

# WLS-TV enhances its news broadcasts with NEC large-screen LCDs

## Quick Facts

**Facility:** WLS-TV

**Location:** Chicago

**Challenge:** Overcoming color balance issues when videotaping broadcast content on LCDs

**Solution:** 40" NEC LCD4010

**Date:** April 2006

Management at ABC 7 News (WLS-TV) committed to setting a new standard for innovative news broadcasts with a state-of-the-art news studio on Historic State Street. The 8200-square-foot conversion of existing 1920s-style retail space is unique and features an expansive bay window at the sidewalk. The new set provides an up-close, behind-the-scenes look at one of the city's top-rated newscasts. As a part of the overall project, designers wanted large flat-panel displays placed on-camera so that news anchors could show graphics, interact with remote interviews and gesture to weather and traffic details without using the older "green screen" technique. The new displays also were needed to give the director and production staff more visual choices such as allowing news anchors the option to stand up and have multiple places to stand or sit within view of the new LCDs.

## The Challenge

When using TV cameras to capture video images on a screen, there are a number of problems that can occur. The biggest challenge is color balance. What looks good to the eye will not reproduce accurately on the TV camera, so WLS-TV's technical team needed to find a flat-panel display that had extremely flexible color temperature adjustments. Additionally, natural ambient light enters from the street windows and combines with special overhead fluorescent lighting to create a difficult-to-manage lighting situation. Many flat-panel displays simply don't have the ability to adjust for this environment, which requires serious color saturation and a color shift towards the red spectrum.

According to David Hewitt, WLS-TV's technical facilities manager, this color adjustment "requires hardcore setup flexibility." Hewitt and his team performed a product shootout with other models and brands of flat-panel displays and, at the time, NEC was the only manufacturer that could display accurate color while under ambient lighting conditions. Hewitt also leaned towards LCD technology because it doesn't suffer from "image burn-in"

that some other technologies can exhibit over time.

## The Solution

Based on the testing results, WLS-TV selected NEC's 40" MultiSync LCD4010 displays, which they purchased from Software House International. The technical team used testing scopes and video waveform monitors to adjust the color correctly. The team also



With five 40" NEC MultiSync LCD4010 displays in its studio, WLS-TV is able to enhance its news broadcasts with background graphics, remote interview interaction and gesturing references to weather and traffic details.

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provided high-definition (HD) video feeds from the WLS-TV technical plant, which resides on another floor in the building. Some of the video feeds are computers with HD video cards, as well as other legacy systems. The HD digital video is converted to DVI format using an AJA brand HDP adapter. This allows the final connection to the NEC display to be made via DVI connector, so the signal remains digital for excellent clarity.

The new system is used for something unique every day. News anchors will interview people on the monitors as well as use the displays for creative segues by introducing live video segments on them a few seconds before they transition to full screen. News anchors also stand next to the screens to show traffic maps and more.

"Once we started doing rehearsals, the directors started to realize all the choices at their disposal," said Hewitt. "Now, the LCD

panels are such an integral part of our approach that it is part of our day-to-day process which separates us from our competitors. In almost every newscast, we roll video on the panels, such as an investigative reporter rolling video from a report. It's unique in the Chicago market.

"There's a huge impact when people see the flat-panel displays on TV or when looking into windows of the first-floor set from the street. More eyeballs help the advertisers pay attention to us and buy TV ads. Often, there are 100 people standing outside at 10:00 p.m., looking into the State Street studio, across from the Chicago Theater. We light up the whole street and it looks magnificent."

Emily Barr, ABC 7 president and general manager added, "Our new sidewalk studio is designed as an exciting destination point in the continuing revitalization of this historic downtown area."