

## **Turner Studios Protects On-Air Broadcasts with Behind-the-Scenes Technology**

### *Remote Monitoring Device Watches Over Expensive Production Equipment*

By Bob Douglass

Turner Broadcasting Systems' campus in Atlanta is a sprawling complex, comprised of multiple large office buildings spread across several acres. Within those buildings, staff and equipment work to support the organization's mission of producing news and entertainment for a variety of media outlets including CNN, Turner Network Television (TNT), Turner Classic Movies (TCM), Cartoon Network, and more. Not surprisingly, the space and the technology are expensive to run and maintain, and even more expensive to replace.

The complex houses Turner Studios Engineering's pre- and post-production facilities. A division of Turner Broadcasting, Turner Studios' slice of the state-of-the-art campus is responsible for the production of numerous programs every year, including live broadcasts of NBA games, Atlanta Braves baseball games, Dinner & A Movie, and much more. In fact, Turner Studios provides facilities and resources for all of the Turner Entertainment Networks worldwide.

These facilities include fully equipped studios, editing suites, graphics production centers, and more. Those studios are supported by terminal gear rooms where electronic gear is stored, including switches, network gear, video servers, etc. And it is absolutely critical that the temperature in each gear room remains cool.

In the mid-1990s, the studio experienced several incidents when the add-on cooling system failed. Staff members scrambled to address the problem before any equipment was damaged from prolonged exposure to the high temperatures.

With that experience fresh in his mind, Walt Youmans, broadcast engineer with Turner Broadcasting, researched a range of solutions. He learned that a remote environmental monitoring system with autodialing capabilities would be an uncomplicated but significant step toward safeguarding the equipment.

Initially, Youmans installed a Sensaphone 1104 from Sensaphone, Inc. (Aston, Pa.), which offered four monitoring inputs and up to four alarm notifications. Several years later, as Turner Studios expanded, the staff realized a more robust solution was needed. Youmans again contacted Sensaphone and learned about the recently launched IMS-4000 Infrastructure Monitoring System.

The IMS-4000 has built-in monitoring for power failure and the sound of smoke detectors, plus the ability to detect eight additional conditions from external sensors. The input interface is designed to work with Sensaphone's specific external sensors, which allows for automatic sensor detection and supervision. When potentially dangerous conditions are detected, the IMS-4000 alerts engineers who can take the necessary steps to prevent lost network functionality. Those alerts are issued via email, pager, or phone.

Sensors are available to monitor temperature, humidity, water on the floor, doors and video cameras, as well as motion, smoke and fire detectors. An interface is also available to allow users to connect to and monitor any dry contact device or any 4-20mA device.

The system also comes with an internal data logging function that accumulates time-based snap shots as well as event driven data. The data history can be viewed using the built-in web interface, or through the Windows<sup>™</sup>-based PC software delivered with the product.

The system works with a dial-up line, and comes with built-in voice, data, and modem with a standard RJ-11 phone connection, in addition to the 10/100 Ethernet interface. It is also supplied with an internal UPS battery backup robust enough to continue its monitoring functions for several hours after the power is lost.

The decision to upgrade to the IMS-4000 has paid dividends for Turner Studios. In one significant incident, the system sounded an alarm at 2 a.m. It automatically contacted the technical staff and dispatched the appropriate engineer to respond. The system had detected a significant increase in temperature in a room housing complex and expensive computer graphics equipment considered vital to the network's day-to-day business.

Had that situation gone undetected, Youmans said, it would have likely resulted in several hundred thousands of dollars in repair and replacement costs. The implementation of the IMS-4000 system has been so successful that Turner Studios is considering expanding its use to other areas of the complex.

***About the author:** Bob Douglass is the vice president of sales and marketing for Sensaphone, Inc., manufacturer of the complete line of Sensaphone remote monitoring systems. For more information, visit [www.Sensaphone.com](http://www.Sensaphone.com) or call 610-558-2700.*