

Adding a Little Electricity to the Home: The Renewed American Home shows how today's electronic trends can work in any old home - even yours

By Paul Rogers - CTW Features



Wired up: Structured wiring makes your home one giant, functioning device. So your refrigerator, stove, microwave - and wine fridge - all are on the same page. Image courtesy NAHB

Just because you live in a 1940s bungalow or a 1970s ranch doesn't mean you can't take advantage of today's flashy home audio, video, security, lighting and other electronics systems. That was one of the messages from The Renewed American Home, a showcase house built under the auspices of the National Association of Home Builders for the 2007 International Builders' Show held Feb. 7-10 in Orlando, Fla.

For each of the last 24 years, the NAHB has organized the construction of a showcase home, calling it The New American Home. But this is the first Renewed American Home in the distinction being that the former is new construction, the latter a remodel. Albeit a massive remodel, including the relocation of the entire house to a new lot.

The Renewed American Home came about by accident. The NAHB purchased the house in Orlando's historic Lake Eola district intending to knock it down and build The New American Home. When the city's Historic Preservation Board nixed the knockdown, NAHB decided that a remodel might complement a from-scratch building and serve equally as "a real-world laboratory demonstrating concepts, materials, designs and construction techniques that can be replicated in whole or in part in housing built any place and in any price range."

The Renewed American Home offers a plethora of ideas, including environmental features that earned it "green" certification from the Florida Green Building Coalition. But one that stands out because of the juxtaposition between the remodel and the original home, built in 1909, is the electronics.

"The Renewed American Home demonstrates that owners of historic residences can still participate in the modern entertainment lifestyle without needing to compromise their environment," says Malcolm Wertz, president of Electronic Systems Design, Orlando. ESD designed the low-voltage systems in both IBS showcase homes.

Among the installed systems at The Renewed American Home are structured wiring, security/life-safety features, multi-zone audio, lighting control and flat-panel displays.

Structured wiring refers to all the low-voltage wiring in the walls that provide the audio, video, phone, security and network access, as well as the components that interface the wiring with the electronics they control: the displays, processors, phones, radios, cameras, lights, etc. Structured wiring, in essence, makes the home one big, integrated, electronic device.

"The systems of today allow you to interface/interact with your home in the structure becomes 'alive', if you will," says Joe Tame, design specialist at ESD.

The Renewed American Home, for example, features a Bose Lifestyle multi-room audio system that allows the homeowners access to all music, video and communications from any room via LCD remotes. Every room boasts in-wall speakers. A centralized hard disk stores digital music. Video distribution connects every TV in the house (three plasma, three LCD) to all video sources and security cameras.

Another example: All lights can be set to sequence on and off at specified times of day or, when interfaced with the security system, in conjunction with other house activities such as opening or closing the front door. The system also controls the brightness of lights, turning them on at only half power, for example, to set a relaxed mood and save energy.

It doesn't take much to imagine a scenario in which you come home from a hard day's work, open the front door and the hall light goes on long enough for you to remove your jacket and hang it in the closet. You enter the library greeted by soft lighting, sit back in an armchair, touch a remote sitting on the end table and are soothed by Bach's Cello Suite No. 1.

And it doesn't take much to imagine the kind of selling point such electronics would be if you were marketing a home or how such a system might boost the price.

How easily such systems can be incorporated into the average existing home depends on many conditions. But that's the point of The Renewed American Home in to show it can be done with existing materials found in almost any major home-improvement store. It starts with structured wiring, which has become common in new-home construction only since 2000.

Homes built prior to 2000, "with few exceptions ... are ill-equipped to handle today's electronic needs. In many cases, homes that were lucky enough to have [sufficient-grade] wiring, for example, were wired in a fashion that renders the capability of the wire null and void," says Wertz.

Those homes without structured wiring can expect a certain level of drywall or plaster damage from new wiring, but usually not inordinate amounts. Although The Renewed American Home does not utilize much wireless, there also are limited wireless options for certain systems, such as lighting, heating and air conditioning.

Wertz and Tame expect lighting control to be one of the first features picked up en masse by builders ranging from whole-house shut-offs to motorized drapes, shades and awnings to capture or shut out sun in with house-wide control touch panels not far behind.

"From a resale standpoint, I believe that buyers will be asking more and more for the ability to have home networks," says Wertz. "When I started in this business in 1994, security systems were really the only electronic system that was standard for the most part. Today I see customers asking for systems ranging from iPod interfaces with whole-house audio to dedicated home theaters to flat-panel TVs, and I believe these are becoming the standard equipment of today."

Even in houses built in 1909.

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