

4 HOME THEATER PACKAGES 4 BUDGETS

# ELECTRONICHOUSE

FAST TRACK TO THE CONNECTED LIFESTYLE

FEBRUARY 2007

What YOU Need  
to Know About

# TVS

Price ■ Resolution ■ Size



Ultimate Sports Room  
3 Screens to Watch

# DIY HOME THEATER

# CONTENTS

## February departments

### Quick Hits

**17 HOME FRONT** Quiet windows, Start Over TV and the HD fridge.

**52 SPOTLIGHT** Matt Roberts of 3 Doors Down.

**96 10 THINGS** About high-def DVD.

### Strictly Stuff

**23 ELEMENTS** Theaters for all sizes.

**32 MORE FOR YOUR MONEY** The (video) game room.

**46 ALL ABOUT** Lighting control systems.

### Tech-Styles

**34 TRANSFORMED** Rotating

plasma in a home office.

**36 GREAT IDEA** Remote computer repairs.

**38 START** Illuminating options.

**40 BIG IDEAS** Beam us up to this theater.

**55 AT HOME WITH** Will West of Control4.

### Columns

**58 HOT BUTTON** Life imitates video game.

**60 PLAY** Cheap, better or best?

### In Every Issue

**8** Editor's Letter  
**90** Systems Designer Directory  
**95** Advertisers' Index



#### HERE'S WHAT MAKES THIS ROOM ROCK:

- It's in a bonus room above a garage.
- A 110-inch Drape screen rolls down on cue.
- Seven channels of 800 speakers and a subwoofer blast great sound.
- Oak double doors keep out light and noise from adjoining spaces.
- A Yestage 6-Link lighting control system sets the mood.





## High Trek

Kirk and crew never had it so good. This "high-trek" bridge offers a 102-inch high-def view into the ever-expanding universe of home entertainment. And it was all built from scratch by homeowner Gary Reighn. You could say a lot about his Enterprise.

**G**ary Reighn has boldly gone where no one has gone before—or perhaps where only a few have gone. This Philadelphia-area homeowner not only built a home theater based on the command bridge of a popular science fiction show with a cult following—others have done that—but he also did it all himself. He's responsible for everything from framing the walls to installing the equipment to crafting space view ports and simulated computer screens.

And although he insists he is not a Trekkie who dresses up and attends conventions, one might compare him favorably to the original series' Scotty character, who was always repairing the engines and warp drives in the nick of time.

This job, fortunately for Reighn, didn't have a deadline, an impending Klingon



## BIG IDEAS

attack or the nagging of Captain Kirk. Gary was able to take two years, from cleaning out his basement to finishing the 19-by-14-foot space. "I'm a big sci-fi fan. I like *Star Wars* and *Star Trek* a lot. And I always wanted to do a big-screen theater, but plasma screens were too expensive when I started this [in 2002]," Gary says. "I've always been an audio junkie and a little bit of a videophile. We had a Polk-based system upstairs, and the theater was an opportunity to spend some more money on it."

When he saw some million-dollar *Star Trek*-like theaters featured in magazines, he knew what he wanted to do. Only Gary's budget was about \$15,000.

First, he built a scale model of the room, which served as his blueprint. The fine details he would figure out as he went along. The walls went up, the floor went down. And although the basement only offered 7½ feet of height, he added a riser for a back row of seats, bringing the ceiling height there down to 7 feet. There would be no digging an extra couple of feet down like in some expensive projects. A water heater was moved, but a water meter right in line with a side wall was simply boxed over to appear as part of the ship's architecture. An all-important fire extinguisher was placed behind a metal door in the back, which also blends in with the decor.

Gary admits he couldn't build an audiophile- and videophile-grade system with his budget, but he appears to have done pretty well, with a high-definition Sony LCD projector capable of 720p resolution, Polk audio speakers in a 7.1 configuration, a Velodyne subwoofer, Yamaha receiver, Bravo DVD player, Philips Pronto remote, and Bass Shakers beneath the two home theater chairs in the front row. The back row seats, Gary proudly points out, are just comfortable office recliners that cost \$50 each. Gary fitted each of the back-row seats with his own custom-made cup holders.

The equipment is stored in a rack recessed into a side wall and is part of an equipment closet that can be accessed from outside the room. The

# The Details

The elements that pull this space together



**SOUND TREK ARRAY** Three Polk CSI speakers flank the home-built screen, while a powered Velodyne CHT-12 subwoofer fires from the stage below.



**SPACE ISSUES** The rack of components is accessible from a closet on the other side of the wall, and a cleverly crafted view port is set between acoustic treatments.

## BIG IDEAS

front. Polk speakers are recessed into the wall and flank the screen, while the four surrounds are mounted to the side and rear walls. The 12-inch Velodyne subwoofer is in the proscenium Gary built in front of the screen.

And what of the screen? Gary made that, too, no doubt saving a few grand. The 100-inch screen is made from matte white screen vinyl and steel framing painted black.

"The hardest part was settling on the final design and color scheme," Gary says. "I had no idea what I was going to do on the walls. Then I figured I'd put windows in."

Gary constructed the space-view ports by building light boxes with fluorescent backlighting, then taking plexiglass and painting the back black and gently touching a drill bit to each spot for a star. He says he if had more money, he would have used fiber-optic lighting. The simulated computer screen displays are light boxes as well, using plexiglass and a clear film from Staples, reverse printed with the graphics on an ink-jet printer.

Also on the walls are various shapes that are actually acoustic treatments. "I knew that if the room were a drywall box, it would sound terrible," he says. "It's definitely quiet when you go in. I used Sound Stop acoustic board, and I needed something that could be cut fairly easily. I think that took out most of the booms, but I'm sure an expert would find frequency response variations," he says.

That doesn't matter so much to Gary and his family. "My teenage son and I are often down there watching movies. And it's intimate enough that I can go there and sit by myself and not feel like I'm in a big empty room," Gary says. "It's a room that when you dim the lights, everything is focused on the movie."

We know Gary's not a Trekkie, but we think Scotty would be proud.

**SYSTEM & ROOM DESIGN:** Gary Reighn,  
[www.reighn.com/theatermain.html](http://www.reighn.com/theatermain.html)

FOR MORE INFORMATION, GO TO [www.electro5house.com/4more/startrek](http://www.electro5house.com/4more/startrek)

## Even more Details



**THE TROUBLE WITH FIXTURES** The saucer-shaped overhead light is made from painted MDF (medium-density fiberboard) with eight halogen lights and one center light that uses conventional bulbs (the original fluorescent bulb interfered with the infrared remote control system).



**SHIP'S AMENITIES** Okay, so the back pocket door doesn't split apart and isn't automated, and Uhura never had shelves lined with DVDs. The crew didn't have customfitted cup holders in the backseats, either.