

Michigan State University East Lansing, Michigan

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Skandalaris Football Center

The Michigan State Spartans aren't taking any prisoners in their drive to dominate the Big Ten. So it's no surprise that they pulled out all the stops at their new Skandalaris Football Center, a \$15 million, 25,000 square foot addition to their Duffy Daugherty training building.



The need for reliability was a big reason Crestron was specified for the control, annotation, and switching systems. "As complex as it was, they didn't want to be bothered worrying about the technology. We had to get it right the first time."

At the core of the Skandalaris Center is a digital video archiving system that is networked to a divisible team meeting room and nine other rooms assigned to various offensive and defensive positions. The archive is used in conjunction with the on-screen annotation system built into Crestron's TPS-GA-TPI Touchpanel Interface, which also controls the audio, video, and other systems in these rooms.

"What some people don't know is that with any sport, and in particular football, there's a lot of instruction involved," says Gregory Ianni, Senior Associate Director of Athletics. "We wanted to set up stations where our assistant coaches could be most effective in teaching their student athletes the game of football. "The finished Center has just been phenomenal," he adds. "It's a great learning environment. The technology is easy to use, it gives us real-time information that we can pass on to the team, and it's just been terrific in maximizing the time efficiencies of our coaches and athletes."

Time, according to Ianni, is a crucial factor in any college football program. "We get just 20 hours a week with the players. If you figure they're on the field roughly 2 1/2 hours, they're probably in those rooms an hour to an hour and a half per day."

At Michigan State, coaches have long felt that reviewing plays is the most productive way they can spend time in the classroom. Ianni explains, "we constantly look at techniques and situations in game and practice videos."

"Let's say we're running a play, and the offensive line has to block a certain way. We may have 20 plays from past games where we successfully used that blocking pattern, so the coaches will show selections of those plays. They also have the ability to stop the play, draw the play right on the same screen, and draw where they want people to block. The coach used to have to stop the video and walk up to the blackboard to script the play. But now he just does it at his desk, and it shows up on the room's big screen. It's as efficient and effective as you can get."



This type of visual learning is especially effective for young athletes, Ianni says. “You have to remember that this generation of young people expects this kind of technology. This is how they learn and this is how they communicate.”

The video used in instruction comes from two sources. Media staffers at MSU shoot footage at every game and every practice, and Big Ten members share videos from every game in a digital format. All the footage is broken up into clips, then indexed and archived on a computerized system from XOS Technologies.

Ianni says Michigan State has used the XOS archive system for about ten years. A major goal of the Skandalaris Center project was to fully integrate this system into the classroom display and sound systems, maximizing the effectiveness and efficiency of instruction.

Mike Sexton, Technology Designer at Troy, MI-based AV consultant Integrated Design Solutions (IDS), says Michigan State has built up about 20 terabytes of archived content, with digitized game film going back at least 20 years. Coaches access the system from networked PCs in each of the classrooms as well as their offices, and a detailed index makes it easy to find specific clips. Because newer footage is high-definition and in a widescreen format, IDS specified the use of a 19” Cybertech O1900U touchpanel to be used with the Crestron Touchpanel Interface, plus high-definition projectors and flat panel displays. A coach can bring up a video clip on the touchpanel and the room’s large screen display, start it, pause it and draw on it using the Crestron annotation software, and once he’s sure his players understand the point he is trying to make, move quickly on to the next clip.

He can also annotate over handwritten plays from a document camera or media from DVD, videotape or live video coming from an RF head end in the building.

Sexton says IDS used a Crestron MPS-100 for audio and video switching and control in each of the smaller position rooms, and they route all local video and audio signals in these rooms over Crestron QuickMedia® cable. “We like the MPS-100 because it conserves rack space, minimizes interconnects, yet does everything MSU needs,” he explains.

A Crestron PRO2 processor located in the head end networks all the control processors together for Crestron RoomView® centralized management. The integrator can also access the Skandalaris Center network from their service department should they need to step in with support or troubleshooting help.

Head coach Mike Dantonio typically starts the practice day with the entire team assembled in the new Team Room, speaking to them and perhaps showing a motivational video assembled for that day. The team then divides into the offensive and defensive squads for more specific instruction, and from there, breaks out to their adjacent position meeting rooms.

“Michigan State asked us to make the Team Room divisible, so they could very easily break out the offense and the defense,” Sexton explains. “We looked at traditional manual air and motorized walls, but they took at least five minutes to open or close, which was just too long, given the limited time with players.” Instead, MSU opted for a Skywall motorized wall that drops from the ceiling





and is in place in about one minute. Control of the wall and all audio and video switching is accomplished with one touch of a button on the Crestron-controlled Cybertech touchpanel.

The AV integrator wired all the sources back to a digital signal processor, which can detect the position of the wall and switch to its one or two room settings. If the coaches show a multi-channel signal, it will detect that too, and distribute the audio in six-channel surround mode. IDS had JBL design the speaker layout in those rooms, to pump about 6,000 watts of sound into each side, which makes quite an impression during a motivational video.

The coaches also use the room for team movie nights, and they make good use of the surround sound on those occasions too. According to Ianni, “After a rough practice when the kids are going through hell, our coaches will change things up, go rent a video and give them a chance to regroup.”

Another major goal for the Skandalaris Center was to support Coach Dantonio’s stepped-up recruiting program. “The young men who are considering playing for the Spartans are very aware of the technology here,” Ianni explains.

A team history museum is a prominent part of the facility, illustrating the Spartans’ storied past and the success graduates have had

moving into the pros. The museum includes a video wall in addition to 42" displays, all fed by the same RF video and audio distribution system that sends live video to the classrooms and offices. “We’ll show live games, taped highlights, recruiting presentations and NFL highlights featuring former Spartan players,” Ianni says. Sources are chosen using a Crestron TPS-15L wall mount touchpanel, and a Crestron CEN-RGBHV16X16 Wideband RGB Matrix Switcher routes the signals.

Sexton says despite the complexity of the Center’s RF and IP video systems, there have been very few issues either with maintenance or user training. “I have to say that when the installation was finished, we hit the ground running. All of the coaches caught right on to the touchpanel controls. They have been bulletproof as well.” The only tweaking that the integrator had to do, Sexton says, was to audio levels. “There wasn’t a single call on how to show a source.”

The need for reliability was a big reason Sexton specified Crestron for the control, annotation, and switching systems. “As complex as it was, they didn’t want to be bothered worrying about the technology. We had to get it right the first time.”

Ianni agrees. “The flexibility of the space is huge and the technology allows us that flexibility with minimal problems. IDS nailed it.”