO ENGINE

- (1) Autopatch 4YDM
- (22) Blonder Tongue CAMS 60D Modulators
- (1) ACA 35 Blonder Tongue Amp
- (3) OCA 8D Blonder Tongue Combiner
- CVS 2 Blonder Tongue Splitter
- CVS 4 Blonder Tongue Splitter
- (11) CRT 30 Blonder Tongue Directional Tap

#### DISPLAYS

- (9) Sony 27" TVs

#### THEATER EQUIPMENT

- Stewart Optascreen 100
- Stewart Optamirror Optics System
- Rumco 980 Ultra
- Rumco SC4200 Scan Converter
- Sony DVPS7000 DVD
- Marantz LV520 Laserdisc
- Sony VCR
- Sony SAT B2 DSS SAT
- Krell AV Standard Processor
- Krell KAV 150 Amp
- ATI 1504 Amp
- (3) Snell 1800 LCR
- Snell 1800 SUB
- (4) Sound Advance SA2 Surrounds
- Crestron CNMS II Rack
- Crestron CNRFHT 30A remotes
- Crestron VT 3500 Touchscreens

#### HOME AUTOMATION EQUIPMENT

- (3) Crestron CNMS II
- (2) Crestron CNRAICK

- Crestron CNORAICK
- (6) Crestron VT 3500 Touchscreens
- (3) Crestron CNRFGWA RF Gateway
- (9) Crestron CNRY16 Relay Cards
- (5) Crestron CNAI8 Analog Input Cards
- (7) Crestron CNA08 Analog Output Cards
- (8) Crestron CNIN16 Digital Input Cards
- (12) Crestron CNIR8 IR/Serial Cards
- (9) Crestron CNPWS75 Power Supplies
- (8) Crestron CNCOMH2 RS-232 Cards
- (6) Crestron ST VS Video Sync Sensors
- (20) Crestron CNPC2 Power Controllers
- (9) Crestron CNTBLOCKS
- (1) Crestron CNTEU1A Telephone Interface

- (7) Triplight LCR2400 Surge Protection
- (3) Triplight Smart 1400 UPS

#### CEBUS EQUIPMENT

- Lots Of Dark Fibre, and Cat 5
- (280) USTEC Decora TECPORTS
- (3) USTEC TG16AR 2 TEC Gate Servers

#### LIGHTING

- Lite Touch Elite Processor
- 248 Lite Touch Control Stations
- 42 Lite Touch Enclosures

#### HVAC

- Alerton Microview Processor

#### TELEPHONE

- AT&T Partners

#### RACKS

- Middle Atlantic AXS Racks

- VIDEO CONFERENCING
- Picture Tel Concord

### PROJECT TEAM

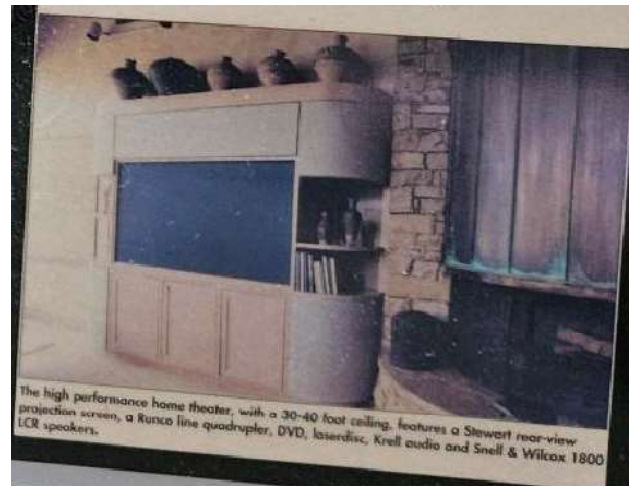
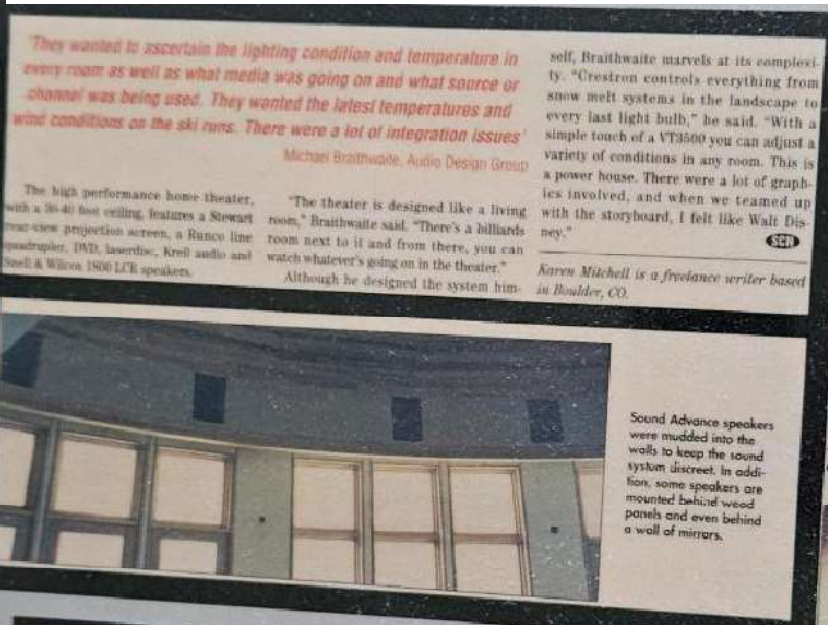
**SYSTEM DESIGN/INSTALLATION:** Audio Design Group, Salt Lake City, UT

**ARCHITECT:** Van White, Salt Lake City, UT

**PROJECT MANAGER, ELECTRONIC SYSTEMS/USER INTERFACE DESIGN:** Mike Braithwaite, Audio Design Group

**CRESTRON PROGRAMMING & GRAPHICS:** Neil Smith, Audio Design Group

**SALESMAN:** Rich Barro, Audio Design Group



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