

Mass Transit Use Cases

Indoor and Outdoor Signage Options
from Adaptive Micro Systems

History of Adaptive Micro Systems

- Adaptive was established in 1978 in Milwaukee, Wisconsin
 - We own a 75,000 square foot Manufacturing and Administrative facility in Milwaukee
 - Our plant is certified to the latest 2015:ISO-9001 Standard
 - Our products are approved to the strictest level of NEMA, ETL and FCC parameters
 - We also market some UL/CuL and CE listed Product to our European Dealers and Clients
 - Our 60-Member Milwaukee Staff includes Product Design and R&D, Customer Service, Light Assembly, Sales and Technical Support
- LED “Face” assembly, Electronics packaging and some final assembly is done at our Company-Owned facility in Penang, Malaysia
 - Here we employ an 80-Member Staff of electronic manufacturing professionals

Outdoor LED Signage- Use Cases

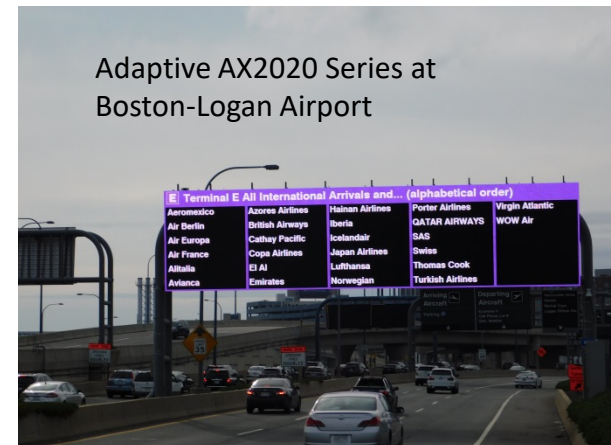
For over a Decade, Adaptive has provided the Airport and Mass Transit industry with highly efficient and cost-effective LED-based Dynamic Message Signs. We would like to introduce you to some typical Use Cases that DFW may want to take advantage of for future projects:

Arterial and Airport Entry Signs

- What you will need to know about specifying an arterial or airport entry sign:
- **All Adaptive signs in this category meet NTCIP and MUTCD standards (National Transportation Communications and Manual on Uniform Traffic Control Devices)**

Standard Features include:

- NEMA TS-4 environmental rated
- Redundant 24V current sharing power supplies
- 70° LED viewing
- High Brightness Displays (12400 Cd per pixel or 12,000+ Nits)
- Front access service to key components



Outdoor LED Signage- Use Cases

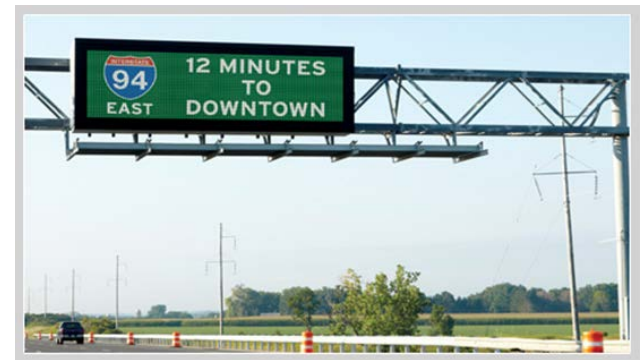
Arterial and Over-the-Highway Signs

These applications are normally satisfied with “Walk-In” enclosures like those featured here:

- Drivers respond more quickly to graphic images versus text messages, and with ever-increasing traffic conditions and driver-induced distractions, these Full-Color Dynamic Message Signs are the solution
- Providing simple MUTCD symbols and icons to convey traffic conditions is an effective way to communicate over the roadways



AlphaXpress 8700 Series with Front-Access Design

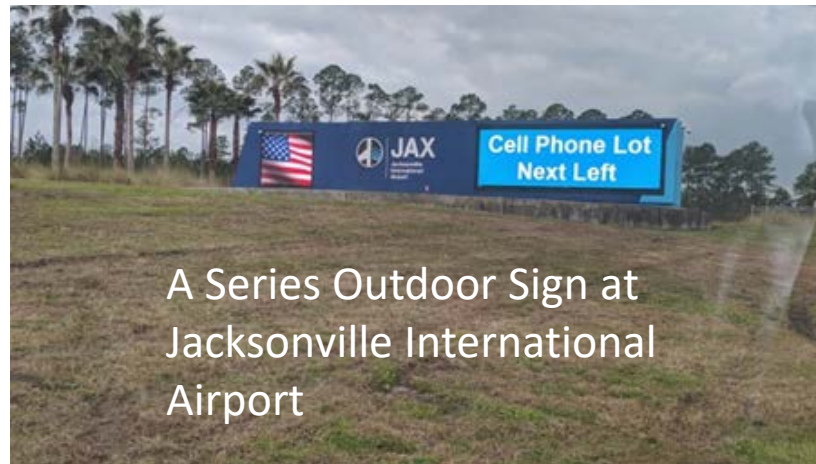


AlphaXpress AX2000 Full-Colored DMS Walk-In

Outdoor LED Signage- Use Cases

Monument and Side-of-Building Mounted LED Signs

- These self-contained signs are perfect for general announcements as drivers approach a Terminal entrance, as in the attached photo
- They are also mounted to the exterior of Parking Lot structures for space availability and general traffic management announcements
- These signs are available in Primary and Primary/Secondary Face configurations



A Series Outdoor Sign at
Jacksonville International
Airport

Outdoor LED Signage- Use Cases

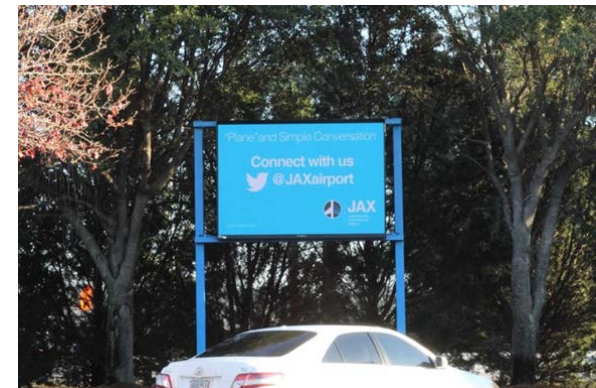
Parking Lot Applications

Adaptive offers Outdoor-Rated signage that can be mounted to the exterior of parking lot structures, and Semi-Outdoor Rated full-color signs for communicating priority messages within the actual parking structure:

- Display Daily Rates and Available spaces with Exterior Signage, utilizing the A-Series or StreetSmart fully-contained outdoor message centers
- Display Emergency Messages and Exit Routes with the Semi-Outdoor Rated 4000 Series Mass Notification (MNS) displays



MNS Series Display used in Stairwell

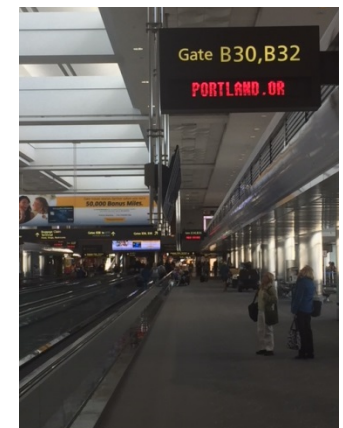
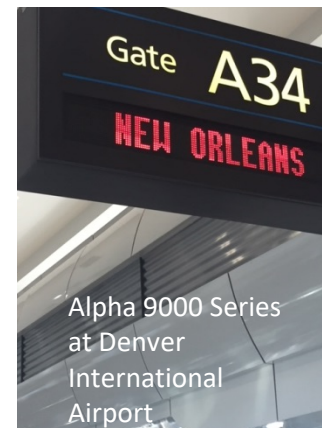


Cell Phone Lot at Jacksonville Airport

Indoor LED Signage- Use Cases

Indoor LED Airport Passenger Information Displays (PID's)

- Adaptive LED displays boldly deliver the information that's critical to your airport passengers, such as arrival and departure gates and times, baggage carousel status and weather updates
- Our indoor and outdoor display boards can also be automatically updated through an interface to your FIDS software package.
- Adaptive signage is found in airports throughout North America are flexible and dependable, and can be used for a variety of functions:
 - Capacity indicators and directional signage to parking facilities
 - Baggage claim displays
 - Ticket counter displays
 - Networked clocks in terminals
 - Arrival / departure boards
 - Gate and Ramp information displays
- We feature ADA-compliant solutions



Indoor LED Signage- Use Cases

Indoor Fine-Pitch LED Signage for Passenger Information and Emergency Notification

- Adaptive features a host of full-color capable, indoor message displays that can be integrated into annunciation panel or kiosk configurations, or stand-alone wall, ceiling or hallway side-mount installations



Alpha 9000 Series full-matrix addressable, full-color display

Alpha J Series
At Pittsburgh
International



Alpha 9000 Series Full-Color
Display at New York City high-rise
installation



Indoor LED Signage- Use Cases

LED Video Walls

- For the ultimate in color, contrast and brightness, Adaptive teams with LianTronics to deliver LED video wall solutions:
 - UL and FCC listed, with Indoor solutions beginning at 1.2 mm Pixel Pitch
 - Available in Outdoor configurations starting with 10mm Pixel Pitch
 - Both Front and Rear-Panel accessible models
 - Mounting options to include wall, ceiling, and floor with or without integrated credenza
 - Options to include Video Content Controller



People's Hallway at Beijing International Airport

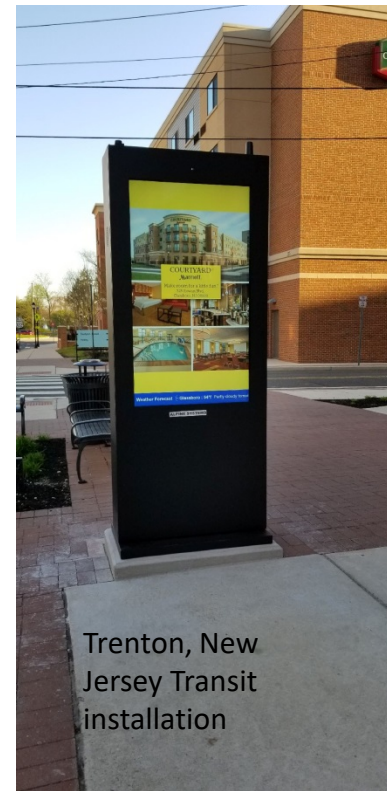
Indoor-Outdoor LCD Signage- Use Cases

Passenger Information Displays and Kiosk

Adaptive can offer custom solutions for sealed, outdoor LCD Passenger Information Displays and indoor monitors and Kiosk configurations.

Key Features include:

- IP65 enclosure ratings for outdoor installs
- Circulating Fans and fully air-conditioned panel options
- Direct Sunlight-readable (2500 Nits) displays
- Display sizes ranging from 42"-80" diagonal operating in Portrait or Landscape Mode



Supporting Documents

The following links will provide additional technical information and operating specifications for the LED displays featured in this Use Case document

- <https://www.adaptivedisplays.com/led-signs/indoor-led-displays/-alpha-j-series/>
 - For J Series Airport PID applications
- <https://www.adaptivedisplays.com/hubfs/AdaptiveDisplays/Alpha-Sales-Sheets4000%20RGB%20MNS-O%20POE.pdf>
 - For 4000 MNS PoE Series Airport Emergency Messaging applications
- https://cdn2.hubspot.net/hub/160781/file-3132614383-pdf/docs/a-series_premier_16mm.pdf?t=1529000189889
 - For A Series Premier Parking Lot and Monument and Side-of-Building mounted applications
- https://cdn2.hubspot.net/hub/160781/file-3132614373-pdf/docs/a-series_elite_7.8mm.pdf?t=1529000189889
 - For A Series Premier Parking Lot and Monument and Side-of-Building mounted applications
- <https://cdn2.hubspot.net/hubfs/160781/Alpha-9000i-RGB-m.pdf?t=1529000189889>
 - For i9000 Series Indoor Passenger Information Display applications
- <https://www.adaptivedisplays.com/markets/transportation/intelligent-transportation-its/full-color-walk-in-dynamic-message-signs>
 - For Outdoor Arterial and Over-the-Highway Airport Entrance applications