

## Mixing a/v and athletics at recreation facilities

Rec centers a huge draw on campus – A/V a big part of the reason



Field house at the Williams Center in Whitewater. Lewis Sound & Video carefully aimed, zoned and equalized the sound system so that four separate events can take place at once with little or no interference between areas.

It's 6:05 a.m. and the treadmills are in motion, the free weights are off the racks and the bicycles are flying in place. In the vast expanse of the field house, sweating early risers are making their tenth lap around the track, and the swim team has been in the pool for an hour. Fitness has become big business for people of all ages, but especially among young adults who have never known exercise without entertainment close by.

### Music to their ears

It's been over 30 years since the Sony Walkman changed the face of fitness by adding music to mobility. Today, no fitness or recreation center is built without audio/visual systems that can add inspiration to otherwise monotonous work. Nowhere is that A/V presence more welcome than on college and university campuses where top dollar is being spent on sophisticated new recreation and fitness centers.

"The athletic center is one of our primary recruiting tools," said Gary Harms, Director of Recreation Sports & Facilities at the Williams Center at the University of Wisconsin, Whitewater. "Not only for athletes but for the general student body as well. They can all come and work out here." The Center's new 57,000 square foot field house includes a weight room/fitness area, athletic training room, classrooms and office space. Lewis Sound and Video of Waukesha, Wisconsin, drew the task of installing audio systems in the field house, weight room and a renovated volleyball arena.

"We wanted something that sounds good for athletic events and recreational use," said Harms. The cavernous field house, with four basketball courts and a running track, presented its own acoustical challenges to Lewis installers. Henry Lewis, the acoustical expert, used a computer program called EASE to predetermine the best configuration for speakers to assure overall coverage. Lewis hung 48 15" JBL coaxial loudspeakers from the ceiling and pow-

ered them with 12 Crown K-series amplifiers. Lewis aimed the speakers directly down onto the playing surfaces, but zoned them so that when separate events are held on the courts, the fabric walls that can be lowered between them are enough to minimize cross court interference. Wireless microphones offer mobility to judges and referees, although there is a wired mic system as well.

"For as large a facility as this is, people can't believe the sound quality," said Harms. "It's just a large open space with no interior seating or anything to absorb noise, but it's really crisp and clear."

Lewis also analyzed the acoustics of the smaller, older volleyball arena. He suggested that the university replace the original wall and ceiling tiles with acoustical panels, which they did this summer. "When it was empty of people, for classes or camp instruction, it was very hard to hear," said Harms. But the treatment and a new set of JBL speakers has greatly improved the clarity of the audio.

### Graduation on ice

It takes money to build these impressive new facilities, and whether they're paid for by public funds or gifts and grants, the schools want to make the best use of their investment.

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"These have to be multi-functional spaces," said Susan Lewis, CEO of Lewis Sound and Video. "Athletics is a huge money maker, but the university can't be myopic." New athletic facilities often double as locations for community meetings and other events. With the right



kind of presets programmed into the control systems, switching back and forth from athletics to ceremonies is simply a matter of pushing the right buttons.

The Milwaukee School of Engineering may hold the record for unusual graduation venues. Though their new 210,000 square foot Kern Center boasts a basketball arena and sizeable lobby/fitness center, it's the ice arena that gets the nod for the May ceremony.

"You don't see that many hockey rinks used for graduations," said Susan Lewis. "That's because the facility would normally have to install a temporary subfloor over the ice, which can be labor intensive." MSOE, however, found a convenient and less costly way around the problem by scheduling their annual meltdown and maintenance just before commencement. Once the ice is gone, the college brings in a custom-built circular stage, directly

in line with the overhead speakers. "You can kill the speakers where you need to and bring them up on the ice or audience areas," said Rai Stelter, Kern Center coordinator. The addition of three temporary sets of bleachers and the removal of the glass and dasher boards gives the school an impressive 360 degree ceremony. The audio system has the versatility and clear signal needed to assure that every mom and dad can hear their child's name as he or she crosses that stage.

## Separation anxiety

It should not be a surprise that these state-of-the-art athletic centers have raised the expectations of young adults for the fitness centers they patronize after graduation. That's one reason that managers of the Pleasant Prairie Lakeview RecPlex decided to outfit the facility with all-new A/V when they remodeled last year. The renovated RecPlex, with its 60,000 square foot field house, 17,000 square foot aquatics center, huge fitness center, multiple instruction rooms and two ice arenas, is not only one of the Midwest's largest indoor recreation centers, but one of the most advanced.

Perhaps because of the size and sophistication of the systems, the original A/V contractor found themselves unable to complete the project. The RecPlex brought in Lewis Sound & Video to correct a number of design flaws and finish the job. "Lewis was put in a challenging situation and had to clean up a real mess," said Ruth Otto, Pleasant Prairie's IT director.

The project was sizeable to say the least. Each ice arena is equipped with four permanently installed robotic cameras and multiple microphones so that events can be recorded, edited and sold to parents on DVD. Lewis Sound & Video completely redesigned the digital video production system that makes this possible, starting almost from scratch. Lewis also added net-

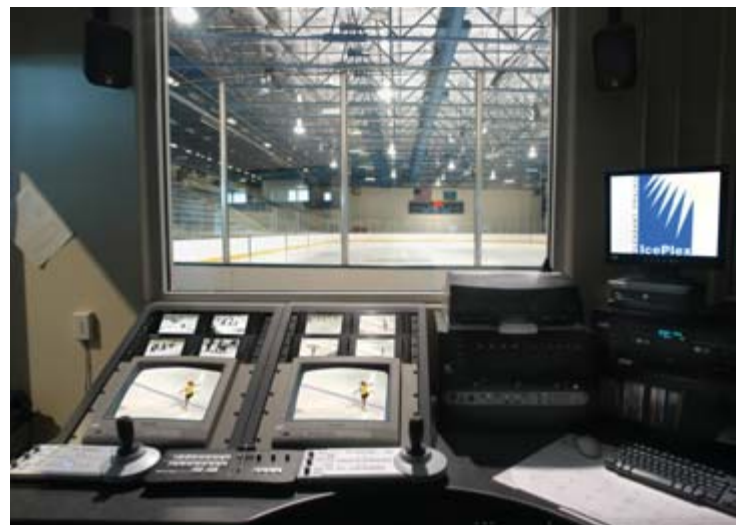
worked digital signal processing to the sound systems throughout the facility. "The networked DSP adds critical control and equalization functions to each system," said Susan Lewis. Lewis Sound installed most of the network wiring, and "we also programmed room combining sound systems in the field house, the aerobics room and the Lake/Prairie rooms." The firm gave each area its own wireless mic system, CD background music and in some cases, satellite radio.

Lewis Sound & Video also designed and installed a facility-wide digital signage/messaging system, with sixteen 32 inch monitors and plasma displays, and installed an eight-zone digital paging system that allows any staff member to initiate a page from any house phone. The page overrides any music source or microphone that may be in use. Working with TV monitors already installed by the previous contractor, Lewis added FM transmitters and headset receivers so people working out in the fitness center can listen to the TV program of their choice. In the cycling center, stationary bicyclists can keep their eye on a video monitor that might be showing the hilly terrain of the Tour de France, or a flat expanse of Midwest highways.

"While we sold only about 20 percent of the equipment for this project, we supplied 90 percent of the functionality," says Henry Lewis. "We were responsible for the clarity of the sound and video, completing and tuning and adding key components to each system. We also redesigned and rebuilt the production room from scratch." Thanks to Lewis, the RecPlex grand opening was as impressive as Ruth Otto had hoped. "Lewis turned it around and delivered a professional sound and video environment. They did an excellent job. I'd recommend them to anyone."

## Making fitness fun

Not everyone likes to exercise, but with the addition of audio/visual technology, an element of fun has been added to what used to be the often tedious task of working out. Whether they're lifting to the beat of a rock tune or cruising to Mozart in Montana on a stationary bike, young people today are reaping the rewards of putting music, video and mobility on the same page.



The video production room at the Lakeview RecPlex, with switching setup in foreground. The system includes a nonlinear editing system (not shown).

Carefully programmed presets in the DSP allow MSOE to use the Kern Center's ice arena for hockey, figure skating, and graduation ceremonies.