

Electronic Lifestyles

Your Guide to Integrating Technology Solutions in Residential Design & Construction

Fall 2013

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DESIGN &
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A view of the home from oceanside gives a full picture of the blue and green colored LEDs, the lit Tiki torches, and the Axis "whalecam," far upper right.



Heavenly Haven

Maui is the ethereal setting for this automated retreat the owners have dubbed 'Honu Lani' (Turtle Heaven).

BY PATRICIA ROBERTS

There is a saying that "Mighty oaks from little acorns grow." And while palm trees, not oaks, populate this breathtaking locale, that's nevertheless an apt metaphor for this project's evolution from a basic distributed audio system and a simple light switch into a fully automated residence.

Maui-based integrator Art and Automation was hired at the recommendation of architect Marc Taron of the Maui firm Arquitectura. "The funny part is, when he called us, he actually apologized for asking us to help him out," Mike Ruger, president and CEO of Art and Automation, said.

"The initial contract for the house was \$6,500, to install some surround speakers and a very simplified distributed audio system. His initial involvement in the project was equally minimal," Ruger said. "It's almost comical to look at the original intent and then see what the project transformed into."

Since electrical code prohibited use of a high-voltage switch in the tub area, the only option was to use a low-voltage keypad. So Ruger recommended a Lutron model. And when he explained the breadth of control possibilities

that it offered his clients beyond just turning an outdoor light on and off, the project grew exponentially from there. "The owners quickly went from a small, local Lutron system to a fully integrated, whole-house lighting control system," Ruger said. "Shortly thereafter, the client decided that if they were going to do the lights, they might as well add full automation to the house"—a turnabout that happened in just 48 hours. "Here, as in most cases, properly educating the client was instrumental."

The home is controlled with AMX NI-series controllers, which sync with both wired and wireless touch-panels, laptops, smartphones, and tablets.

As the job progressed, the full scope of control and monitoring possibilities became clear to the homeowners, part-time residents who soon readily understood the value in being able to access, monitor, and manipulate every aspect of the home remotely. The security camera installation the owners settled on even allowed them to keep tabs on the remodel's progress from a distance. And because two of its cameras are equipped with 20X optical zooms, the owners can view both the whales that migrate to Maui every winter and



Path lighting leads evening visitors from the front yard entry gate to the front of the home.

the turtles that crawl up onto a nearby small, isolated beach every afternoon.

Close teamwork among integrator, designer, contractor, and architect, either in person or via conference calls with the owner, kept the remodel from hitting unnecessary snags. "Once we demonstrated our efficiency and garnered client trust, we proceeded on a number of items with merely a verbal 'OK' from the owner, within minutes of our suggestion," Ruger said. "This allowed us to keep the ball rolling and avoid any schedule delays. The level of trust was incredible."

Besides distributed audio, security, and lighting control, the system gives the owners full command, from anywhere in the world, of motorized shades, two media rooms, HVAC, the pool and the spa, multicolor LED lighting, and even the outdoor Tiki torches.

Ruger made sure to strategize for upgrades or other technological needs down the road that might arise. "We planned ahead by installing empty conduit or extra cabling, as a way to 'future-proof' the home just in case the owner wanted to add another feature that we'd talked about. This plan served us very well, as the owner was very creative in laying out things he wanted to be able to do."

Also, based on the client's 180-degree shift at the onset of the project, from wanting very little to wanting it all, Ruger needed to be ready for the unexpected. "If we learned anything about our client, it was to never be surprised as to what he might want to do next. This is a client who initially rejected the very notion of installing any kind of intelligence in the house. Now, if there was a way to add a blender to the system, he'd probably do it."

While all the gear that was eventually incorporated into the installation sounds like a lot to fit unobtrusively into a home without offending the aesthetic carefully crafted by interior designer Shelby Hansen, it's a tribute to Ruger, Taron, Hansen, and their teams that everything was successfully "stealthed." "Most of the back-room equipment is hidden in racks mounted in custom-made Balinese cabinetry designed to hide everything in plain sight," Ruger said.

"It was a truly amazing team effort—so many professionals with so many different disciplines, working so closely together. The general contractor (David Stoops of Maui's Building Specialists), architect, interior designer, electrician, plumber, and especially the client—everyone—understood the project was a moving target, so whenever anyone needed help, everyone just moved in and helped out. I never once heard anyone say, 'That's not my job,' I've never worked on a job-site quite like this before. It was a great experience." ■



In the great room, a Sharp large-screen TV is mounted above the home theater component cabinet below. The custom front-carved doors, which hide the equipment, contain vent holes for the gear.

DESIGNER'S PERSPECTIVE

Shelby Hansen, Shelby Hansen Interiors



Shelby Hansen

Electronic Lifestyles®: Have you collaborated in the past with Mike and his Art and Automation team?

Shelby Hansen: This project was the first time I worked with the guys at Art and Automation. They were easy to work with because they really know their stuff; it gave me confidence that we could seamlessly work together for a very custom home for our client.

EL: What was the biggest challenge for you in this project? How did you overcome it?

Hansen: The biggest challenge was due to the fact that we were vastly upgrading the mechanical and technical aspects of the house, but had logistical limitations of accommodating the housing of the equipment for the Lutron and two electrical panels within the footprint of the original house, rather than adding on to the house. The equipment had to work within the confines of the existing footprint of the house, and the obvious location to serve as the brain center was in a guest bedroom wall.

The only problem for me as a designer is when you have a guest bedroom that's all windows and one wall, and you're going to put the electrical panels and the Lutron panel on the only wall—the wall that the bed's headboard goes on—well, that is certainly a design challenge!

No amount of art would cover these boxes, and the panels needed to be easily accessible, and they needed air flow, but that turned out to be a great and fun challenge.

I suddenly saw a vision of four beautifully decorative carved and painted Teak doors that would slide for access and cover the entire wall. They would look antique and I would have them made in Bali. I would make them like French louvers to allow airflow, and the talented artisans would carve in a Hawaiian theme. It was the most perfect solution, because it added drama and scale to the room, beauty and great function!

EL: What did the client most like about the end result that they articulated to you?

Hansen: That the home really captured their casual family style and was the culmination of all their personal preferences in design and function.

EL: What else would you like to say about this project?

Hansen: That it was the most enjoyable project I ever collaborated on. The clients, architect, contractor, the crew and the guys at Art and Automation—we all had a great synergy, and that shows in the final presence of the home.

The master bedroom features Lutron's SeeTouch keypad near the door, which powers the Sivoia shades.



The pool view looking over a submerged concrete plinth. Submerged pedestal seating is at left and there is color LED lighting throughout, and automated Tiki torches in the distance.



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ARCHITECT'S PERSPECTIVE
Marc Taron, AIA, Arquitectura, LLC



Electronic Lifestyles®:
 We've heard that you were the reason the homeowner decided to use Mike Ruger and his Art and Automation team to do the home's technology integration. What makes Mike and his team so easy to work with?

Marc Taron: I have learned that to surround myself with quality vendors, people who share a passion for what they do, always leads to the best results. I have had great experiences working with Mike and his crew over the years.

EL: What was the biggest challenge for you in this project? How did you overcome it?

Taron: The biggest challenge was that there were so many creative minds involved (owners included), that new ideas were constantly thrown into the mix. It was challenging to keep up with the need for revised drawings.

EL: What element of this project were you proudest of in the end result?

Taron: That the client has such a large, wonderful family, and this house suits them perfectly.

EL: What did the client most like about the end result that they articulated to you?

Taron: Perhaps the outdoor shower in the master bath, where it all started.

■ **equipment** Contact the CEDIA member for a complete equipment list.

AMX NI3100 Integrated Controller, NXD-1000Vi Touchpanel; **Axis** Q6035-E Security Camera; **Dell** Vostro 200 Security Camera Server; **Extron** VSW-2VGA-A 2x1 VGA Switch with Audio; **Furman** F-1000-UPS Uninterruptible Power Supply; **iPort** IW-22 iPod Dock; **Leon Speakers** HZ313-LCR-A Custom LCR Soundbar; **Lutron** H8P5-MH48-120 HomeWorks Lighting Control System, Sivoia QED Motorized Shades; **Marantz** NR1501 AV Surround Receiver; **Middle Atlantic** SRSR-4-13 Equipment Rack; **Niles** ZR-6 Multizone Receiver; **OmniMount** ULPC-X TV Mount; **Pakedge** RB-KIT Preconfigured Ethernet Router; **Parasound** Z-PRE Preamplifier, Z-AMP Amplifier; **PSB** SubSonic 5i Powered Subwoofer; **Samsung** LN40C550 TV; **Sharp** LC-70LE6400U TV; **Sonance** VP87R Visual Performance Ceiling Speaker, VP85R W Subwoofer; **Touchpanel Control** TPC-APPLE iPad Integration; **Trine** EN400-32D Electric Door Strike; **Wilson** AG Pro 75 Cell Phone Booster