



CASE STUDY

Extron NAV Pro AV over IP Helps Tie it All Together for Medical School in the Bahamas

The Western Atlantic University School of Medicine (WAUSM) is an international medical school located in Freeport, Bahamas. Its charter class started in 2021 and it offers a four-year medical degree program that is designed to prepare students for a successful career in the medical field. The curriculum includes courses in basic sciences, clinical sciences, and clinical rotations.

Extron

Two main classrooms for collaborative learning equipped with seven displays, nine ceiling array microphones, three PTZ cameras, two Extron ShareLink Pro 1100 Wireless Presentation Systems, and one Extron SMP 351 Streaming Media Processor, all connected via Extron NAV Pro AV over IP.



“The NAV technology is a game changer and allows us to deliver content anywhere at any time. The AV over IP scheme is also a welcome change from the heavily used HDMI standard. You don't have to be an audiovisual expert to use Extron products and the performance has been great so far. This is the third time in my career I've worked directly with Extron's products on a project and every time has been exceptional. The design was thorough, the support has been great, and the solutions are always top-notch.”

Dariano Joseph
Director of Information Technology
WAUSM

WAUSM uses a variety of AV technologies to enhance the learning experience for students. They believe that “active” learning is much more effective than “passive” lecture-only learning models. This means classrooms are outfitted with state-of-the-art equipment, including AV, which aids students in hands-on activities and technology-enhanced information sharing, ultimately creating a very engaging learning environment. They have implemented several of these active learning and collaborative learning environments, incorporating high-definition video conferencing for remote learning and digital signage to display important information throughout the entire campus.

THE SCOPE OF THE PROJECT

The 40,000 sq. ft. campus consists of two interconnected buildings with about 22 distinct spaces that required Extron AV solutions. There are two large classrooms, each seating over 160 students. Each classroom is equipped with a microphone system for voice reinforcement and wireless presentation and collaboration for active learning. There are four group study rooms equipped for wired and wireless collaboration, two conference rooms equipped for BYOM and wireless presentation, six AV-capable exam rooms, and four simulation rooms, each with its own control room workstations. There's also an AV-capable debriefing room and a student lounge area with several displays for entertainment and announcements. Other displays are placed around the campus and are connected using Extron NAV technology.

The integrator, Multimedia Technologies, recommended Extron equipment because of our technologies for collaborative

24/7 Digital signage and entertainment streaming achieved with NAV encoders and decoders



Main AV rack in building two ties all the solutions together with Extron NAV encoders and decoders, NAVigator with 96 Endpoints Upgrade LinkLicense, wireless presentation, streaming and recording, as well as audio and control.

learning and Pro AV over IP solutions. According to Dariano Joseph, Director of Information Technology at WAUSM, "time constraints and global microchip shortages were an obstacle but the readily available and easy to install Extron products helped us to meet our deadline for opening." Joseph continues, "Extron equipment was selected because of previous experience in the medical education space, their ease of use and installation, their quality support, and innovative solutions."

NAV Pro AV over IP - Tying it All Together

Extron NAV – Pro AV Over IP solutions played a huge part in tying all the AV together. All areas with sources and outputs are connected through a range of NAV products including: 20 NAV E 501 Encoders, 35 NAV SD 501 Scaling Decoders, and one NAVigator with LinkLicense enabling 96 Endpoints. There are also several Cisco switches, allowing communication between the two buildings. WAUSM reviewed Extron NAV solutions, and this worked out better than anyone expected. One thing the flexibility inherent in NAV enabled was that it has enhanced the faculty and student experience by providing a means by which custom content from internet news sources to campus information can be sent to any of the displays connected via NAV.

Joseph commented on how the NAV solution works so well, "Once the system was installed and in full operation, we realized that the NAV AV over IP technology could be utilized for other unintended use cases. For example, NAV technology is being used to deliver digital signage across the entire campus and for 24/7 entertainment streaming."

Four group study rooms are each equipped with ShareLink Pro 1100 for wired and wireless collaboration and easily controlled with Extron NBP 100 Network Button Panels.



TLS 1025M room scheduling systems provide room availability in real-time and allow easy reservations for meetings and conferences.

The two large classrooms are the main collaborative teaching areas. Each is equipped with seven displays, nine Sennheiser Team Connect 2 ceiling array microphones, three PTZ cameras, two Extron ShareLink Pro 1100 wireless presentation systems, and one Extron SMP 351 streaming media processor.

Audio

Audio signals are distributed throughout the campus. Two main IDF closets house Extron audio amplifiers and DSP. Multiple Extron NetPA U 1002-70V amplifiers provide audio distribution. For the two main classrooms, Extron NetPA U 1004-70V, DMP 128 Plus C AT and XMP 240 C AT along with the Sennheiser microphones are used for voice reinforcement. Extron's ProDSP Digital Matrix Processors are doing the heavy lifting of processing the audio from the multiple microphones and delivering it to the students in the classrooms, as well as the remote participants via the video conferencing system. The DMP 128 Plus C AT also enables camera tracking capabilities in one conference room via Extron's control systems. Camera tracking enables recalling camera position and zoom presets based on the position of a person speaking.

Room Scheduling

Extron Room Scheduling System is used to manage bookings for the conference rooms. With the easy-to-use TLS 1025 room scheduling panels, professors and staff can view room availability in real-time and reserve rooms for meetings or conferences. TouchLink Room Scheduling Panels connect directly to popular calendar services, and, for WAUSM, this meant Office 365. All TLS panels are configured with Extron Room Agent™ software. Simply connect the touchpanel to



Two conference rooms equipped for Bring Your Own Meeting – BYOM and wireless presentation controlled via Extron TLP Pro 1025T 10" Touchpanel

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your computer, open the free Room Agent software, fill in the required fields that compose the user interface, and you're done.

Control

Extron control solutions provide easy-to-use and consistent control capabilities from room to room. The medical school incorporated Extron control and automation solutions to facilitate efficient scheduling, control, and communication across different rooms in the facility.

Thirteen Extron Pro Series touchpanels of various sizes are located within exam rooms, simulation rooms, classrooms, and conference rooms, as well as in debriefing rooms and leisure spaces. These allow convenient control of various AV source devices, including volume and power controls.

Two Extron IPCP Pro 255Q xi control processors in Building 2 provide centralized control for all classrooms, exam control rooms, simulation control rooms, the debriefing room, and the student lounge. The IPCP Pro 360Q xi control processors with LinkLicense are managing the AV systems in the conference rooms and administration spaces, ensuring seamless integration and efficient control of various devices and peripherals.

RESULTS

From day one, the administrators and Joseph had a goal of WAUSM being a state of the art campus using the latest AV over IP technology to deliver a world class experience to their students. Working closely with Extron, Multimedia Technologies, and AVPR solutions, an Extron EQIP programming resource, their goal was reached. Everyone, from the staff and administrators to the students enjoy a top-quality, engaging learning environment enhanced by Extron AV. Joseph puts it best by saying, “The NAV technology is a game changer and allows us to deliver content anywhere at any time. The AV over IP scheme is also a welcome change from the heavily used HDMI standard. You don't have to be an audiovisual expert to use Extron products and the performance has been great so far. This is the third time in my career I've worked directly with Extron's products on a project and every time has been exceptional. The design was thorough, the support has been great, and the solutions are always top-notch.”

FEATURED EXTRON PRODUCTS

Model	Description
NAV E 501	1G Pro AV over IP Encoder - HDMI, Ethernet, and USB
NAV SD 501	1G Pro AV over IP Scaling Decoder - HDMI, Ethernet, and USB
NAVigator	Pro AV over IP System Manager
LinkLicense	NAVigator 96 Endpoints Upgrade
ShareLink Pro 1100 Miracast Kit US	Wired and Wireless Presentation System with Miracast & ShareNext
SMP 351	H.264 Streaming Media Processor
DMP 64 Plus C AT	6x4 Digital Matrix Processor w/ AEC and Dante
DMP 128 Plus C AT	12x8 ProDSP Digital Matrix Processor with AEC and Dante
XMP 240 C AT	Expansion Matrix Processor w/ 24 AEC and Dante
NetPA U 1002-70V	Two Channel Dante Amp, 100 watts at 70 volts
NetPA U 1004-70V	Four Channel Dante Amp, 100 watts at 70 volts
TLS 1025M	10" Wall Mount TouchLink Scheduling Panel – White
TLP Pro 1025T	10" Tabletop TouchLink® Pro Touchpanel – Black
TLP Pro 1025M	10" Wall Mount TouchLink® Pro Touchpanel – White
TLP Pro 725T	7" Tabletop TouchLink® Pro Touchpanel – Black
NBP 100	Network Button Panel with 6 Buttons - US 2-Gang
IPCP Pro 255Q xi	IPCP Pro xi Quad Control Processor w/LinkLicense for User Interfaces Upgrade
IPCP Pro 360Q xi	IPCP Pro xi Quad Control Processor w/LinkLicense for User Interfaces Upgrade

Extron

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