

Success in Triplicate

UNIVERSAL SYSTEMS INTEGRATES THIRD HOME FOR LOYAL CLIENT IN AUSTIN



On the main floor of Universal Systems' project in Austin, TX, the Great Room AV features a Samsung 55-inch LED TV and Samsung 3D Blu-ray player hidden in a cabinet along with a Tannoy subwoofer. Tannoy in-ceiling speakers complete the room.



PHOTOS: FRANK J. MILES

by Karen Mitchell

For a retired couple with homes in Colorado and north of Dallas, a new residence in Austin is a wonderful retreat. For the homeowners' electronic systems integrator, the third time was the charm.

Universal Systems Inc., of Ft. Worth, TX recently completed a \$410,000 project for the couple's newly constructed home overlooking Lake Travis in Austin. At 4,500 square feet, the Mediterranean-inspired residence is the smallest of their homes but packs a punch. Universal also was the integrator on the client's previous homes.

The Austin residence features a Crestron Digital Media HDMI switching system with 24 audio zones and Crestron lighting control for 133 lighting loads. There is a 12-inch TPMC-12LB touchpanel in the rack with five TPS-6Xs scattered throughout. A full Apple interface is available for iPad, iPhone, or Mac XPanel use, and the interfaces allow full remote control from anywhere in the world. All video and sound via HDMI cabling to amplifiers and signal conditioning equipment reside in the equipment room within Middle Atlantic Products' gangable WRK Series. Furthermore, all room AV equipment including TVs, Blu-ray players, and speakers are powered by Middle Atlantic's Exact Power PowerCore system (see sidebar).

Whole-house entertainment equipment, lighting, climate control, swimming pool, and security are monitored and controlled through

Crestron touchpanels, remotes, and wall switches. Amplification is provided by six Lab Gruppen amps. Speakers from Tannoy include CMS401DC and 501DC models installed throughout various rooms in the house, including the elevator and on second- and third-floor porches. Five Samsung LED TVs are found throughout the home, as well.

The biggest challenge was fitting everything into a relatively small space, said Universal co-owner Hank Lohmer. "There was so much packed in, including the 24 zones, so we had to make sure there was enough rack space."

Lohmer, who programmed the system, came to the company in 1999, where he not only joined founder Gary Dilling but also met and married the boss's daughter, Dorenda Lohmer, who runs the office. Dilling started Universal in 1981 as a security company, moving into home theater in the mid-1990s and growing the business from there into a full-service integration company capable of designing and installing systems for big executive-style homes. Although Universal offers commercial services as well, including those for clients such as the FAA's Regional Operation Center in Ft. Worth, the bulk of its work is in the residential sector.

A Homeowner That Knew What He Wanted

According to Lohmer, this latest home plays into the owner's audio and video desires the best. "He was in the connector and cabling business as a supplier," Lohmer explained. "He gave me a list of what he wanted in each room, and we ran with it. All three homes are Crestron, and are decked out, but we plan to go back to the other homes and mimic what Austin has. All three are internet-connected at all times, from any location."

On the main floor, the Great Room AV features a Samsung 55-inch LED TV and Samsung 3D Blu-ray player hidden in a cabinet along with a Tannoy subwoofer. Tannoy in-ceiling speakers complete the picture.

"Aside from being excellent speakers with a large product line for many applications, we have used Tannoy for many years and have established a personal relationship with the company," Lohmer said. "The client also has them in his other homes."

In the design stage, Lohmer added, the great room's TV viewing angle and its proximity to heat generated by the fireplace were a concern. "However, the length of the great room allowed for



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Universal Systems' Austin project incorporates Middle Atlantic Products' gangable WRK Series wide body equipment racks that were fully integrated with thermal and cable management accessories to maintain adequate temperatures and a clean, effective cabling system within the cabinets. Middle Atlantic's cable ladder system was chosen to manage the massive amount of cable coming into the room, and the manufacturer's Custom Rackshelves and faceplates were specified for components that weren't rackmountable.

In addition to the professional racking provided by Middle Atlantic, the company also supplied power management for the entire AV system. Installing a custom Exact Power PowerCore Transformer System in a WRK with Integrated UPS enabled a level of protection that provided single-point ground, isolation, battery back-up, filtering, and surge and spike protection for the entire AV System, not just the rack room. The client was able to utilize standard electrical wiring throughout the house without any worry of damage to the system. Also, Middle Atlantic's custom configured PDW systems provided rack-level power distribution where and how it was needed. —Karen Mitchell

Racking Up the Power

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In the home's queen suite, a flat-panel TV lift, by MK 1 Studio, features three viewing positions and a bed skirt management arm that raises the bed skirt during use and lowers the skirt when the TV is retracted under the bed.



comfortable TV viewing," he said. "The owner selected a low-BTU fireplace and a mantle that diverted any heat away from the TV, which was inset into the stone fireplace with a Chief PAC-501 In-Wall TV Enclosure and mount."

The home's utility/laundry room, with an extra refrigerator, features audio and light sensors. A nearby hallway with entry to the double garage includes additional speakers. Inside the oversized garage, two in-ceiling Tannoy CMS 501s provide audio, and five Crestron lighting panels control whole-house lighting. A formal dining room is its own zone as is an adjoining conservatory/sitting room with a 54-inch high bar-style table.

Keypads with ADT security are installed at strategic locations. Outside, four static and three Pelco devices provide additional security.

On the second floor, both king and queen suites have 40-inch LED TVs. Suite speakers are installed inside and on adjoining porches. In the queen suite, the owner's wife forbade furniture housing the TV at the bed's footboard. The only solution, Lohmer said, was the employment of an under-bed TV lift for the LED TV. The lift, by MK 1 Studio, features three viewing positions and a bed skirt management arm that raises the bed skirt during use and lowers

the skirt when the TV is retracted under the bed.

"As long as you have a bed skirt it's a great idea; without a bed skirt, not good," he says. "When we first put it in, the client's wife didn't like it, but as she used it more she began to love it. This was the first time we used this solution."

A guest suite, with a 46-inch LED TV and in-ceiling Tannoy CMS401 DCs, also has a Crestron c2n-clap8 processor for its surround system. "It was originally going to be a media room," Lohmer said, "but we needed more rack room, so there is a fold away Murphy bed.

A second-floor landing features a compact six by six-foot equipment closet with three access doors and a Mitsubishi P Series system for cooling. "We also had the [Exact Power] PowerCore custom-housed to match the other two AV racks, so it was consistent," he said.

On the third floor, accessible from a circular, floating wood stairway from the second floor (which is steel-framed and had to be dropped in before the

second-floor walls and roof were installed) a round library offers spectacular views of the lake and hill country. A Crestron TPS-6X wireless touchpanel and a 46-inch LED TV, as well as audio,

add to the enjoyment.

Outside, a swimming pool with a fiber optic Pentair lighting system that changes water colors is controlled through the Crestron system. Two rock speakers from StereoStone, with a lifetime warranty, provide audio. More audio extends to back and side porches.

"When you work with a system of this caliber," Lohmer said, "and the customer already knows the cost, to some degree prices aren't a worry. You just worry about doing it right the first time and making sure you have everything together. When a client is spending this amount, there's a lot of trust involved. You have to be careful not to take advantage, and to be a good steward of the customer's money. They need to know you'll be there for them and follow through. It's easier with repeat customers because you already have a rapport."

Karen Mitchell is a freelance writer in Boulder, CO.



What's in the Hood

The desire by Universal System's client to have a hand-carved Mexican travertine kitchen vent hood was all at once beautiful and functional, but presented a unique challenge for the integrator. The custom-built one-ton hood, made precisely for an exact fit, not only had to house an exhaust fan for the cooking range, but also had to accommodate a Sony 32-inch LCD TV in a Chief PAC-501 cantilever mount.

"We measured the space at least three or four times to get the proper sizing," explained Hank Lohmer. "Typically, we would have hung a TV on a cabinet, but with this stone and vent hood, everything had to be modified because we had only two to three inches behind the TV to allow for venting."

The TV and Chief mount are four inches deep, so the airflow had to be in a customized channel. "There wasn't a lot of space for fluff," Lohmer added. "After seeing the final product, we knew all the measuring and planning was not done in vain. It has become a major focal point of the kitchen and the house."

—Karen Mitchell