AV for Education
Instructional AV Technology Solutions from Atlona
We are pleased to introduce the Atlona Education Program (AEP). The AEP is dedicated to serving qualified college, university, and K-12 institutions with AV technology needs for instruction and collaboration. This special offering will provide preferred pricing, dedicated support and free training. Our goal is to make it easy to acquire, implement, manage and maintain the AV technology solutions essential for your success.

As a member of the Atlona Education Program exclusive benefits and offers are available:

- Preferred pricing for AEP members
- Free design and engineering support
- Opportunity to earn reward points redeemable for products, services, and training
- Free and instant access to the Atlona Academy training portal
- A dedicated toll free telephone number and email address
- Equipment upgrade and manufacturer trade in promotions

**What Others are Saying...**

“The technical support representative was quick to respond, helpful, and knowledgeable about the product. We were asked to offer any suggestions or ideas to make the products better, which was great to hear. After mentioning this during our departmental discussion, someone said, ‘Now this is the kind of company we want to do business with.’”

— Kevin Martus, Riverside Unified School District

“This was one of my best experiences with technical support. In about 5 minutes everything was working without any issues.”

— Igor Jakab, University of Alberta

For dedicated AEP support, design assistance or program information please contact:

+1.866.ATLONA.8
(+1.866.285.6628)
edu@atlona.com
www.atlona.com/education
Why Atlona

Atlona prides itself on being an agile company that develops innovative and reliable products to solve the challenges facing today’s AV industry. Equally important is our customer commitment to be easy to do business with and provide you with the industry’s best backend support program. The Atlona Advantage gives you the highest level of customer support, training and protection in the industry.

Atlona’s Award-Winning 10-year Warranty

Atlona is proud to be recognized by the readers of Systems Contractor News with The 2015 Platinum and 2015 Gold SCN Stellar Service Award for Best Warranty Program

- Quality is not negotiable, we guarantee that our products will work as they were designed
- Atlona warrants its products are free from defects in materials and workmanship
- 10-year warranty begins on date of purchase by the end-purchaser

Next Day Advance Replacement

Atlona offers free next-day shipment for a replacement unit, plus convenient return label.

- Next day-replacement guarantee is valid for one year after the original date of purchase
- For products older than one year, Atlona offers free ground shipping of the replacement product

Multi-Level Training, Support and Certification

Atlona Academy: Three levels of certification for the ultimate in technology and systems training.

- Earn 7 InfoComm CTS RUs and 3 CEDIA CEUs in our industry accredited courses
- Training is available in multiple languages
- Training can be tailored to your needs in topics covering sales, products, and system design

Buyer Protection: 30-Day Customer Satisfaction

Atlona protects your investment:

- If you are not satisfied with your Atlona product, it can be returned within 30 days for a full refund.
Case Study

Like most institutions of higher education, Boston University updates its technology infrastructure every few years to ensure it offers students and faculty the very latest tools to aid them in the education process. Starting in the summer of 2015, the institution turned its attention to its highly-regarded College of Communication, where it decided to conduct an overhaul of the AV systems in two rooms serving advanced Journalism and narrative post-production workshop labs, as well as a lecture hall and a classroom.

While optimizing system performance was its priority, the university always needed to ensure its choice of gear and installation process fit into its budgetary constraints. Several years ago as a cost-saving measure, Boston University’s College of Communication decided to manage the maintenance of its campus-wide AV needs internally without the assistance of outside integrators. Its AV upgrade projects were handled by the college’s Technical Operations Manager and Chief Engineer, Jake Kassen, and his supervisor, Technology Director Brad Fernandes.

“We were not very familiar with Atlona, but we were impressed with the company’s ability to offer the most features at the best price,” said Kassen. “We started out using their gear on a trial basis. As we proceeded through the projects, Atlona gear quickly became our go-to choice.”

**Matrixed 4K/UHD in the Video Production Lab**

The first project Kassen and his team tackled was the AV system upgrade of the Ezratti UHD lab (room 301A), which was completed with 13 Mac computer stations and two 70” Sharp 4K video screens fed by several sources, including Panasonic Blu-ray players. The Atlona AT-UHD-CLSO-824 4K/UHD 8x2 matrix switcher was selected for this room, as it offered

![BOSTON UNIVERSITY](image_url)
a mix of inputs, and the ability to support remote sources throughout the room. One immediate benefit of the new system is that it enhanced the students’ ability to view content being edited with professional software via a projector, while simultaneously viewing edited content on a separate display.

During the first stage of the installation project, it was also revealed that the new LED/laser projectors purchased to replace older lamp-based projectors had HDBaseT inputs, which were compatible with each of the new Atlona switchers. This enabled Kassen to save money and installation time without the need for HDBaseT receivers, as well as to keep select legacy gear in the mix without requiring separate cabling to carry RS-232 signals to the projectors.

It was also early in this project that Kassen found that the Atlona switchers enabled him to replace multiple outdated AV components with a single component. For instance, the AT-UHD-CLSO-824’s dedicated audio mix-matrix for signals routed to the switcher’s outputs enables audio signals to be mixed from either of the two selected video sources along with both mic/line input signals. This eliminated the need for an external mixer, which saved money, space and installation time. In Kassen’s view, the piece also proved considerably less expensive, more capable, physically smaller and more reliable than the competitive switcher it replaced.

Flexible Switching for HDMI and Legacy Sources

For the next space upgrade, a seminar room the Atlona AT-UHD-CLSO-601 six-input switcher was chosen to support the single Panasonic LED projector configuration that needed to be connected to an assortment of video sources.

This featured flexible multi-format switching of four HDMI and two multifunction analog inputs to mirrored HDBaseT and HDMI outputs with built-in 4K scaling. This provided the flexibility for it to be integrated with both new and legacy sources.

The AT-UHD-CLSO-601 enhanced the system’s ease-of-use with intuitive, turnkey features including automatic display control, which turns on the display automatically whenever instructors and students connect a source, and automatic input selection, which senses the presence of any video signal. This eliminates the need for a separate control system, reducing cost and complexity.

During the summer of 2016, Kassen’s team upgraded the college’s largest lecture room with a new Panasonic projector with an HDBaseT input and AV distribution components from a number of manufacturers. All are connected via Atlona’s AT-HDVS-150-TX 3x1 switcher and HDBaseT extender, which is powered by an Atlona AT-PS-POE midspan power injector. Ideal for long distance transmission and display control in this educational setting, this model offered the versatility of two HDMI inputs plus a VGA input with audio. This switcher also enabled multiple older components to be replaced by a single new component, as it combines the benefits of a switcher, with built-in auto-switching, and the advantages of long-distance HDBaseT signal extension. Like the other two Atlona switchers used in this project, it enables auto display on/off and auto-switching. Its installation with cost-effective and easy-to-terminate category cable provided additional cost and time saving benefits.

“The Atlona gear has been rock solid,” said Kassen. “We have been very happy with the level of company support from the time we ordered the gear through its installation.”
Challenge

A university is looking to invest in AV technology with the unrestricted flexibility and capacity to share content campus-wide for a wide variety of potential needs. For example, a live event being broadcast at the sports facility could be distributed to the performing arts center for providing overflow, while AV content anywhere can be centrally monitored at the helpdesk in the administrative building.

Solution

Atlona OmniStream offers an ideal integration solution that addresses the requirement for absolute AV system flexibility by distributing signals over Gigabit Ethernet. OmniStream encoders and decoders between facilities and buildings can be connected into the campus-wide network infrastructure. This enables a “virtual matrix” — a highly versatile AV distribution system that allows AV endpoints, anywhere on campus to be interconnected wherever sources and displays are needed.

Application Diagram and Specifications

<table>
<thead>
<tr>
<th>Model</th>
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<tbody>
<tr>
<td>AT-OMNI-112</td>
<td>OmniStream Dual-Channel Networked AV Encoder</td>
<td>2 - HDMI</td>
<td>2 - IP</td>
<td>Networked AV encoder for two HDMI sources up to 4K/UHD, plus embedded audio and RS-232. SMPTE VC-2 visually lossless video compression with sub-frame latency.</td>
</tr>
<tr>
<td>AT-OMNI-122</td>
<td>OmniStream Dual-Channel Networked AV Decoder</td>
<td>2 - IP</td>
<td>2 - HDMI</td>
<td>Networked AV decoder for two AV streams up to 4K/UHD, plus embedded audio and RS-232. Features two HDMI outputs, 4K/UHD 4:4:4 scaling for each output, downmixing, audio embedding and de-embedding, and more.</td>
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</table>
Lecture Hall

Challenge
Lecture halls today need much more than a computer and a projection screen. They require the flexibility to deliver content on multiple screens, and allow instruction from various locations to suit a variety of teaching styles. AV systems must work with remote learning systems, accommodate newer 4K as well as legacy AV sources, and allow integration for audio equipment including microphones.

Solution
The AT-UHD-CLSO-824 8x2 matrix switcher provides two outputs, each mirrored to HDBaseT™ and HDMI for connecting to two displays, a confidence monitor, and an AV over IP system. Three HDBaseT inputs allow presentations from locations away from the equipment rack, while the HDMI inputs can be used for resident AV sources. The AT-UHD-CLSO-824 offers advanced audio processing that includes matrix mixing and EQ.

Application Diagram and Specifications
Collaboration Space

Challenge
Soft codecs such as Skype® and GoToMeeting® allow cost-effective videoconferencing for collaborative teaching spaces, allowing university researchers and student / faculty teams to work with remote participants. Delivering a quality video and audio experience from a PC is challenging, whether relying on the built-in camera and mic of a laptop, or trying to string together long USB cable connections.

Solution
The Atlona AT-UHD-HDVS-300-KIT is an extender for both AV and USB. With USB hubs at the transmitter and receiver, you can place a high quality USB webcam at the screen, a USB conferencing mic at the table, and even connect to an interactive touch display. HDMI, DisplayPort, and VGA interfaces easily allow connectivity to PCs, while automatic switching and display control make user operation effortless.

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<tr>
<td>AT-UHD-HDVS-300-KIT</td>
<td>Soft Codec Conferencing System</td>
<td>3 - HDMI&lt;br&gt;1 - VGA / 3.5 mm audio&lt;br&gt;1 - DisplayPort</td>
<td>1 - HDMI</td>
<td>Connect USB mics, webcams, HDMI, and analog sources to a laptop or PC for Skype®, WebEx®, and GoToMeeting® web-based conferencing. All AV, data, control, USB, and Ethernet transmission between the transmitter / receiver pair is carried over a single, Ethernet-enabled HDBaseT™ link up to 330 feet (100 meters).</td>
</tr>
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</table>
Challenge
Small meeting spaces in student unions and department offices need AV systems as do classrooms. These areas benefit greatly from the ability to share content on a screen. Student and faculty meetings are typically ad hoc, so little time is available for fiddling with AV gear and settings. In many rooms, budget constraints do not allow for a control system.

Solution
The Atlona HDVS-200 system delivers all essential AV functions with an auto-switcher, HDBaseT extender, scaler, and controller. The compact transmitter mounts discreetly under the meeting table and accommodates three laptops, while the receiver can be concealed near the display. Advanced Automatic System Control simplifies AV operation by automatically switching to a new input, powering on the display, and dropping the screen whenever a source is connected.

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<tr>
<td>AT-HDVS-200-TX</td>
<td>4K/UHD Two or Three Input Switcher / Transmitter</td>
<td>1 or 2 - HDMI 1 - VGA / 3.5 mm audio</td>
<td>1 - HDBaseT</td>
<td>Input from PCs with VGA or HDMI output. PoE-powered by receiver over distances up to 330 feet (100 m). Auto-switching between inputs. Ethernet connections for control and management. CEC, IP, and RS-232 display control. Wall plate only has one HDMI input.</td>
</tr>
<tr>
<td>AT-HDVS-200-TX-WP</td>
<td>Scaler / Receiver</td>
<td>1 - HDBaseT</td>
<td>2 - Balanced audio</td>
<td>HDMI extension up to 330 feet (100 m) @ 1080p. Built-in scaler to match source signal to the display’s native resolution. LAN port extends Ethernet for control and management. CEC, IP, and RS-232 display control, plus contact closure control. Delivers PoE to eliminate local AC outlet at transmitter.</td>
</tr>
<tr>
<td>AT-PA100-G2</td>
<td>Audio Amplifier</td>
<td>1 - RCA L/R 1 - 3.5 mm L/R 1 - Mic</td>
<td>1 - Stereo speaker 1 - 3.5 mm loop</td>
<td>Small, energy efficient, stereo / mono amplifier. Provides 2 x 20 W stereo or dual mono, 1x 40 W bridged. Features two stereo line level inputs, one mic input with 48 volt phantom power, ducking, and RS-232 control.</td>
</tr>
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Many classrooms have presentation locations for an instructor at a lectern and students from a lab table. The AV system needs to support AV source connectivity at these locations, centralized switching to one or two displays, and also be easy to operate, but without the expense of a large switcher or complex system control.

Combine the flexibility of the Atlona HDVS-200 Series HDBaseT transmitters and the AT-UHD-SW-5000ED HDBaseT / HDMI switcher, and you have a fully equipped classroom AV system. With Advanced Automatic System Control, the system detects and switches to a newly connected laptop, and can automatically power a display on or off. An AT-ANC-108D button control panel at the lectern gives the instructor complete AV presentation control.

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<tr>
<td>AT-UHD-SW-5000ED</td>
<td>4K/UHD Five-Input HDMI and HDBaseT Switcher</td>
<td>2 - HDBaseT 3 - HDMI</td>
<td>1 - HDBaseT 1 - HDMI 2 - Balanced audio</td>
<td>Five-input switcher with Ethernet-enabled HDBaseT inputs plus PoE for remote sources. Features Advanced Automatic System Control. HDMI plus mirrored HDBaseT output to extend AV signals, control, Ethernet, and power up to 330 feet (100 m).</td>
</tr>
<tr>
<td>AT-HDVS-200-TX</td>
<td>4K/UHD Two or Three Input Switcher / Transmitter</td>
<td>1 or 2 - HDMI 1 - VGA / 3.5 mm audio</td>
<td>1 - HDBaseT</td>
<td>Input from PCs with VGA or HDMI output. PoE-powered by switcher over distances up to 330 feet (100 m). Auto-switching between inputs. Ethernet connections for control and management. CEC, IP, and RS-232 display control. Wall plate only has one HDMI input.</td>
</tr>
<tr>
<td>AT-ANC-108D</td>
<td>8-Button Network Control Panel</td>
<td>N/A</td>
<td>N/A</td>
<td>Eight-button network control panel for Atlona IP-based single output channel switchers. Designed for easy configuration using the Atlona Management System (AMS). PoE-powered with optional external power supply available.</td>
</tr>
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</table>
The Atlona Management System (AMS) is **free, powerful software for configuring and managing** Atlona IP-controllable devices over a network. For educational institutions, AMS greatly simplifies and **streamlines AV installation** from a single user portal that lets you discover, set up, and commission Atlona products across several classrooms, floors, buildings, and even throughout a campus.

With AMS, you’ll save valuable time servicing and administering your AV operations while ensuring prompt, professional assistance to instructors and students who rely on AV systems on a daily basis for their educational needs.

- **Automatic Network Device Discovery** – Use AMS to scan the network, detect newly connected Atlona devices, and add them to your system configuration.
- **Multi-Device Configuration and Management** – Save installation time by creating and then duplicating a device configuration across identical Atlona products.
- **Web Browser Access** – AMS server software runs on a standard PC. AMS can be simply accessed through a standard web browser over a LAN or WAN to the server PC.
- **Device Control and Management** – An individual device can be configured, controlled, and monitored, with the same capabilities available through the device’s web interface.
- **Manage and Automate Firmware Updates** – Streamline device updating by using AMS to schedule new firmware to multiple products at once.
- **Alerts and Event Logging** – Device status and activity are continually monitored and logged by AMS. Fault detection alerts are immediately issued through the AMS web GUI.

For more information about the Atlona Management System, please visit www.atlona.com/ams.