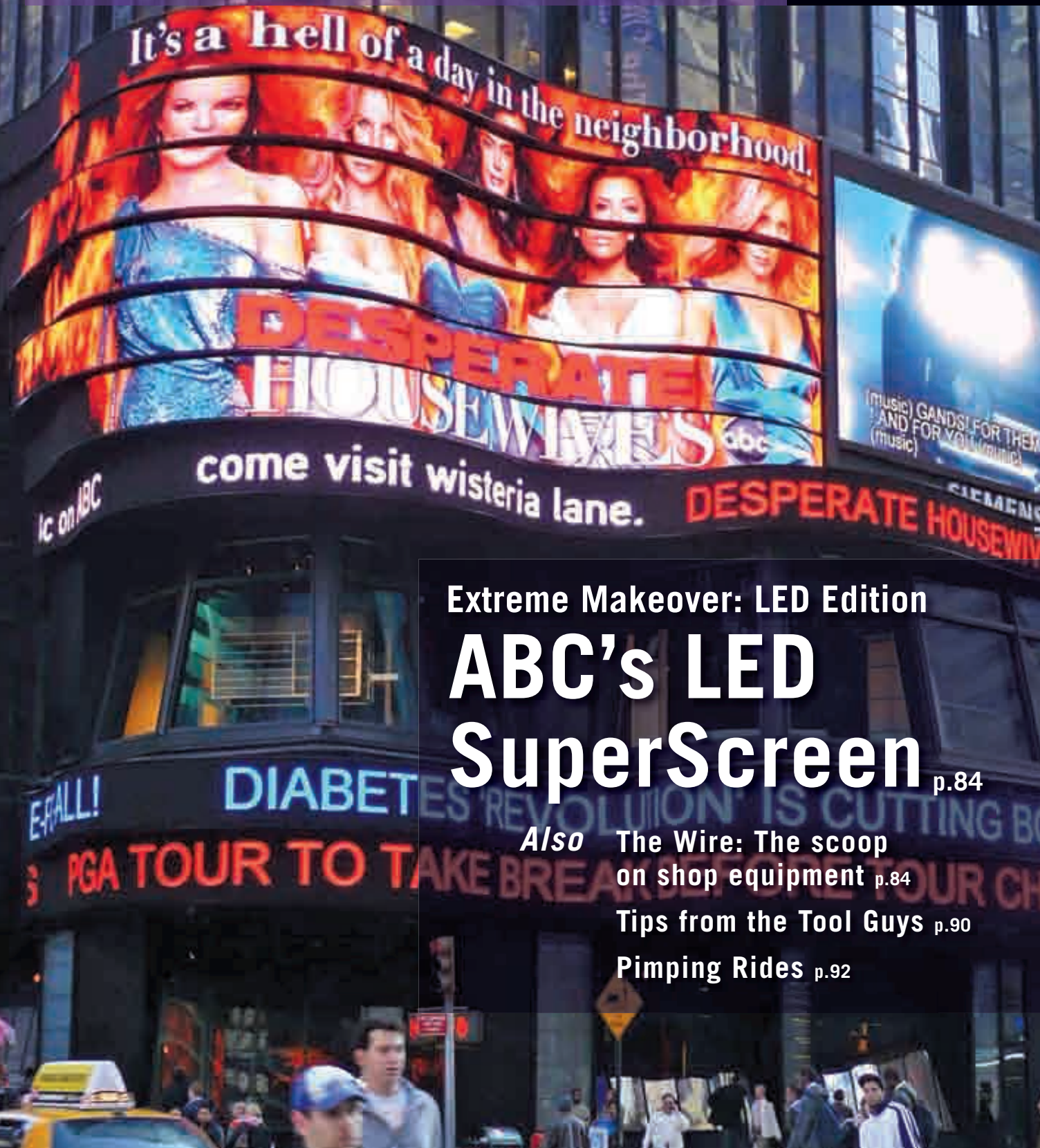


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Good Morning, Times Square

The ABC Times Square icon is reborn.



Louis M. Brill

As a media façade, the ABC Times Square Studios' LED display is a sight to behold. Nine, curvilinear, horizontal, LED video ribbons undulate around the facade's front. Home to ABC's *Good Morning America*, the building presents what seems to be a gigantic TV screen that displays network news and upcoming program and entertainment previews. Actually, the display, the only LED sign in the

world that's integrally involved with a major-TV-network program, is trailblazing the future of media-façade-based "performance signage."

Easily seen throughout Times Square, the display broke ground as a media façade, a term that describes an LED video display that completely covers a building's front cladding. Media facades now proliferate on Times Square to capitalize on the area's advertising clout.

A precursor to media facades

Originally created in 1999 by its corporate parent, the Walt Disney Co., the ABC Times Square Studios' LED spectacular is one of the area's oldest such displays. Having beamed more than 70,000 hours of news and entertainment for eight years, the screen has recently been updated by D3 (Rancho Cordova, CA), a full-service LED video-display firm that designs and fabricates high-defini-



Photo credit: Jason Barak, D3



Photo credit: Ida Astarute, ABC Inc.

A Times Square tradition. Each morning, as *Good Morning America* begins its live broadcast, early-birds gather around the streetside studio windows to watch the program as millions watch on television.



Photo credit: Ida Astarute, ABC Inc.

The Rockettes were featured on *Good Morning America* as they performed their tap-dance routines in front of the ABC TV studio building.

tion LED video displays.

D3 LED screens also appeared recently in several other Times Square sites, such as a display replacement for the Armed Forces Recruiting station, the exterior displays on M&Ms® Retail World (see ST, October 2007, page 90) and Ripley's Believe It Or Not Odditorium (see ST, August 2007, page 90).

Initially built by Multimedia LED (Rancho Cordova, CA), the inte-

grated LED display was divided into nine, separate, horizontal, LED ribbons, each approximately 133 ft. long, that extended lengthwise across the building. The first seven, full-color ribbons boasted a 50mm pixel pitch and formed a video-ribbon screen across the front of the building.

To enhance the display's visual appeal, a SONY JumboTron LED videoscreen was embedded within the bigger Multimedia LED screen.

Below that, the text-feature band briefly summarized the story behind the video image. The lowest ribbon broadcast sports news, and the one above that broadcast news headlines.

To facilitate the ribbon's unique shape, NYC-based Landmark Signs built a curved, steel, interlocking frame that connected it to the building façade. Landmark built it in New Jersey, disassembled it and re-assembled it in Times Square.



Landmark Signs placed an impact-proof tarp over the studio windows to protect them as it installed each LED ribbon's new D3 modules.



In a rare look from behind the LED facade, the individual LED modules, and their steel-frame modules, can be seen.

“Once the full marketing value of the ABC LED display was understood by the Times Square advertising community, it became a springboard for many other LED video spectacles [HSBC, Pontiac, Wrigley’s, LG, Samsung, etc.],” said George Pappas, a D3 founding partner who’s currently in charge

of operations and manufacturing, and a former project manager of the original Multimedia project.

Having witnessed the upgrading of other displays, such as Coca-Cola (in 2005) and Budweiser (in 2007) and the addition of new, full-color, high-definition screens (Chevrolet, Pontiac and Prudential),

the Disney Co. decided to upgrade the original ABC Times Square LED display.

During the summer of 2007, to prepare the ABC building for the new LED display, the original LED sign was stripped, one ribbon at a time, to its bare, steel frame. Having removed the original LED segments, Landmark retrofitted the new D3 LED modules (WS-10 units) onto the existing steel frame, from the bottom up, using the same LED-module connection points that held the first LED display in place. At least 3,551 D3 LED modules, each 3.5 in. (8 pixels) wide x 3.25 ft. (100 pixels) tall, replaced the original LED screen modules.

An icon is re-installed

The unique sign design encompasses huge glass studio windows that separate the seven ribbons above and the two below. Tony Calvano, Landmark Signs’ principal, said replacing them entailed careful planning. “During our swap out and replacement of the ABC LED modules, we started at the



Photo credit: ABC Inc.

Reporting Live from Times Square

Images that stream across the curvilinear ribbons of the ABC LED display will distort unless software compensates for the curves. NYC-based Show & Tell Productions developed a state-of-the-art software system that controls image shape and acuity as it streams past each radius curve. The process continually morphs pixel spacing as the image passes through the curves. Essentially, the software accelerates or slows down the image flow, and stretches or tucks the content to accommodate the screen's radius curve.

D3's Meric Adriansen said, "In the original system, the imagery was 'pre-morphed' with a plug-in Adobe filter, which allowed the creation of properly aligned images on its ribbon face. When we specified how the new sign would operate, we noted that, in order for

live imagery to be placed on the ribbon surfaces, we needed real-time morphing capability. Show & Tell's control system implemented this for ABC. Now, in the front-end system, all image content, live or pre-created, can be morphed in real time to create properly aligned, distortion-free imagery for everyone who sees the sign throughout Times Square."

The building facade regularly serves as a bumper shot, as well as a backdrop for show and weather segments in the outdoor area in front of the studio. The ABC building facade has also been used as a backdrop for ABC News and ESPN Sports shows. In 2007, the ABC display featured World Cup soccer matches, which attracted so many fans that they covered every inch of Times Square as they watched the soccer match.

bottom and worked our way upwards. By the third ribbon tier, we were above the studio windows, which meant we had to protect each studio window segment as we worked above it," Calvano said.

To protect the windows from welding sparks and dropped debris, Landmark draped and rigged a fireproof, impact-resistant tarp across the windows, below

where they were replacing each ribbon of the modules. Daily, the crew set the tarp under the workspace in the morning and removed it at the end of the day.

Because of its iconic presence, the original ABC sign operated while it was retrofitted. Selectively, each old LED ribbon was turned off as its new module was installed.

Calvano said the project began with the most difficult part, the

tight, curving, 3.5-ft.-radius corner of each ribbon: "The LED modules on the inside radius curve had to fit seamlessly. Then, by working from the radius outwards, we installed the rest of the ribbon, going north to the ribbon's edge and then south to the other edge of the display. As we moved from section to section, the tarp below followed us, covering that section of studio glass. Once we perfected



The new ABC Times Square “SuperSign” offers a 10mm pitch with a 25-times-greater image resolution over its predecessor sign.

Photo credit: Ida Astute, ABC Inc.

the radius-curve insertion technique, we did this with the other eight ribbons. All together, we replaced the entire display in about two and a half months.”

The new facade

The new ABC LED display offers 25 times greater resolution than the original display. D3’s replacement display also includes:

- 10mm-pitch, LED-screen resolution;
- Brighter color and better color uniformity throughout the entire screen;
- Data lines with a redundant gigabyte Ethernet network, which allows a simultaneous

dual processor to run the same data signal twice in a parallel mode, as a backup feature; and

- Hot-swappable backup power supplies also run in parallel, which allows the backup power supply to immediately replace a failed, primary, power supply.

The new, high-resolution LED display required new software, noted Meric Adriansen, a D3 managing partner who helped develop the original sign’s operation procedures (see sidebar on page 79). He initially served as a software project manager for Multimedia, which installed the ABC LED display. He oversaw the

development of the front-end content-management system, which included the software that controlled the graphics, video, animation and image morphing.

The original software for the first ABC LED screen ultimately became a patchwork of fixes that adapted the screen to new software upgrades and imagery techniques.

In the new D3 version of the ABC LED display, additional control of the video image allows the ribbon screen to display a complete image on all nine ribbon tiers, not just the upper six ribbon tiers, at the operator’s discretion; the bottom feature band and text ribbons can be added to show an even larger screen image



ABC's Window on the World

Jan Chaloner, the vice president, ABC Network Print, and Richard Paris, director of operations, ABC Television Network, explained how ABC's Times Square Studios' LED display serves as a backdrop for live entertainment, on-air news broadcasts and entertainment programs.

Paris said, "ABC Times Square Studios upgraded the ABC 'SuperSign' LED display not only to create a state-of-the-art, high-resolution LED display, but also because outdoor, electronic advertising has become more important in connecting media with the public. With our new LED display, we can provide our sponsors with an opportunity to engage the 1.5 million people who pass through Times Square daily. We can also tie in the display directly with our live events and with on-air broadcasting. Also, because interactive is getting more popular with outdoor advertising and the public, our new display addresses that feature as well."

The ABC Times Square Studios' LED display serves as a full partner in promoting the network and other business units of the Walt Disney Co. Jan Chaloner, vice president, ABC Network Print, said, "We use the building display to market various ABC TV and synergy partners' programming, including our television shows, sponsor content, and promotions for new TV programs and special TV shows. It's also used as a backdrop for some of our live outdoor Times Square broadcast events. Even better, it marks the location of our broadcast center in Times Square and acts as a draw to attract people to the first-floor TV studio, where they can watch ABC News *Good Morning America* broadcast as it happens." Talk about reality programming.

Chaloner added, "The new sign has better technical capabilities to present live events, and it complements that with on-the-fly scrolling text, during a live presentation. As another new enhancement, we can transform the image from its normal size [the top seven horizontal ribbons] to display it over the full, nine, horizontal ribbons on the front of the ABC building facade. When our clients understand this new feature, we expect to have some truly spectacular video displays for Times Square."

on the building façade.

A single TV program or event can be promoted on the smaller Mitsubishi insert screen, which accompanies the primary LED video ribbon. Below that, the feature band identifies the video

content on the LED videoscreens, and two "zipper" ribbons show ABC News and ESPN sports headlines.

Content design and placement must also consider font selection and logo placement, plus the coor-

dination of six or seven separate LED ribbons. Also, the ribbon bands and the Mitsubishi screen can be used simultaneously to create a cohesive marketing, promotion or branding message that combines graphics, copy and



The ABC SuperSign shows off all nine ribbons as a video display.

video. Finally, existing, pre-recorded television content (usually formatted in either 16:9 or 4:3 aspect ratios) could be reformatted for the unusual aspect ratios of horizontal LED ribbons.

Show and tell

The ABC TV staff and NYC-based Show & Tell Productions share the screen's daily operation. Show & Tell developed the integrated, show-control system for the original and new, ABC LED building

facade.

Phil Lenger, Show & Tell's president, said, "We always provided a daily video and graphic playbook to help operate the ABC LED screen. With the new display in place, Show & Tell rewrote and upgraded the show-control system to handle all of the screen's new capabilities, including its high-resolution format, live broadcasting and, most importantly, a streamlined operation of the overall playbook system."

The display operation is now more compatible with such graphic software as Flash applications. Finally, the display can easily present live interviews from the street, which comes in handy for such special events as New Year's Eve, parades and historic moments, and personal reactions to sportscasts.

As Adriansen pointed out, the original SONY JumboTron served as a "sideshow" to a smaller, but easier-to-view, insert screen. Now, these



On New Year's Eve, the ABC SuperSign prominently displayed sponsor promotions. Also, Diet Coke premiered advertising on the lower two LED ribbons and provided a 12-hour, countdown clock to midnight. To the right, One Times Square awaited the Ball drop.

positions have flipped-flopped; the bigger LED screen now creates the most visual impact.

"Our ABC 'SuperSign' is so big," Chaloner said, "it engulfs your viewing experience as you look around Times Square.

"Because the ABC SuperSign is closer to the ground level, it's thereby 'closer' to the pedestrians who view it. Other Times Square signs are hung off the sides of the surrounding skyscrapers, far above the pedestrians, giving the signs a more distant and less personal presence."

Future spectaculars

ABC TV's Times Square building is one of the pioneers of out-of-the box, LED-screen design, which many other companies now use to represent themselves. Such examples include the latest Coca-Cola

LED spectacular (see ST, *January 2005, page 82*), the FUSE display (see ST, *May 2007, page 82*), and the Enoshima Island Dragon Tower (see ST, *May 2005, page 90*). These unique designs, along with conventional make-overs (such as Coca-Cola, Budweiser, etc.), have engendered a second generation of LED spectaculars along urban byways.

The curvilinear, ABC TV Studio LED display has redefined a sign's function for its client sponsor. Now, content providers are "sign casting," or broadcasting visual communications via displays in urban spaces.

Richard Paris, director of operations, ABC Television Network, said, "It's our way of using the sign to distribute specific news and entertainment content on a daily basis to the public passing by the studio

building. As a result of this powerful emphasis, our LED sign has a significant life of its own. We've been on the Super Bowl and Hollywood's Academy Awards. The ABC SuperSign display has been shown in more movies with a reference to Times Square (*Spider Man, Vanilla Sky, Death to Smoochie, Enchanted*, etc.) than we can even count."

The ABC SuperSign, which integrates LED signage and TV programming, is a destination for Times Square tourists, who first see the sign on television. Now that's the ultimate in signage, a display with its own television show. What will happen next? Stay tuned. ■

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