



Case Study: Education

University of Wisconsin-Eau Claire

University of Wisconsin-Eau Claire Installs Tesira® in New State-of-the-Art Student Center

Founded in 1916, the University of Wisconsin-Eau Claire (UWEC) is one of the Midwest's top public universities. It provides students with small classes led by talented professors, cutting-edge programs, and the support they need to meet their goals for success. Arguably the largest business entity in the West-Central region of Wisconsin, UWEC is also a hub for business meetings and events that draw professionals locally and from around the world.

THE CHALLENGE

Instead of remodeling the existing W.R. Davies Student Center, which the students, faculty, and staff decided no longer met their needs, UWEC replaced it with a new 170,000 square foot, state-of-the-art Student Center.



We were trying to ensure that the building wouldn't have problems as it came online, and be forward-thinking for the next 50 years.

We think we achieved that with Tesira.

– Jason Jon Anderson
UWEC Event Production Coordinator

CONSIDERATIONS

The challenge with the installation was two-fold: designing a system that allowed audio to route from any input to any output in the facility; and providing professional audio to support over 11,500 student and business events each year, with an intuitive user interface, easy zoning, room combining, and complete digital signal processing.

UNIVERSITY OF WISCONSIN EAU CLAIRE SYSTEM REQUIREMENTS

UWEC asked Shen Milsom & Wilke to design a comprehensive audio solution for the following spaces:

- 1 Meeting rooms in small, medium and large configurations with multimedia capabilities 
- 2 Two ballrooms that can divide into four individual rooms or any combination therein 
- 3 Alumni room and cabin bar 
- 4 Multi-purpose room 
- 5 Lounges and recreation spaces 
- 6 Retail and food service areas 
- 7 Indoor and outdoor lounge areas for entertainment and study 
- 8 Student services 
- 9 Offices of student organizations 
- 10 Cinema/auditorium space 

UWEC wanted the ultimate in flexibility, with the unique ability to take any input and route it to any output, and combine any room with any other, or separate them as needed.

THE SOLUTION

The integration team consisted of Shen Milsom & Wilke as the consultant and designer with Erik Geiger at the helm, and Audio Architects, led by Andy Pierson, as the installer. Geiger and Pierson chose Biamp Tesira as the only viable option for the high level of usability, flexibility, scalability, and control required by UWEC in this \$2.7 million AV installation. Having successfully used Audia in the previous Davies Center, the team felt confident employing the new Audio Video Bridging (AVB) standard integrated into Tesira for all networked audio systems in the building (and eventually across the entire university campus).

Using a third-party AV control system, Tesira was deployed as the main audio transport for background music (BGM) and live paging, with the AVB network spanning all floors, ballrooms, event/performance spaces, and indoor and outdoor lounge areas.

SYSTEM SPECIFICS

Components:

Tesira:

7 SERVER-IO

Cards: 9 DSP-2; 56 SIC-4; 26 SOC-4

18 EX-MOD

Cards: 6 EIC-4; 28 EOC-4; 15 EIOC-4;

9 EX-IO

The Tesira SERVER-IO allows for scalable DSP and I/O in the same device, with up to three DSP-2 cards and up to 12 I/O cards each. The 82 I/O cards in the 7 SERVER-IOs allow for a remarkable 328 channels of audio input and output

The SIC-4 and SOC-4 cards provide audio channels that include +48V phantom power, mute, level and signal invert, and full-scale output reference. As a 4-channel I/O expander, the EX-IO features 2 channels of mic/line level input and 2 channels of line level output.

Each EX-MOD can be configured with up to three 4-channel I/O expander cards for communication with the Tesira AVB network for audio networking, configuration, and control. With the 18 EX-MODs in this installation, UWEC has 216 easily customizable channels at their disposal. The EIC-4 and EOC-4 cards each provide four channels of input and output respectively for use with the EX-MOD device. The EIOC-4 is an optional expander card that provides two channels each of mic/line level audio input and line level audio output as with the EX-IO.



AVB allowed us to leverage a very powerful, centralized DSP over many rooms with low I/O requirements on a fully scalable network, eliminating the need to have a DSP or excess hardware deployed in each physical space.

-Erik Geiger, Associate at Shen Milsom & Wilke

FUNCTIONALITY AND CONTROL ENABLE SUCCESS

The Tesira SERVER-IO provides UWEC with a single, Ethernet-based DSP network that can accommodate a large quantity of both analog and digital input/output. The ability to combine and separate audio and digital signal processing as needed are important functions for the university.

Combining audio for a professional presentation in two of the four room configurations of a ballroom, while next door a student organization meets, and the fourth room hosts choir practice, is an everyday necessity for UWEC as their event needs change on a constant and frequent basis. Using Tesira, Shen Milsom & Wilke and Audio Architects enabled UWEC to meet the current and future needs of its students, staff, faculty, and business partners.



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ABOUT BIAMP SYSTEMS

Biamp Systems is a leading provider of innovative, networked media systems that power the world's most sophisticated audio/video installations. The company is recognized worldwide for delivering high-quality products and backing each product with a commitment to exceptional customer service.

The award-winning Biamp product suite includes the Tesira® media system for digital audio networking, Audia® Digital Audio Platform, Nexia® digital signal processors, Sona™ AEC algorithm and Vocia® Networked Public Address and Voice Evacuation System. Each has its own specific feature set that can be customized and integrated in a wide range of applications, including corporate boardrooms, conference centers, performing arts venues, courtrooms, hospitals, transportation hubs, campuses and multi-building facilities.

Founded in 1976, Biamp is headquartered in Beaverton, Oregon, USA, with additional engineering operations in Brisbane, Australia. For more information on Biamp, please visit www.biamp.com.