

# CASE STUDY

## SIERRA WIRELESS AirLink™ Products

### Reactrix Systems

*Reactrix Systems, Inc., headquartered in Redwood City, CA, develops and markets innovative media solutions for advertising, retail, event and entertainment applications appearing in a variety of venues, including malls, movie theaters, office buildings, transportation centers and entertainment complexes. By combining digital image projection and visioning technologies, the company's media system projects vivid, interactive, branded images that instantly respond to people who walk by or gesture over the display area, creating an immersive media experience that makes floors, walls and tabletops 'come to life'. Today's Reactrix Media Network has a monthly reach exceeding 100 million people in the top 25 US markets.*

### Business Challenge

High-tech marketing firm Reactrix has technology that allows the company to project 6' x 8' advertising images onto the floors of public spaces in 30-second or 45-second increments. Consumers step on the images to interact with the ads, taking actions such as kicking a virtual ball, which then changes direction.

A turnkey Reactrix installation consists of a video projector, processor and visioning unit, mounting frame and a standard 6' x 8' display surface. Once installation is complete, advertising content is fed to the projectors and refreshed approximately every four weeks.

Originally relying on DSL or cable for their broadband connections, Reactrix was often forced to wait up to six weeks before installed units were visible on their network.

This delay frequently led to a costly and time consuming process where field technicians were required to manually upload content directly to the system. Furthermore, Reactrix was dependent on customers to communicate equipment or content issues, as Reactrix had no way to monitor their systems to prevent downtime and possible loss of advertising revenue.

As their customer base grew, Reactrix began to see interest in their projection systems from suburban locations, where DSL and cable were not yet available. Due to the high cost of satellite service and lack of availability of high-speed landline connections, the best solution was to use affordable and ubiquitous 3G broadband cellular data connectivity.



### Sierra Wireless AirLink™ Solution

Reactrix needed a simple solution that allowed immediate connection to installed systems to enable content changes on-the-fly. Originally, their wireless solution came in the form of Sierra Wireless' AirLink Raven Ethernet (Raven-E) intelligent wireless modem coupled with AceNet monitoring and maintenance software.



POWERED BY: ALEOS

As an innovative company, Reactrix is always interested in staying ahead of the technology curve. Therefore, as new technology rolled out in 2006, they decided to take advantage of the faster data transfer rates offered by the latest 3G technology. To realize these benefits, Reactrix turned to Sierra's new X Platform networking devices, supporting 3G speeds. The Raven X offers increased processing power and expanded memory and, like the Raven-E, is powered by ALEOS™ embedded intelligence, enabling remote configuration, packet-level diagnostics and network session persistence. The common platform of ALEOS allows a homogeneous use of Raven-E modems with Raven X modems without the need to change any parameters of connected systems.



POWERED BY: ALEOS

Sierra brought in Feeney Wireless, a value-added distributor, to help Reactrix increase the efficiency and scalability of their solution. Feeney Wireless offered comprehensive integration support and helped Reactrix configure their solution for optimal efficiency. Feeney also provided Reactrix with coverage boosting accessories, such as antennae and custom cabling, and created kits for maintenance teams to test for coverage and signal strength at projection sites.

While Reactrix's sensing and projection software are the brains behind their advertising system, it's Sierra's embedded operating system, ALEOS – the longstanding industry benchmark for reliable and feature-rich intelligence – that enables the quick deployment and management of the solution. ALEOS simplifies installation, operation and maintenance of any solution and provides the "always-on" and "always-aware" connection management required for unmanned applications. To harness the strength of ALEOS, Reactrix deployed AceNet, Sierra Wireless' enterprise grade one-to-many monitoring and configuration tool. Tightly integrated with ALEOS, AceNet enables Reactrix to remotely monitor, control and manage each of their AirLink devices, greatly reducing the frequency of service calls.

# CASE STUDY: Reactrix Systems



## Sierra Wireless Solution, continued

Reactrix is now equipped with 24/7 monitoring through almost 200 Raven-E and Raven X devices implemented across their nationwide network. With AceNet, all of these modems can be monitored and configured on one worksheet, and instead of reacting to problems after being alerted by their customers, Reactrix can now proactively detect issues and fix them remotely or dispatch a field technician as necessary.

In addition to the simplicity provided by utilizing a single cellular resource instead of multiple regional cable/DSL providers, Reactrix benefits from immediate connection to newly installed systems. By eliminating the wait-time for a DSL or cable provider connection, Reactrix has reduced their solution deployment time from six weeks to just several hours, allowing them to start generating ad revenue right away. All connected projection systems are controlled from a central location, enabling Reactrix to refresh content anywhere on the network from their headquarters.

## Results

Reactrix's wireless solution has provided the quick activation and content management capabilities needed to boost the potency of their media network. And with the demonstrated performance increases in speed and throughput, Reactrix plans to migrate all Raven-E modems to the Raven X platform that supports EV-DO Rev. A. Additionally, the wireless solution offers Reactrix new system monitoring capabilities that allow the company to record important interactivity metrics to use as an ROI sales tool to build their network of advertisers.

The Reactrix Systems solution deployment using AirLink's Raven X and Raven-E network devices and the AceNet monitoring tool on Sprint's cellular network produced the following improvements:

- Shortened cycle from installation to revenue-generation, enabling immediate monetization of the site, which translates to approximately \$2,000 in increased revenue per installation.
- Eliminated wires, enabling a more portable solution and allowing equipment to easily be deployed for short-term opportunities (i.e., trade shows, special events, etc.). Special event installation costs have been reduced by approximately \$1,000 per event (the cost of leasing DSL lines).
- Minimized potential revenue loss from downtime by cutting problem resolution time by 50% through remote monitoring and management capabilities offered by ALEOS embedded technology and AceNet software.
- Decreased cost of installation by eliminating need for landline connection to Reactrix equipment. Historically the most costly and time consuming part of the solution, the installation process has been reduced from weeks to hours and has translated into a cost savings of \$2,000 per installation.
- Eliminated a dependency on DSL and cable by leveraging the CDMA nationwide footprint, allowing Reactrix to avoid landline installation costs and increase the size of their potential market to areas where DSL and cable are not available.
- Simplified service provider network with single connectivity provider.
- Improved relationships with customers through proactive system fixes and ability to support quick content changes.
- Provided measurable statistics for Reactrix to use as advertising sales tool.

*"The Reactrix wireless solution is critical in building out our media network," explained Reactrix's Michael Harshfield, Sr. Director/VP, Customer Care & Supply Chain. "The Raven-E modems, coupled with AceNet software, allow us to see our installed systems right away; we can monitor, pull interactivity data and communicate with a system to change content immediately – making each system fully operational and able to generate revenue from day one."*

## Sierra Wireless - Connecting people and systems to mobile broadband networks around the world

Sierra Wireless modems and software connect people all over the world with mobile broadband networks that keep them in touch, informed, and productive from wherever they need to be. The Company offers a diverse product portfolio addressing enterprise, consumer, original equipment manufacturer, machine-to-machine, and specialized vertical industry markets. Sierra Wireless also provides professional services to customers requiring expertise in wireless design, integration, and carrier certification. For more information, please visit our website, [www.sierrawireless.com](http://www.sierrawireless.com)