

**Case
Study**



Xcaret

Reliable Communication Thrills Theme Park

Xcaret has equipped its production team with Clear-Com's Eclipse[®] HX-PiCo, i-Series user panel, and FreeSpeak[®], enabling staff to put on intricate performances, safer and more efficiently.



Xcaret Theme Park

EXECUTIVE SUMMARY

CUSTOMER: Xcaret

- Theme park
- 10,000+ annual visitors
- Playa del Carmen, Mexico

CHALLENGES

- Promote safer, more effective coordination
- Extend coverage to eliminate information gaps
- Streamline communication and eliminate confusion
- Attain uninterrupted coverage

INTERCOM SOLUTION

- 1 Eclipse HX-PiCo digital matrix
- 1 i-1200E i-Series user panel
- 2 FreeSpeak base stations
- 27 FreeSpeak wireless beltpacks
- 10 Active antennas
- 2 Antenna splitters
- 29 CC-300 headsets

RESULTS

- Enhance issue resolution
- Wide collaboration strengthen teamwork
- Greater control of workflow
- Innovative design ensures connectivity

Background

Xcaret, an eco-archaeological theme park distinguished by its unforgettable Mexican cultural experiences, prides itself on providing an engaging experience for everyone that visits. Located at the seashore of the Riviera Maya, near Cancun, Xcaret delivers 40 different exciting attractions, an array of exquisite cuisine, and high-quality entertainment that incorporates rich Mexican traditions.

The success of the park is indicated by its increasing popularity. Since its first production in 1994, Xcaret has grown from having 1,000 guests annually to over 1 million visitors a year. Likewise, the scale and complexity of the Xcaret México Espectacular production has become more and more impressive. The show is presented in a massive arena that accommodates over 6,000 people and it features an impeccable set design with up to 300 talented artists. Behind the scenes, the busy production crew is simultaneously operating many pieces of equipment, taking cues, and accomplishing other responsibilities. Xcaret México Espectacular is never on a break; it runs 365 days a year, rain or shine, day or night.

Challenges

For the past two decades, the staff members have used Clear-Com's wired and wireless intercoms for communication. However, they have seen big changes in their production demands. While Clear-Com's legacy systems have had a good track record of delivering dependable performance, they did not offer sophisticated capabilities that could simplify the production team's workflow. Expanding and modernizing their communications infrastructure was imperative to improve their teamwork and productivity. Ultimately, a new, advanced intercom solution would help propel them into the future they envisioned.



Xcaret México Espectacular Performance

Promote safer, more effective coordination

The audio, video, lighting, stage operations and mechanical departments are some of the groups that require inter- and cross-departmental wireless communication. A wireless solution is especially critical for members of the mechanical department so that they can move around easily, respond to cues quickly and address emergencies immediately. Not only are they faced with difficult and dangerous tasks, but they are also responsible for others' safety. Changing the scenery during a show requires them to move three massive 36sqm portable stages and bulky furniture, in and out of the venue. Additionally, those in the mechanical department are often running back and forth on a 20m high cat walk to oversee theatrical stunts such as wire-flying.

The main limitation of Xcaret's legacy wireless system was that it only supported a limited number of full-duplex beltpacks. Most of the beltpacks functioned in half-duplex, which restricted the team's communication and impeded reaction time because they were unable to talk and listen at the same time.

Extend coverage to eliminate information gaps

There are two locations in the production venue where wireless communication is indispensable – on the 800sqm stage and under the stage. Xcaret's legacy wireless intercom could only provide sporadic coverage, causing people to be cut off from communication when they were out of range. This interfered with their ability to collaborate and resolve issues.

Streamline communication and eliminate confusion

Because everyone shared a single intercom channel, it was distracting for beltpack users when multiple conversations happened at once. This deterred productivity since people had to determine what information was relevant to them, then interrupt the conversation to ask for further clarification.

Attain uninterrupted coverage

The theme park has a plethora of wireless microphones, consumer wireless products and other technologies competing for the 2.4 GHz frequency spectrum. In RF-hostile environments such as this, most wireless intercoms are susceptible to audio fading and dropouts. In searching for a new wireless communication system, the production team wanted to find one that would be immune to interference and deliver high quality audio.

The Solution

Choosing Clear-Com

Although the production crew had experience with many brands of intercom, the staff members have always favored Clear-Com for their productions. Jose Manuel Rodriguez Vazquez, Technical Area Manager at Xcaret, explains, “In the past, I had used different brands of intercom for other productions. Some were inexpensive, but they didn’t supply necessary features. Others were unreliable or had poor audio quality, which would make my production experience feel like torture. One of the main reasons why we went with Clear-Com is because of its superior technical performance.”



At the video control table, the video operator relies on the FreeSpeak wireless beltpack and CC-300 headset for clear communication.

Grupo Audio Diseno SA De CV, a leading distributor of audio systems in Mexico and a Clear-Com Partner, helped Xcaret design the communications setup, supplied the intercoms, and installed the systems at the venue. Xcaret acquired an Eclipse HX-PiCo matrix intercom, an i-1200E i-Series user control panel, two FreeSpeak wireless base stations, FreeSpeak wireless beltpacks, antenna splitters, antennas and CC-300 headsets. The technical director, who oversees the entire production team, uses the i-Series control panel while the rest of the staff relies on the FreeSpeak wireless beltpacks.

Results

Enhance issue resolution

Each of their two FreeSpeak base station supports up to 20 wireless full-duplex beltpacks. Xcaret currently utilizes 27 FreeSpeak beltpacks between the two base stations. As their team grows, they can easily add more beltpacks to the system. FreeSpeak has allowed every member of the production team to move around freely, communicate in real-time, and safely tackle unexpected challenges.

Wide collaboration strengthen teamwork

By strategically placing antennas in the venue, Xcaret has created an expansive coverage zone for wireless beltpack users to roam. Each antenna provides an omni-directional coverage area of up to 150m in radius, which was sufficient to cover the entire arena. The staff members are able to collaborate with anyone, at any moment and at any production area. Never again do they have to worry about going out of range and losing connection.



The technical director relies on the i-1200 i-Series user control panel to communicate with the rest of the production team.

Greater control of workflow

A FreeSpeak wireless beltpack provides six full-duplex channels, which permit the production team to segment departments into separate, isolated channels. With this feature, the lighting operator is able to assign the technical director and follow spot operators to different channels. Likewise, the camera operator can designate the technical director to the first channel and the client to the second. Information has become more pertinent and manageable than ever before.

Innovative design ensures connectivity

FreeSpeak operates in multiple license-free bands from 1.88-1.93GHz, away from the crowded frequency spectrum. Thus, it enables continuous, clear communication at the theme park and eliminates the need for frequency coordination. The wireless beltpacks also possess cellular auto-roaming technology, allowing them to constantly scan and select the optimal signal. Patented Dynamic Port Allocation technology permits beltpack users to roam between antennas without losing connection to the technical director that uses the matrix panel.

Clear-Com's intercom solution has minimized risk, ensured reliable communication in all production areas, and enhanced workflow. By embracing Clear-Com, Xcaret's production team is better prepared to put on each show and give their audience the best performance possible.

**Americas and Asia-Pacific
Headquarters**

California, United States

Tel: +1.510.337.6600

SalesSupportUS@clearcom.com

SalesSupportAPAC@clearcom.com

www.clearcom.com

**Europe, Middle East, and
Africa Headquarters**

Cambridge, United Kingdom

Tel: +44 1223 815000

SalesSupportEMEA@clearcom.com

China Office

Beijing, China

Sales/Marketing Tel: +86 59002608

Service Tel: +86 59000198

SalesSupportAPAC@clearcom.com

Copyright © 2015 Clear-Com, LLC. All rights reserved. ®Clear-Com, the Clear-Com Logo, Eclipse, and FreeSpeak are trademarks or registered trademarks of HM Electronics, Inc.