



## Case Study

# University of Miami Upgrades Broadcast TV Infrastructure

with Avocent KVM switches

### Overview

With more than 15,400 students and over 10,800 full and part-time faculty and staff, the University of Miami was ranked No. 54 in the U.S. News & World Report® 2007 "Americas Best Colleges" rankings. The School of Broadcast Communication Program is one of the leading programs in the U.S., preparing students for careers as television and broadcasting professionals. In recent years, the university realized it needed to upgrade its on-campus broadcast facilities. As part of a complete broadcast studio renovation project, the University of Miami turned to Professional Communications Systems (PCS), a broadcast and audiovisual integrator and equipment supplier specializing in the design, installation and maintenance of turnkey audio and video communication systems to deliver a modernized broadcast technology solution. Thanks to Avocent KVM technology, the new facility features a centralized machine room to house all computer systems. "Avocent is the backbone technology that makes this whole system possible," said Lloyd Hicks, regional manager for PCS. "The technology has created a more efficient, open and dynamic work environment," said Tom Ortiz, director of engineering and operations for University of Miami. "Students don't have to run to different computers in another room or on another floor. Everything is just easier and faster."

### Challenge

- Antiquated analog broadcast technology was not up to date with industry standards
- No infrastructure in place to support future HD recording and broadcasting
- Decentralized computing system was difficult to manage and maintain

### Solution

- Avocent broadcast KVM switches were selected as part of a total solution from Professional Communications Systems to simplify control of machine room computers and broadcast devices

### Results

- State-of-the-art digital broadcast studio mirrors current industry environments
- Centralized computing enables quicker, easier, secure access to core applications
- Users have access to multiple shared computers to perform their jobs
- Increased space in studios, control rooms and editing suites
- Cost savings via reduced power consumption and streamlined maintenance



### Profile

#### Organization

University of Miami

#### Location

Coral Gables, Florida

#### Industry

Education

#### Web site

[www.miami.edu](http://www.miami.edu)

#### Products

Broadcast KVM Switches

**"With Avocent we're cutting costs through reduced power consumption, lower air-conditioning usage and streamlined hardware maintenance. We've also improved security by placing all of our digital assets in a secure machine room."**

Tom Ortiz

*Director of Engineering and Operations*  
University of Miami

## Challenge

In recent years, the university realized it needed to upgrade its on-campus broadcast facilities where students gain hands on experience developing broadcast programs and running the university's UMTV campus channel. "It had been about eight years since the studio had been upgraded," explains Tom Ortiz. "The prior system was based on analog broadcast technology and was not up to date with industry standards. With the industry moving to digital and high definition recording and broadcasting, we needed a modernized facility to give our students the best possible educational experience."

Also, a decentralized computing system made up of servers, PCs, editing systems and playback devices meant that students and staff had to run in and out of control rooms or up and down stairs to access specific applications on standalone computer systems. "The computers were isolated in various rooms," explains Ortiz. "Directors and sound technicians had to run around the facility and share computers in order to get their work done. We knew that having a centralized machine room with KVM technology would streamline operations and provide a much better, more professional working environment."

## Solution

As part of a complete broadcast studio renovation project with updated studios, control rooms, cameras and equipment, the University of Miami turned to Professional Communications Systems to provide a modernized broadcast technology solution. Based on the industry-leading Grass Valley™ Concerto routing switcher, the PCS solution included six Avocent AMX®5121 user stations and one AMX5000 (8 users x 32 ports) KVM switch to enable multi-user access to centralized servers and other devices. Avocent's KVM technology allowed the new facility to include a centralized machine room to house all computer systems.

## Results

With state-of-the-art digital broadcasting equipment, modern control rooms and several digital post production suites, the new broadcast facility is up and running at University of Miami. "Avocent is the backbone technology that makes this whole system possible," said Lloyd Hicks. "Students now have a system that replicates what they will find in the industry when they graduate," said Ortiz. Students and staff create original programming including live newscasts in the new broadcast facility every day. UMTV is now offered to 600,000 Comcast customers in Coral Gables, FL which was not possible before.

Designers, editors and operators in various stages of the broadcast cycle now have shared access to multiple computers to perform their jobs. These same computers and devices can also be shared with multiple users since core applications hosted on servers can be accessed by virtually any computer. "The technology has created a more efficient, open and dynamic work environment. Students don't have to run to different computers in another room or on another floor. Everything is just easier and faster," said Ortiz.

"With Avocent we're cutting costs through reduced power consumption, lower airconditioning usage and streamlined hardware maintenance," adds Ortiz. "We've also improved security by placing all of our digital assets in a secure machine room." With centralized servers, editing systems and playback devices, Ortiz has also freed up space in control rooms and editing suites where hardware and cables used to reside.

"Working with PCS was excellent," concludes Ortiz. "They delivered an outstanding technology infrastructure along with expert design, installation and integration services. Avocent technology is a key part of the solution and it has transformed our work environment."

## About Avocent Corporation

The Avocent connectivity and control division offers managed AV infrastructure solutions for professional audio/video and broadcast markets. Our Emerge® product family allows industry professionals to deliver innovative wired and wireless solutions for AV and KVM extension, switching, distribution, and signal processing needs. Additional information is available at [www.connectivity.avocent.com](http://www.connectivity.avocent.com).