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University of Connecticut

University of Connecticut Relies on Extron SMP 351 to Continue Teaching During a Pandemic — and Beyond

"We strive for simplicity, standardization, and reliability. That's one of the reasons that we use Extron for switching, distribution, and control. We select AV suppliers based on durability, functionality, and responsive technical support. Extron has always been awesome at all three."

Jeffrey Albright
Audio Visual Technician 3, Campus Technology Services
University of Connecticut

The University of Connecticut - UConn is a public research university founded in 1881. Its 14 schools and colleges grant undergraduate degrees in 119 majors, graduate degrees in 88 research and professional practice fields, and six types of medical and law degrees. It is ranked as the best public national university in New England and among the top 25 public universities in the United States.

Challenges

In the first semester of 2020, UConn was teaching over 30,000 students at its 4,400-acre Storrs campus, plus four regional campuses across Connecticut. When COVID-19 hit, the University adjusted quickly, with a mix of remote, hybrid, and in-person classes. To accomplish this, UConn leveraged and expanded their existing lecture capture and streaming infrastructure based on Extron's SMP 351 Streaming Media Processor and the Kaltura Video Cloud.

Recognizing that part of the 2021 academic year would still require social distancing, and would limit on campus attendance to 30 percent of the student body, UConn implemented a plan to maintain robust remote and hybrid learning capabilities that would meet immediate needs and would be a valuable addition to teaching options well into the future.

Engineering Building classrooms.

Engineering Building lecture hall.

To support this plan, the Campus Technology Services AV team headed by IT Manager Steven Fletcher outfitted most classrooms and select seminar rooms across all campuses with over 200 additional SMP 351 Streaming Media Processors.

Solution

Learning spaces equipped with the SMP 351 allow UConn instructors to record and livestream any of the AV sources used during lesson presentations. Remote learners take part in classes real time or any time later via on-demand access through the Kaltura video cloud platform.

Instructor-Friendly AV User Interface

Each AV-enabled learning space is equipped with an Extron TLP Pro 725T Touchpanel and an IPCP Pro 250 xi, 350 xi, or 550 xi Control Processor. The touchpanel graphical interface guides users through the lesson streaming and recording process. Users can select sources, turn livestreaming on or off, and pause recording. Recordings automatically upload to Kaltura when STOP is pressed.

State-of-the-Art AV Switching, Streaming, Control

In every AV equipped learning space, a single user command powers all AV system components on or off under control of IPL T PCS4 Power Management units. In standard classrooms, Extron IN1608 xi MA 70 Presentation Switchers send selected AV content from document cameras, laptops, and Miracast™ BYOD screen mirroring receivers to the rooms' projectors and FF 220T ceiling speakers. The AV content is also provided to SMP 351s for recording and live streaming. The switcher drives the room speakers with a built-in power amplifier. SW4 USB Plus USB Switchers route USB signals to the instructor PC from laptops, keyboards, mice, and handheld lecture clickers.
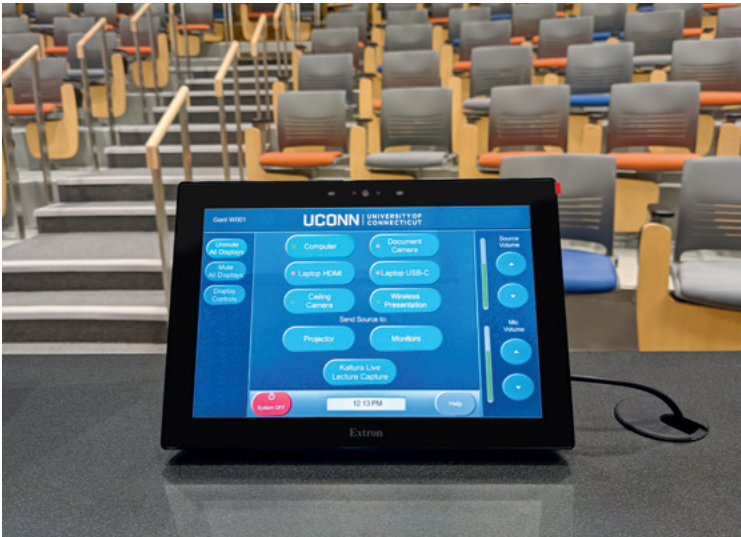
Click on the photo for a video demonstration of UConn's AV user interface.

In larger learning spaces, switching and distribution is handled by DTP Crosspoint 108 4K Matrix Switchers coupled with Distribution Amplifiers and DTP Transmitters and Receivers. DMP 128 Plus ProDSP™ Digital Matrix Processors select and mix microphone and program audio and tailor the sound for room acoustics. XPA U 2002 SB and XPA 4002 Amplifiers drive the speakers.

Remote Monitoring, Control, User Assistance with GlobalViewer Enterprise

UConn deployed Extron's GlobalViewer® Enterprise software to centrally manage, monitor, control, and troubleshoot the AV systems. Using the software's web browser interface, the UConn Campus Technology team is able to provide real-time help desk support to users. GlobalViewer Enterprise also helps UConn manage the lifecycle cost of their AV investment by automatically scheduling startup and shutdown of all rooms on customized schedules, saving time, energy, and expendables such as projector bulbs across the entire campus.

Gant Science Complex lecture hall has a ceiling projector and two flat panel displays. Inset shows the teaching station.

Results

In a typical week, the SMP 351 supports education content recording and livestreaming for 150 class sessions. SMP 351s broadcast to dedicated Kaltura webpages that are listed online for students to access on-demand. This capability allowed UConn to continue to provide quality education throughout the pandemic. The user-friendly AV systems developed by UConn's Campus Technology Services team eased the transition to this style of teaching and learning. UConn AV team member Jeffrey Albright, Audio Visual Technician 3, is the principal designer and coder behind the interactive GUI that makes operation so intuitive. Explaining his team's service philosophy and their experience with Extron, he says, "We strive for simplicity, standardization, and reliability. We want our rooms to work every time a professor walks in to teach a class. That's one of the reasons that we use Extron for switching, distribution, and control. We select AV suppliers based on product durability, functionality, and responsive technical support. Extron has always been awesome at all three."

The left side of the Gant lecture hall teaching station houses AV sources, switching, distribution, streaming, and control equipment as well as a digital matrix processor for mixing and processing audio. The right side contains wireless mic receivers and audio amplifiers.