



Crestron DigitalMedia™ Brings High-Definition Video to Multimedia Performing Arts Theater

Background

Located in Lethbridge, Alberta, Chinook High School is the first public high school to open in the city in 50 years, building on the community's core values of strong academic focus, a wide range of career and technology studies, performing arts programs and a competitive sports program.

Its new state-of-the-art theatre facilitates learning and instruction in Fine Arts, which include choir and instrumental music, art, drama and dance. The facility is also available for general use by the school for academic and community programs.

To deliver a superior high-definition digital audio/video experience for the students, the theatre includes a high-end multimedia centre with the latest Crestron DigitalMedia™ technology at its core.

"Fine Arts instructors are devoted to facilitating the development of artistic skills in each student," said John

Percevault, Director of Technology for the Lethbridge School District #51. "The inclusion of multimedia technology in the classroom helps students grow as performers on a professional stage with professional equipment."

The Challenge

The multi-purpose multimedia performing arts theatre relied on high-definition audio and video (surround sound 5.1 and 6.1) and multiple HDMI® input signals to multiple HDMI out devices, including five high performance data projectors and 1080p LCDs.

The district wanted to seamlessly distribute high-definition audio and video from all types of sources to a variety of displays. Multiple HDMI inputs at 1080p is the mandatory requirement over large distances within a high school in Canada, so the school needed a solution that would meet those requirements.

"We needed a system that fulfilled the school's technology requirements, while also meeting the student's learning needs," said Neil Sheets, Technology Support Specialist at Lethbridge School District #51.

The Solution

After assessing competitive matrix switching solutions, Lethbridge School district selected Crestron DigitalMedia to handle HDMI matrix switching since it enables HDMI signals to be transmitted up to 100 meters over standard CAT5e and up to 300 meters using CresFiber®.

“We wanted a true digital high-definition system and Crestron was the only company that had a HDMI video switching matrix ready to go when we were,” noted Percevault.

Percevault considered many factors when it came to selecting the best digital AV network infrastructure, including distance limitations, an intuitive user interface, and the dual purpose matrix. Crestron has a full set of tools for transmitting HD audio, video and control signals using fiber, so distance was not an obstacle. DigitalMedia is more than just HDMI over CAT5e. The system is flexible enough to control equipment from a variety of vendors using a combination of Ethernet, RS-232, MIDI and low voltage relays.

Control is handled through simple, intuitive touch screens. Crestron touch screens allow control of the media centre systems for a range of uses including video conferencing, lectures, video presentation, and movies, while still allowing staff and students to explore the advanced production capabilities of the facility.

In addition, the multipurpose matrix of DigitalMedia allows the system to be a distribution hub for an in-school digital signage system.

Systems at a Glance

The DigitalMedia 16X16 switcher provides the foundation for delivering an advanced, true high-definition multi-room

AV signal routing solution that’s extremely flexible and installer-friendly.

The switcher affords quick switching and pure, lossless distribution of HDMI® and other signals to support the latest Blu-ray Disc® players, HDTV receivers, digital media servers, computers, and all other audio/video devices. Integrated Ethernet networking and USB-HID distribution provide a complete connectivity solution.

“ The new media centre is a significant educational asset that we can be proud of for many years.”

John Percevault, Director of Technology, Lethbridge School District

Easy-to-use touch screens enable seamless control of HD content for lectures, videoconferencing, video presentations, movies, school broadcasts and performing arts programs. When an instructor enters the media centre, he/she can choose the desired functions from the stage wall-mount touch screen or the control booth tabletop touch screen. The system includes an “I’m done” selection on the touch screen to make it easy for students and faculty to shut down the system.

Benefits

The Crestron solution enhances the educational experience for teachers and students as well as school visitors. “The audience is very impressed with the high quality audio and video within the media centre,” said Sheets.

Crestron was the only company with a digital solution available to meet both the school’s technical and educational needs, seamlessly delivering HDMI content everywhere it was needed.

Click here to watch the demo

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