

ELECTRONIC HOUSE

FAST TRACK TO THE CONNECTED LIFESTYLE

APRIL 2005



Room with a View

Media Room Bliss

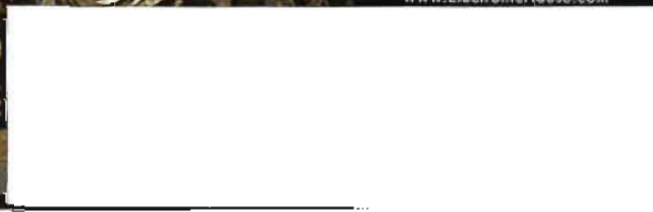
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TRENDS



Wall-through-Wall

EH ■ April 2005



For Nimesh and Saryu Patel, a whole-house music system controlled by a touchscreen was a godsend.

When Nimesh and Saryu Patel recently built their new house in Greenbrook, NJ, they included a multiroom audio system complete with in-wall speakers so they could enjoy their favorite music throughout their home. But there was one very strict guideline: The system had to be simple enough for Saryu to use. "When we lived in a condo, she would call me because she couldn't turn on the TV," says Nimesh.

■ As anyone living in the digital fast lane knows, there's an overabundance of audio and video content just waiting to be enjoyed throughout your house. CD and DVD libraries are taking up valuable space, music and maybe photos and video are stored on our computers, and much more audio and video are broadband downloads away. It seems so simple and right, but for most, actually enjoying all that stuff anywhere in your home can feel as distant as interplanetary travel. This stuff may not be rocket science, but it can sure seem so.

Scattered media and shattered expectations?

Audio and video anywhere in your home are just a remote control click away. *by Mark Spoonauer, photography by William Psolka*

Dreams

The Patels' system alone includes a hard-drive-based AudioRequest music server from Request Multimedia, in-ceiling and in-wall speakers from Sonance and touchpanel controls from Crestron, all of which had to be wired and made to work together so Nimesh and Saryu could have easy audio access from any room, anytime.

That was too much for the Patels to figure out on their own, so they hired a custom electronics specialist, Electronics Design Group (EDG) of Piscataway, NJ, to design and install the whole system. "They actually made it pretty easy," Nimesh says. "I can search by album, artist or genre. We've had parties at our place, and I can have the same

song playing in three different zones, then take a different audio source and have that playing in the basement in the rec room." When the Patels aren't entertaining, Nimesh likes to play music in his exercise room, which shares four speakers with the recreation room.

But the Patels are one of the lucky few couples who have conquered scattered media and shattered expectations to achieve their wall-through-wall dreams.

Into the Home

According to the Consumer Electronics Association (CEA), interest in multiroom audio and video is

For Nimesh, convenient control of the audio and video systems throughout the house was critical, whether he's relaxing or working out.



surging. More than half of those who responded to a recent survey said they would like to be able to listen to the same music in multiple rooms of their house at the same time, while nearly half said they would like to be able to record live TV and make those recordings available to any TV in the house.

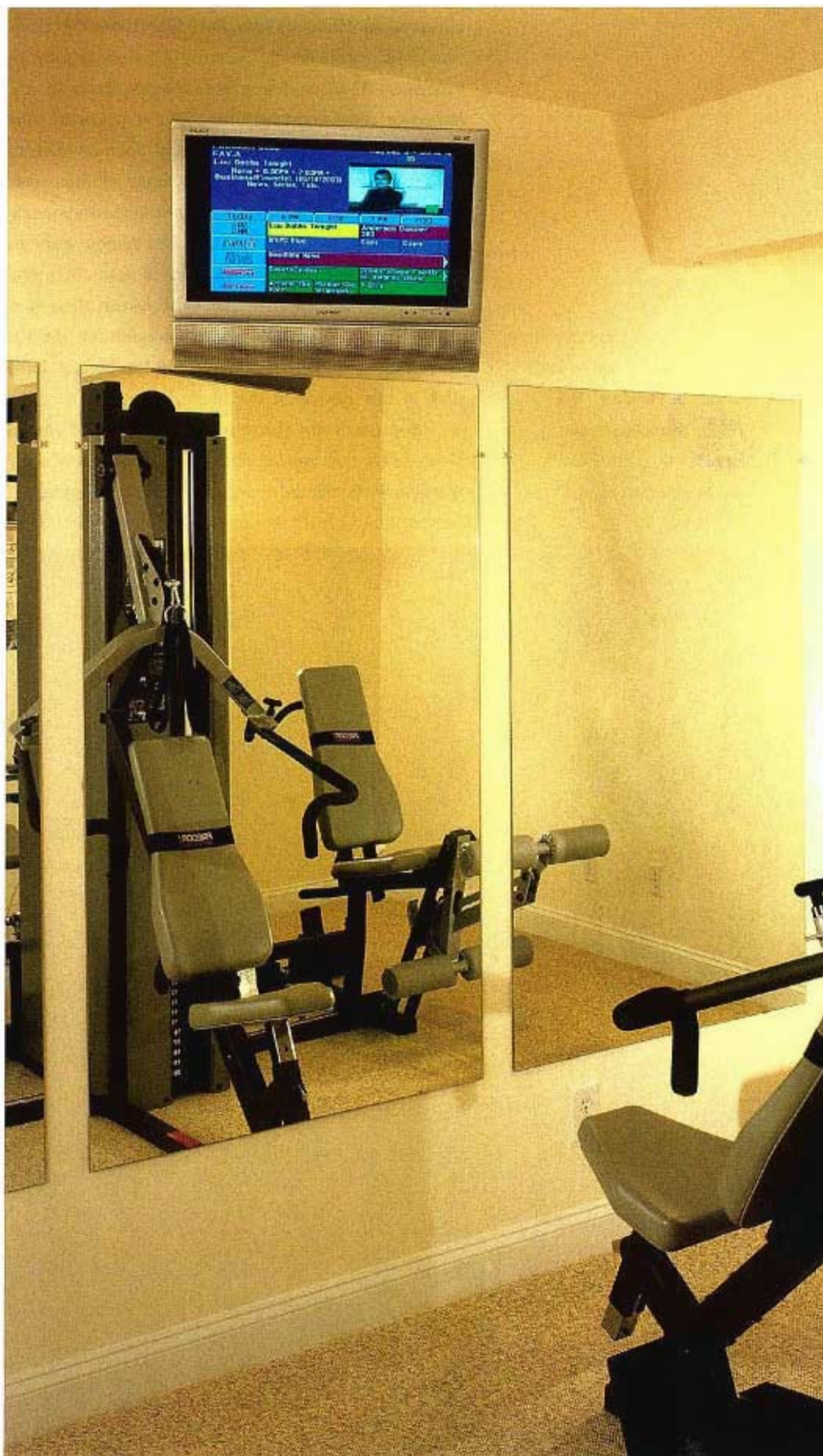
"There has been large growth in media servers due to the convenience of easy and instant access to their content," says Steve Vasquez, cofounder of ReQuest Multimedia, which makes hard-drive-based music servers. Because the content is in the digital format, it can be delivered to other devices throughout the home using standard Category 5 communication cables used for computer networking and structured wiring. "This allows different members of a household to listen to different content from the same collection at the same time," Vasquez adds.

Adding a whole-house audio system running off an audio server like one from ReQuest Multimedia, Escient, Meda Systems and other companies can be an expensive proposition for many. Hard-drive-based media servers run from a couple of thousand dollars to well into five figures. And that can be just for music. (Though ReQuest and Escient offer DVD-changer systems for video storage.) Video servers that can store DVDs onto hard drives are few and pricey and include slick offerings from AMX and Kaleidescape systems, starting at \$10,000 and running up to \$27,000 just for a base system. And that's before you add multiroom capability.

Screaming for Streaming

While going with a wired approach still offers the best quality for distributing audio and video throughout the home, there are some intriguing and affordable wireless options that can turn your PC into a media server. Most wireless media players are installed by the homeowner, along with a server program running on the PC that feeds content over the air to the wireless media player. That player is connected to a TV or stereo.

The wireless media player making the biggest splash right now is Microsoft's Media Center Extender, a \$399 set-top box that delivers your favorite shows, music, pictures and home videos anywhere in your abode using the same streamlined



interface as Media Center PCs. The Extender communicates with a Media Center 2005 desktop or laptop over Wi-Fi and connects physically to a TV, stereo or receiver in another room so you can hear and see every media file stored on your computer.

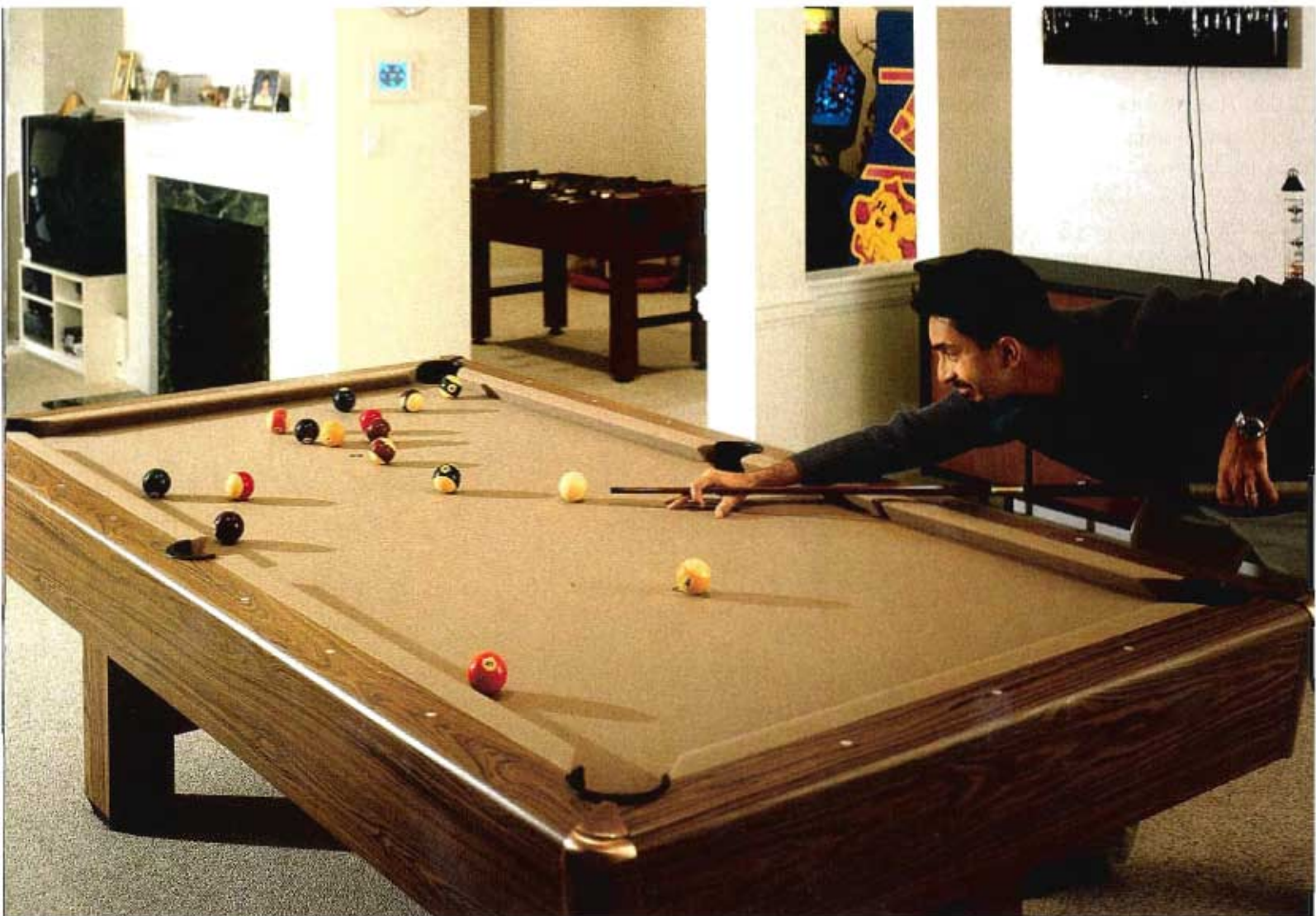
Tom Laemmel, product manager of Microsoft Windows Client, believes today's souped-up computers are more than powerful and nimble enough to shuttle our content around the house. "In many cases, users already use the PC to store their digital videos, pictures and music. In addition, the PC often has the fastest processor and the biggest hard disk of any device in the home."

Because even the most state-of-the-art Media Center PCs max out at about 200 gigabytes of storage space, dedicated media servers are stepping in

with whoppingly large hard disks that can store multiple seasons of your favorite sitcoms, dramas and reality shows. The Niveus 1 Terabyte A/V Storage Server, for example, boasts a whopping 1 terabyte of storage. That's 1,000 gigabytes, or enough room for 100 hours of high-definition TV, 16,000 hours of music and 670,000 photos.

If you don't own the latest and greatest Media Center PC, there are several stand-alone wireless digital media receivers that work with other flavors of Windows. For example, companies like Apple, Creative and Netgear offer dedicated wireless audio players that stream MP3s and other music files and play them through your stereo. Most of these products work well, but with the exception of higher-end gear like the Roku SoundBridge, most look like

Nimesh didn't want the whole-house system to be a shot in the dark. The Patel's recreation room shares four speakers with the exercise area.



mutated routers that don't exactly fit in with the rest of your entertainment center.

For those who want to access pictures as well and seek a design that complements their living room decor, wireless media players like the D-Link Media Lounge should more than satisfy. Unlike first-generation wireless media players, the Media Lounge comes with component video and optical audio connections for the best quality, plus it's compatible with the Rhapsody music service, Napster and Radio@AOL. D-Link, says the device takes only five minutes to install.

Philips' photos Streamium line of products also enables consumers to wirelessly stream videos and music from the PC and Internet to existing home entertainment gear. The SL400i wireless multimedia link has the ability to not only stream music, pictures and videos but also to access content from several online partners, including Launch for music, Yahoo! Photos for photo albums, iFilm for short films and Yahoo! Movies for trailers.

Get Connected

Since Wi-Fi has already found its way into everything from laptops and printers to cell phones and hard drives, it's a logical leap for consumer electronics components to get into the act. Today, digital video recorders and DVD players are getting networked so they can grab pictures, music and videos from our PCs. And TVs are next.

CEA director of industry analysis Sean Wargo senses it's only a matter of time before all devices in the home are connected. "I do believe that eventually the set-top concept goes away as more devices and content are routed throughout the home over a network of addressable products," he says.

That doesn't mean there aren't compelling options out there for those not willing to buy a whole new TV. The TiVo Series2 DVR allows users to share photos and listen to their MP3 collections through their home entertainment systems. Just plug in a wireless USB adapter like the D-Link DWL-122 (\$49), and the set-top box will grab your favorite files off of your PC using TiVo's desktop software. "Over 60 percent of our current subscribers have their TiVo on a home network," says Jim Denney, TiVo's senior manager of product and service marketing. "We

have had music, photos and remote scheduling functionality for over a year and a half now."

You can even watch what you've recorded in one room on a TiVo in another room, although Denney doesn't believe that wireless technology is quite reliable enough yet for full-fledged streaming. The next wireless frontier? The TV itself. Philips recently debuted its first 23-inch LCD set with wireless streaming technology built in. You can access content stored on the computer wirelessly by pressing the PC LINK button and web-based content like MusicMatch and Radio Free Virgin by pressing the INTERNET button.

In the end, the debate over whether the PC or TV universe will rule the digital entertainment roost isn't one worth arguing, as all of our devices within the home will be networked. "Both of those traditional devices will play a role in the media server system," says Wargo. "That's really the point. I believe we aren't talking about a specific product but more a grouping of products into a system."

Just consider the next steps for new homeowners Nimesh and Saryu Patel. Nimesh wanted the flexibility to add more capabilities as he saw fit, including turning his Pocket PC into a Wi-Fi remote control using Crestron's whole-house control software, and the couple's electronics specialist, Electronics Design Group, obliged. It seems that dreams never die, even when they're of the wall-through-wall kind. **EH**

Who Ya Gonna Call?

When Nimesh and Saryu Patel decided to add multiroom audio to their dream home, they contacted Electronics Design Group (EDG) in Piscataway, NJ, to help them plan their system and handle the complicated technical issues involved.

Alan Weissman, an EDG systems consultant, says catering to the customer's specific desires makes all the difference in a successful installation. "We like to sit down with the client and discuss what their priorities are. Once we determine that, we put together a project scope or budget estimate."

The cost of an average multiroom audio installation can start at \$15,000, so having a professional walk you through the whole process provides peace of mind. Ray Lepper, president of the Custom Electronic Design and Installation Association (CEDIA) and owner of Home Media in Richmond, VA, says his company will spend a minimum of an hour and a half just planning the right solution based on the person's needs. "We'll help you understand the choices you can make for different kinds of functionality," he explains.