



CASE STUDY

Circuit of The Americas™

Austin, TX

World-Class Events Facility Incorporates Outdoor Lighting Controls for Site and Maintenance Management



Circuit of The Americas[™] (COTA) in Austin is a one-of-a-kind destination for performance, education, business and sporting use. Home to popular events such as the FORMULA 1 UNITED STATES GRAND PRIX, COTA is a 1,335-acre race track with a variety of associated facilities and parking lots.

During the fall of 2010, COTA



began a new construction project to accommodate growing demand. "COTA's new initiative included a 3.4-mile race track, multiple facilities to hold thousands of people and parking areas that accommodate 25,000 vehicles," said

Dave Ashton, MEJ & Associates, Inc. electrical engineer for the project.

COTA selected MEJ & Associates, Inc. as the electrical engineers for the project. As with any large facility, outdoor lighting is key to ensuring the safety of visitors as they drive, park and walk around the campus at night. Lighting controls systems are valuable to facilities to not only manage and maintain the lighting fixtures, but to also help create a safe environment and save on energy. Systems can also adjust lighting on a daily basis for different events, without a complicated process.

COTA would need an affordable lighting controls system that could help manage the lighting. "We were looking for a controls system that would be the most economical solution for the project," said Michael James, MEJ & Associates, Inc.

Off To The Races

MEJ & Associates, Inc. began investigating the use of the ROAMview[™] wireless outdoor lighting monitoring system from Acuity Controls for COTA. ROAMview accurately controls lighting while maintaining and diagnosing lighting problems with a computerized central system.

"One of the chief benefits of the ROAMview system in a large facility is cost savings," said James. "When you are looking at a facility the size of COTA, the ROAMview system was substantially more economical versus traditional systems."

COTA installed 139 ROAMview control nodes across approximately 375 acres of the facility. The majority of the nodes were placed on metal halide fixtures within parking lots, the main street at the venue (COTA Boulevard) as well as new pedestrian walkways and roadways. Nodes were also installed in a newly constructed paddock area used for staging equipment.

"The ROAMview solution reduced wiring and provided a high resolution of control," said Charles Thompson, Archillume Lighting Design, project lighting designer. "The system uses software that shows which lights are on and off since the controls run on a poleby-pole system."

"The ROAMview solution reduced wiring and provided a high resolution of control...the system uses software that shows which lights are on and off since the controls run on a poleby-pole system." "In addition to managing our lighting, the added benefit of the ROAMview lighting control system is the ability to increase flexibility of our facility's lighting with preset options," said Leo Garcia, COTA head electrician of energy management. "Having the ability to manipulate lighting to meet the constantly changing needs of all our different types of events is something that we really appreciate."

Rewarding Results

The project, including installation of the ROAMview lighting control system, was completed just in time for the 2012 FORMULA 1 UNITED STATES GRAND PRIX.

"The entire design and operation of the control system was a success during the inaugural race," said Thompson. "Traditional controls are grouped by wiring, so ROAMview makes lighting maintenance easier due to its wireless capabilities. The system has easy to adjust settings due to its central computerized system. It features a greater level of control than other options because it allows lights to be turned on and off quickly with little effort and in patterns customized to each event's needs."

COTA uses five lighting control scenarios with 10 zones for different events (i.e., concerts or racing events). "The different scenarios and zones help us maintain traffic control and illumination for areas where pedestrians are walking," said Garcia. "Plus, the control monitor is installed in one central location, so we can easily adjust all of our outdoor lighting needs from one location.

"The installation of the nodes was very easy. Everything about the controls was self explanatory making the system very user friendly from installation to use," said Garcia. "Setting parameters for different event and building schedules have even been simple."

After installing and operating the ROAMview lighting control system system, the control abilities at COTA have proved versatile and achieved positive feedback. "Venue staff has expressed a high level of satisfaction," said Garcia. "The ability to easily adjust light settings across such a large area from one central location has made turning on and off lights really flexible for staff, so we hear a lot of positive feedback."

Diagnostic information provided by ROAMview allows the venue to identify and control individual fixtures with ease. Maintenance discovered the importance of this benefit virtually immediately.

"During one of our concerts there was a thunderstorm," said Garcia.

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One Lithonia Way Conyers, GA 30012 1.800.442.6745 www.roamservices.net sales@roamservices.net "The control system was initially set to maintain illumination in certain areas during the concert, but we had to very quickly illuminate the entire facility because of the storm. The flexibility of the controls allowed us to change the lighting to illuminate parking lots and roadways immediately. "The system accomplished more than what it was planned to do – it successfully maintains parking lot, roadway and public walkway lighting with flexibility," said Garcia. "It has created a safe and manageable environment for a multitude of events and situations."

ROAMview™ Outdoor Lighting Control System

ROAMview[™] outdoor lighting control system from Acuity Controls combines photo-control technology with remote monitoring to help manage and maintain outdoor lighting networks. ROAMview has the system flexibility to adjust light settings to maximize efficiency and enables immediate or automated scheduling. It maximizes the life of outdoor lighting assets and reduces unnecessary lamp replacements.

Featured benefits include:

- A scheduling tool that allows the customer to define exactly which fixtures should be on at what times for normal operation as well as various additional custom schedules.
- Simple retrofitting abilities that allow the system to be installed easily on any property.
- Reduces outdoor lighting energy consumption and maintenance.
- Enables immediate response to outdoor lighting failures, virtually eliminating customer complaints.

At Acuity Brands, we're maximizing the potential of technology to create the best quality of lighting for every environment. With our industry-leading portfolio and proven expertise in indoor and outdoor luminaires, controls, components, LED technology and daylighting, we deliver integrated, intelligent solutions that expand the boundaries of lighting.

Our Brands

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