

Case Study: The Rumba Room

Advanced Multi-Criteria Fire Detector



The Rumba Room is a popular upscale Hollywood nightclub. Part of a multi-building, multi-story entertainment complex, this 25,000 square foot Latin dance club boasts two levels, a thousand patron capacity, and two dance floors featuring state-of-the-art sound and lighting, including fog and smoke effects.

Unfortunately, the club's theater smoke was triggering the facility's smoke alarms on an almost nightly basis. To make matters worse, the smoke would trigger a full-blown alarm that would require the evacuation of nearly a quarter of the entire entertainment complex, including the restaurant below the club.

With each alarm resulting in 1-2 hours of downtime, including evacuation, fire department arrival and walkthrough, and clearing of smoke, lost revenues from each instance could exceed tens of thousands of dollars.

After purchasing and experimenting with several different fog and smoke machines with similar results, the club was forced to receive special permission to set all of its smoke detectors to supervisory, ultimately slowing fire response and incurring additional liability.

In 2009, Callide Technical of San Dimas, CA, was contracted to upgrade the fire safety system of the entire entertainment complex. The Rumba Room posed a particular challenge to the new fire system.

"With all the fog and smoke effects, the existing photoelectric detectors were constantly going into alarm," said Tom Johnson, a principal in Callide Technical. Callide Technical felt that maintaining the fire alarm system on supervisory was an unsatisfactory solution in terms of liability risks and costs and the resulting delay in actual fire response.

Because of their ability to quickly respond to actual fires while maintaining high immunity to nuisance conditions, Callide Technical proposed installing System Sensor Advanced Multi-Criteria Fire Detectors, branded as IntelliQuad for Notifier. The Rumba Room agreed that the decrease in lost revenues and liability and increase in fire response times would certainly justify the use of the more advanced technology, especially if it would

allow them to operate the club with the smoke and light effects that contribute significantly to its unique ambience and appeal.

Callide Technical installed about 25 Advanced Multi-Criteria Fire Detectors to cover the dance floor areas on both levels. Installers wired the detectors like any other smoke detector, while a small amount of additional programming was required to set the detector at the correct sensitivity level for the environment.

"Labor costs were basically a wash," said Johnson. "While the installed cost for these detectors was about 15-20 percent more than a typical photoelectric detector, the Rumba Room was losing more money in an hour of downtime than 50 times the cost difference."

Once installation was completed, the Rumba Room was able to return all of its detectors to alarm from supervisory. And what of the former nightly nuisance alarms? Johnson concluded, "These detectors have been operating for nearly a month now without a single nuisance alarm."

The world's most accurate fire detector for the most challenging applications

The award-winning Advanced

Multi-Criteria Fire Detector combines four sensing technologies — smoke, carbon monoxide, heat, and light — with intelligent algorithms to maintain the highest sensitivity to real fire while rejecting nuisance conditions. The detector is ideal for the most challenging applications where accurate fire detection provides a serious challenge for traditional detectors — especially applications where nuisance alarms can threaten life safety or interrupt mission critical and revenue generating activities.

For more information, visit www.systemsensor.com/multi.



advanced ideas. advanced solutions.™

8 0 0 / 7 3 6 - 7 6 7 2
www.systemsensor.com