

Digital Signage Moves Travelers

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Chicago, Illinois—At Chicago O’Hare International Airport, cutting edge digital signage is taking flight in the United Airlines’ Terminal One lobby. Designed to bring order to an often chaotic scene, United Airlines has installed eye-catching digital signage, powered by Electrosonic technology, to direct passengers through the check-in process, from arrival, through the ticketing, check-in, and baggage check processes, and then on through security.

“The new ‘United Electronic Messaging System’ enables time-challenged passengers to quickly grasp where they need to go; what they need to do; and a wealth of other travel information to enhance their travel experience,” says William J. Sako, Chairman of the Board of Sako & Associates, Inc., in Chicago, IL, which planned, designed and managed the implementation of the project. “This is one of the most innovative, exciting, and dynamic uses of digital signage in an airport lobby anywhere in the world.”

The Ribbon Display:

Across the immense, 500-foot wide lobby is a “Ribbon Display.” One of the longest in the world, this Ribbon Display is made up of 138 High-Definition (HD) Clarity Margay video display monitors with DLP light engines configured in a line running along the width of the lobby above the check-in counters about nine feet up from the floor.

Each of the video display monitors is fed by its own Electrosonic MS9100 MPEG-2 player. And all of the monitors are genlocked, or synchronized, so that all of the monitors act as one continuous display. While the MS9100 player is normally a three rack-unit high device, Electrosonics built a compact, one rack-unit version to customize it for the space requirements of this particular installation. Redundancy has been built into the system to reduce failure.

“The purpose of the Ribbon Display is to create order in the lobby by directing passengers to the appropriate Easy Check-in kiosk to use depending upon whether they are First Class, Premier, International, or Regular Business travelers,” says Sako.

“The nearly 100 Easy Check-in kiosks are sophisticated, self-serve, automated systems that confirm the traveler’s itinerary, print-out a boarding pass, and summon baggage assistance,” Sako added. “As passenger volume changes during the course of the day or night, the Ribbon Display monitors can be changed on-the-fly to keep traffic moving along smoothly. “

The Security Displays:

There are three security displays, each of which has four HD video monitors controlled by Electrosonic VN2400 network processors that indicate where the North, South, and Far South security lines are, and how long the expected wait time is at each one.

This information helps direct passengers to the security lines and to pick which of the three is the shortest line, alleviating passenger stress, crowd congestion and bottlenecks.

The FIDS Display:

The FIDS (Flight Information Display System) displays consist of two HD video monitors high by four video monitors wide, and post up-to-the-minute flight information for all United Airlines flights. Replacing static, conventional CRT displays, this flight data is grabbed automatically from a website across the United LAN and displayed as Flash-animated content, which is updated every few minutes. There are two FIDS displays in the lobby, and each powered by an Electrosonic VN2400 controller, which feeds the content to the FIDS displays.

The Grand Marquee:

The most prominent digital signage in the lobby is an 11 by 18-foot video wall consisting of 40 HD video display monitors, 20 per side, designed to give people the total travel picture. The Grand Marquee is controlled by the new Electrosonic VN Quantum processor, which controls the two back-to-back video displays simultaneously.

Situated in the center of the lobby, these impressive, back-to-back video displays show identical content, including live video of the outside area where airplanes are waiting to taxi out. There are also weather maps for the country; expected travel delays nationwide; news and sports tickers; as well as live video from a variety of sources.

All of the content for each of the displays can be created by United Airlines' staff using content creation workstations at the company's headquarters in Elk Grove, IL, as well as from the second creation station at the Terminal One site. Content can be previewed on a mini Ribbon Display consisting of four HD video monitors, and then transmitted via the United LAN to the players in the lobby.

This integrated solution is enabled by Electrosonic's iMediate software which schedules when and where each "event" is to be displayed; and ESCAN device control software, which triggers the play-out devices according to the schedule. To simplify the interaction for the United content creation and operating staff, Electrosonic developed a custom user interface that allows for point and click operation of the complete system.

"For the most challenging digital signage displays, Electrosonic's powerful technology—including integrated device controllers and HD media players—permits designers to place any type of content anywhere on the screens of various displays," says Sako. "This flexibility enables digital signage to always be extremely relevant and effective, enriching the environments they serve. In this application, Electrosonic's technology has enabled United Airlines to create a less stressful and more fulfilling experience for its air travelers."

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