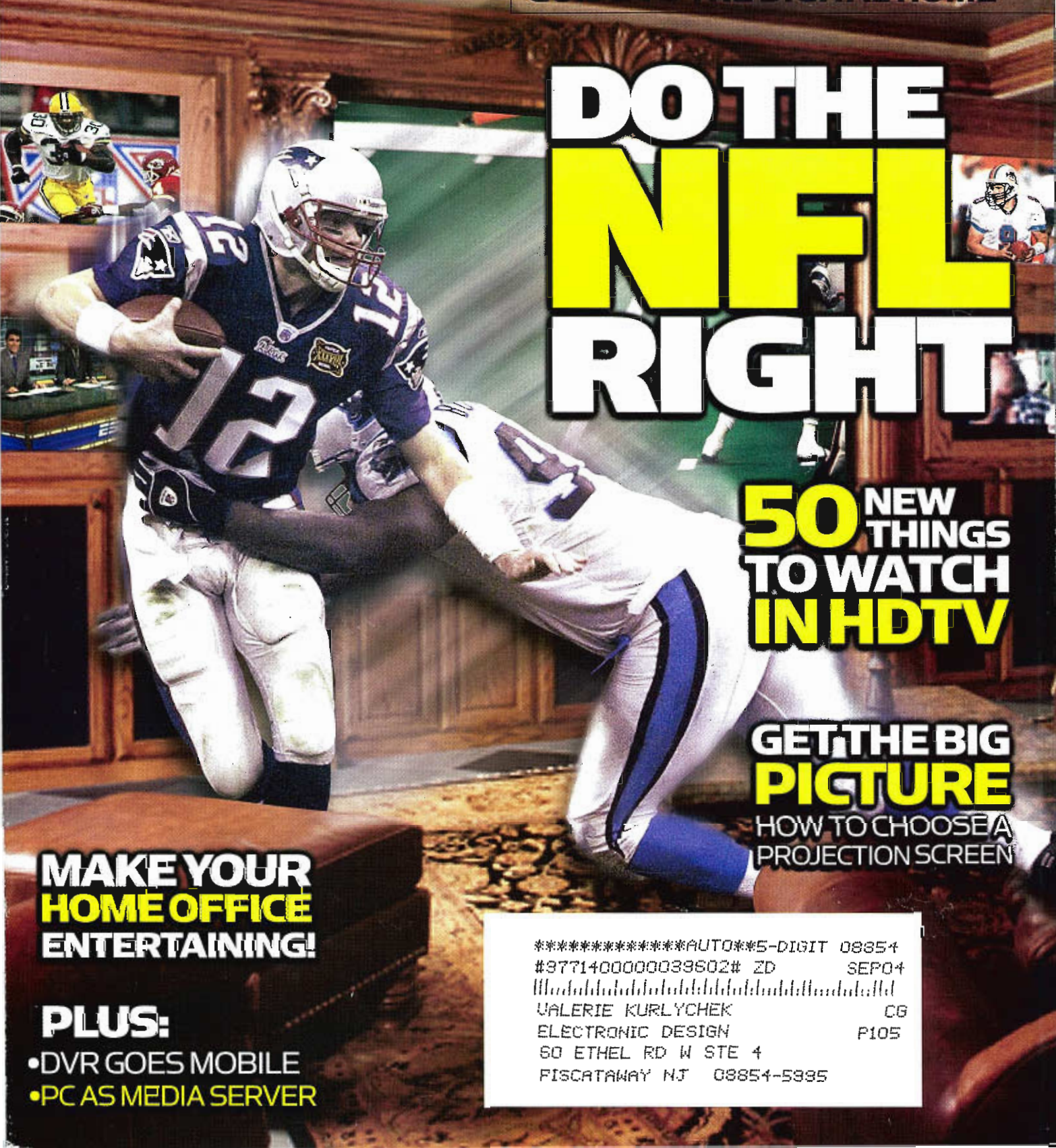


**AUDIO VIDEO INTERIORS: MAKE OVER YOUR LOFT!**

# CONNECTED

SEPTEMBER 2004

GUIDE TO THE DIGITAL HOME



## DO THE **NFL** RIGHT

**50** NEW THINGS  
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PROJECTION SCREEN

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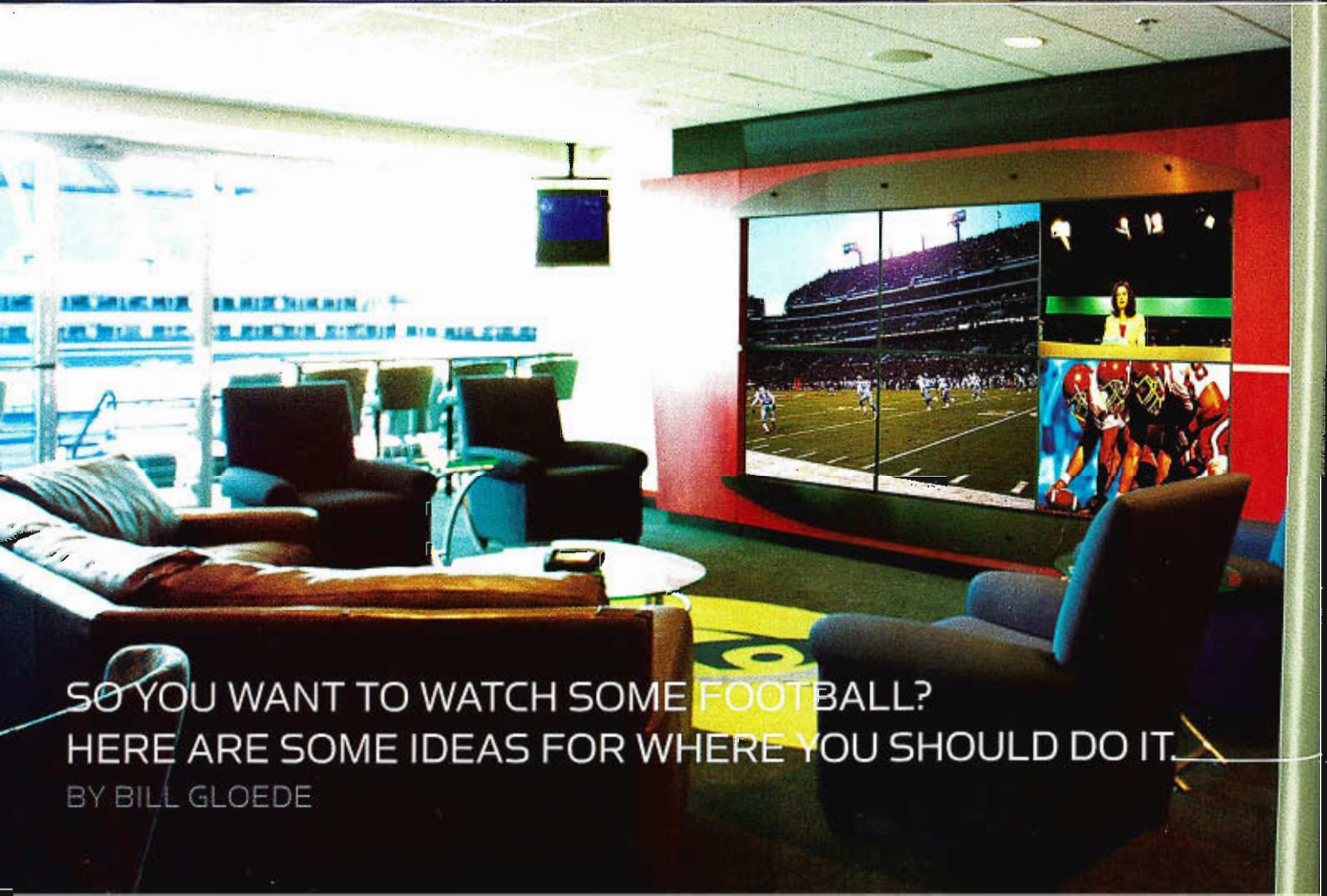
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**THE ULTIMATE ENVIRONMENT** For viewing an NFL game, nothing beats being there. And that's exactly where you are in this skybox in Baltimore's M&T Bank Stadium, home of the Ravens. The videowall can be controlled through an AMX system that can route video and audio to each and every screen in the box. The designer of this system, Starr Systems Design of Baltimore, even went so far as to program the AMX touchpanel system with the entire NFL schedule. **BELOW:** You can even watch the game live, if you want.



**SO YOU WANT TO WATCH SOME FOOTBALL?  
HERE ARE SOME IDEAS FOR WHERE YOU SHOULD DO IT.**

BY BILL GLOEDE



# DO THE NFL RIGHT

**IN THE ANNALS OF HUMAN MALE EXPERIENCE**, it is dictum that sport ranks right up there with sex as primary reinforcement, that through which we define ourselves and give meaning to our otherwise miserable existence. From the time when it was the Lions vs. the Christians in the Roman Coliseum, the passion men have spent on sport is roughly equivalent to that which they have spent on love. And in sport, as in love, the venue matters.

Alas, it is National Football League time in America. Fall is to football as spring is to love—the NFL season doesn't move all of us, but it does move us more than any other sport or combination thereof. Without question, the best place to see a pro football game is in the stadium where it takes place, particularly if you are rich or lucky enough to have access to a skybox. But in 21st-century America, what with overpopulation and the resultant scarcity of tickets, men



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**ALL THE COMFORTS OF HOME** This sports mecca, the work of the Electronics Design Group of Piscataway, N.J., features matrix switching, motorized window shades, lighting control, broadband Internet access, and console gaming. There is also a killer bar at the opposite end of the room, with a commanding view of a pastoral lake.

are creating specialized home environments in which to replicate the stadium experience.

What is the ultimate environment for obtaining primary reinforcement through the viewing of pro football? Since Freud is dead, we consulted several audio-video specialists who have built such environments, among them CHT Systems in Dallas (which provided us with the photo of the room shown on our cover); Electronics Design Group in Piscataway, N.J.; and Starr Systems Design in Baltimore. And their answer, in aggregate, is that there is no one perfect environment. But there are common elements to those that might qualify.

### ROOM TO MOVE

A good rule of thumb is to locate your environment in a room that is big enough to handle it. There is little sense in packing multiple TV monitors, especially those with big screens, into a former breakfast nook. Obviously, the more spacious the room, the more you can do with it. Keep in mind that, in the ultimate environment, must-haves might include a bar (preferably with at least a single-tap keg fridge and a sink), a pool table, a card table, and perhaps even a shuffleboard table. Suppress your feminine (or metrosexual) side—no pastel colors, curtains, or anything even remotely dainty.

(If you have trouble with this, I know a good therapist who'll fix you up right quick. His name is Mike Ditka, and he can be found in Chicago.) You want wood, dark wood if you have good natural lighting, and light wood if there are no windows. And you want leather—preferably “rich Corinthian leather”—for seating surfaces. Couches are fine, as are recliners, but nothing beats big old leather chairs with ottomans. You'll also need plenty of side tables for drinks and chips. Lighting should be recessed and/or indirect, for two reasons. First, you don't want reflections on the TV screens. Second, lamps have a tendency to get mangled during the ecstasy (or agony) of the interception that ends the drive and ices the game. You also may want to consider high-speed Internet access and a good PC, also for two reasons. You may want to look up player profiles or stats during the game. And you may want to liven things up a bit with a wager using an offshore gaming site.

The room need not be a perfect rectangle, nor need it be insulated to the extent of a traditional home theater. Carpets, furniture, and other accessories should be chosen with their sound-absorption properties in mind. After all, you want to recreate the stadium experience, so you want the sound careening around the room. A good digital-signal-processing circuit on your surround system can accentuate that effect (more on sound later).

## GET THE PICTURE?

Selecting the TV monitors you'll need is a real challenge, both to your brain and your wallet. First, to my mind, there is no future in going with obsolete technology, so skip over the 4:3 aspect-ratio sets and go widescreen. You also should go high-definition, particularly since enhanced-definition TV (480 progressive scan lines) is an interim technology that will be gone in very short order. You can always run the HD sets in standard-definition analog, although picture quality is often not as good as it would be on an old-fashioned 4:3 set or EDTV.

Now the fun starts. Ideally, you'll want a high-quality, big-screen plasma for your center screen. A Runco is just about top of the line here, but it will set you back 20 grand or more. The picture, however, cannot be topped. You may decide to choose a front-projection system with a retractable screen. That, too, can get mighty expensive—Runco's best three-chip projector goes for a cool \$130,000. (For about 25 percent of that price, a direct-drive image light amplifier [D-LA] projector from JVC would work very nicely.) For the ancillary screens, the best choice would be liquid-crystal displays, which are now available in sizes up to 46 inches



diagonally. But these can cost upward of \$5,000 each. So a setup with a big plasma and four smaller LCDs can easily run you \$40,000. That's just for the screens. Since they hang on the wall, you will save on built-in cabinets or custom furniture. But they will have to be properly installed, usually by a qualified AV specialist. And if you're putting that much money into the screens, you're going to want video processors such as those made by

Faroudja. Still, the proof is in the pictures.

A less expensive alternative would be to use a rear-projection TV for your main set and good old-fashioned cathode-ray-tube sets for your auxiliaries. A good big-screen HD rear-projection set (digital light processing or liquid crystal on silicon from Samsung, Sony, or JVC) will cost \$5,000 to about \$7,000. The HD tube sets can run from as low as \$600 on up to \$2,500, depending on size and features. A good



**GAMES PEOPLE PLAY** It would be hard to find a better place to spend a Sunday than in this sports center, another Starr Systems project. It features a Sony VPL-VW12HT LCD projector as well as Sony KE-42TS2 42-inch and KE-32TS2 32-inch plasma screens. For sound, SpeakerCraft in-wall speakers are placed strategically around the room. There's also an elegant bar, card table, foosball table, pool table, and shuffleboard alley. Wherever you are in this room, you are definitely in the game.

**THE ULTIMATE IN CASUAL ELEGANCE**  
This Starr Systems installation features Sony 27-inch and 40-inch screens, hooked through a matrix switcher and linked to a whole-house control system and a monster AV network, including a traditional home theater.



setup would include a 60-inch main set with four 32-inchers surrounding it. That would cost in the area of \$10,000. Another cost advantage is that the projection set does not necessarily need to be installed in furniture, and the four satellites could be mounted on ceiling or wall brackets.

#### GO WHERE THE GAMES ARE

There is, at the moment, only one way to gain access to all the regional NFL games on any given Sunday: DirecTV's Sunday Ticket package. For \$219, DirecTV subscribers to the package get access to every Sunday-afternoon game. If you have a

single TV screen, it's as easy as that, but you can watch only one game at a time.

To view multiple games, you need a receiver for each monitor. The standard DirecTV receivers can be had for nothing (with dishes) by new customers, depending on the promotion the company is running. Additional boxes will cost \$100 each or less. If you want HD, the boxes will cost you upward of \$500 each, but the picture will be far superior to that obtained from the standard digital feed. And dozens of games will be telecast in HD as part of the Sunday Ticket package—more HD is available from HD feeds of local CBS- and Fox-affiliated stations in certain large cities and on ABC *Monday Night Football* and ESPN HD's *Sunday Night Football*. So, for a five-screen setup, you'd need five boxes.

If you have more than four monitors, you'll need either a multiswitch or additional satellite dishes (one dish can feed four HD receivers or two standard receivers without

a switch). The simplest way to hook yourself into multiple feeds is to dedicate each receiver to a particular monitor. All you do in that case is wire each receiver to each monitor and you're done. But you will not be able to switch feeds around without changing channels on each of the receivers—and if you have other AV gear, such as a DVD player, digital video recorder, or media server, you won't be able to move the picture around from monitor to monitor. Also, if you have a surround-sound system, you will be able to get 5.1 feeds only from the receiver that is hooked directly to your sound system. (Again, more on sound later.)

To obtain maximum flexibility, which would mean moving feeds from monitor to monitor (say you wanted to run a DVD of Super Bowl XX or ESPN's *Playmakers* alongside four current games, with the surround audio on the DVD), then you would need both audio and video matrix

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PHOTOS BY ALAN GILBERT



switching. These devices can get pretty expensive. An 8-by-4 (eight inputs into four outputs) video switcher from a company called AutoPatch runs less than \$1,000, but similar switchers that can handle 16 into 16 or 32 into 32 run \$4,000 and \$8,000, respectively.

Also, unless you are very, very good at wiring, you will want to hire an AV specialist to design and install these types of systems. If you choose this route, you also may want to consider whole-house control systems such as those made by AMX and Crestron. They'll run the switching as well as lighting, room temperature, and all your AV gear—and even pipe your security system into one of the screens so you can greet guests and let them in without leaving the game (yes, even the pizza guy).

### WHAT ABOUT SOUND?

Nothing is quite so soothing to the soul as John Madden's voice waxing as only it can about the graceful athleticism of a Randy Moss or the rabid tenacity of a Brett Favre. This is why you need a good surround system.

Depending on how big your room is, you may choose 5.1 channels on up to 9.1, which, as the numbers imply, involve more speakers in more

positions. A good surround system will place the announcers front and center, the sounds of players bashing each other to the side of the screen on which they appear, and the crowd and stadium announcer all around you. You'll need at least a good receiver, which start around \$500 and go all the way into the many thousands, and good loudspeakers, which can run anywhere from \$300 or so a pair on up to \$45,000 each. A good subwoofer (\$500 and up), or perhaps two or more, is essential. The higher-end you go, the more you'll want to investigate separate components, which would involve separate amplifiers for each channel of sound. Here you are talking an additional \$1,000 or more per channel. A good benefit of doing this is that your football room also will do respectable duty as a home theater, and for audio, well, it'll kick butt.

Add to all this the necessary cabling—always use high-quality cables—and power-conditioning equipment (between \$500 and \$1,000 for both), and you can easily spend the equivalent of a Wall Street bonus. But you also can do it relatively economically, and if you are handy with a wood saw, you can make it look top-shelf for a minimal investment.

So what are you waiting for? The season's here, and the time is right for dancing in the end zone. \*



**AND RIGHT UNDERNEATH...**  
... the entertainment room shown above is a basketball court, which is also served by the whole-house control and AV systems. Hoops at halftime!