

## Informational Video Wall

Schools, colleges, and universities have vast amounts of information to communicate to students, even outside the classroom. This includes class schedules, campus events, safety procedures, menus, weather, emergency announcements, and more. Visitors can also benefit from school promotional videos, campus maps, and special event information. Video walls are a great way to provide this information in a centralized, visually stimulating manner.

### Needs Assessment

- Purpose** Create a centralized video wall for disseminating dynamic information to students, staff, and visitors.
- Display** Nine flat panel displays of the appropriate size to fill the desired area when arranged in a 3x3 format. Select a video wall mounting system that supports micro-adjustability for precise alignment.
- Sources** PCs, media players, and cable / satellite receivers, as well as logo / text overlay and images stored in endpoint devices.
- Audio** Program audio from the primary zone will be distributed to the area around the video wall.
- Control** Provide intuitive access for turning displays on and off and adjusting audio level, as well as presets and user-definable placement of video wall content.
- Cable** Select the appropriate Category cabling system for Ethernet data.



a mix of computers, set-top boxes, and media players allowing a wide array of content to be available for display on the video wall. This includes campus promotional videos, social media feeds, news, weather, sports, performances, event schedules, cafeteria menus, and more.

### AV Routing

Atlona **OmniStream™** is a flexible, scalable, and cost-effective AV over IP distribution platform that is ideal for video wall deployments.

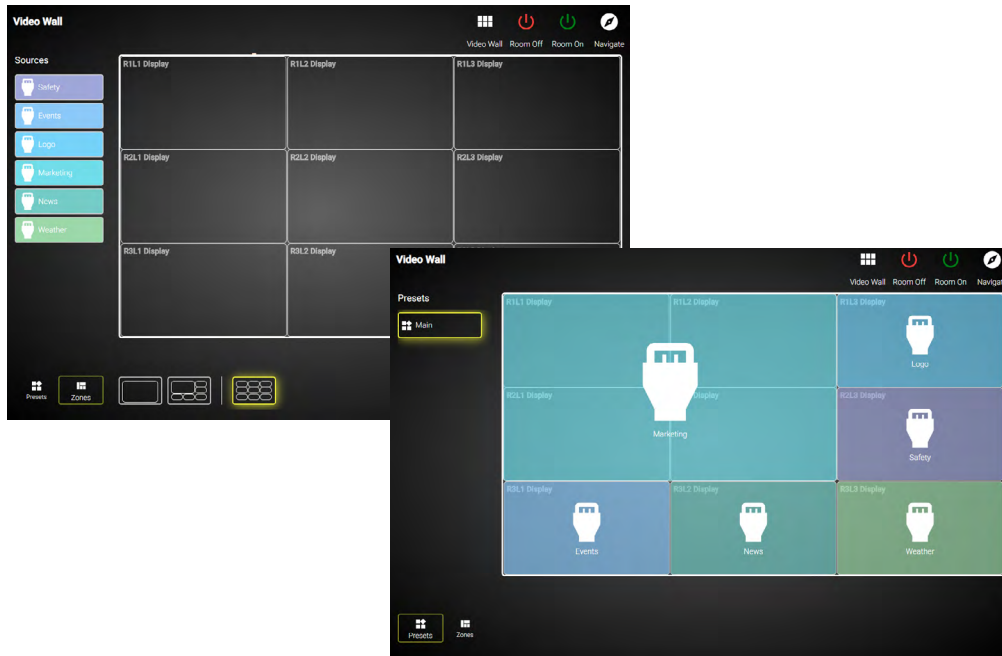
Three **AT-OMNI-112** dual-channel networked AV encoders handle encoding of six HDMI sources at resolutions up to 4K/UHD HDR onto a Gigabit Ethernet infrastructure. Sources connected to the encoders are

Nine **AT-OMNI-121** single-channel networked AV decoders handle decoding of network streams and image processing, as well as provide AV content up to 4K/UHD HDR and control signals to their assigned displays in the 3x3 video wall.

OmniStream endpoints support logo and scrolling text overlay as well as display of stored images. This allows content such as logos, contact details, or other general information to be shown when an active stream is not required.

# Control

The Atlona **AT-VGW-HW-3 Velocity™** hardware gateway acts as the central control processor for the system. Over network connections, the gateway handles routing for the encoders and decoders, as well as display power and audio level controls. The Atlona **AT-VTP-800** touch panel provides intuitive user access to video wall controls. A single button on the panel starts the system by turning all the displays on, as well as initiating the default preset for source routing and video wall layout. Several preset layouts can be created, and easily selected at the push of a button on the touch panel, or via a web browser or BYOD device. Velocity also supports a drag-and-drop mode where any source can be dropped on any single, or combination, of displays in the wall. A dedicated button powers down the video wall system and displays.



*Sample Velocity touch panel user interfaces for drag-and-drop and preset video wall control*

# Audio

One OMNI-121 will be selected as the audio output for the video wall. Audio associated with the content routed to this decoder will go to the Atlona **AT-GAIN-60** amplifier, which supplies 60 watts of power to ceiling speakers located in the area above the video wall.

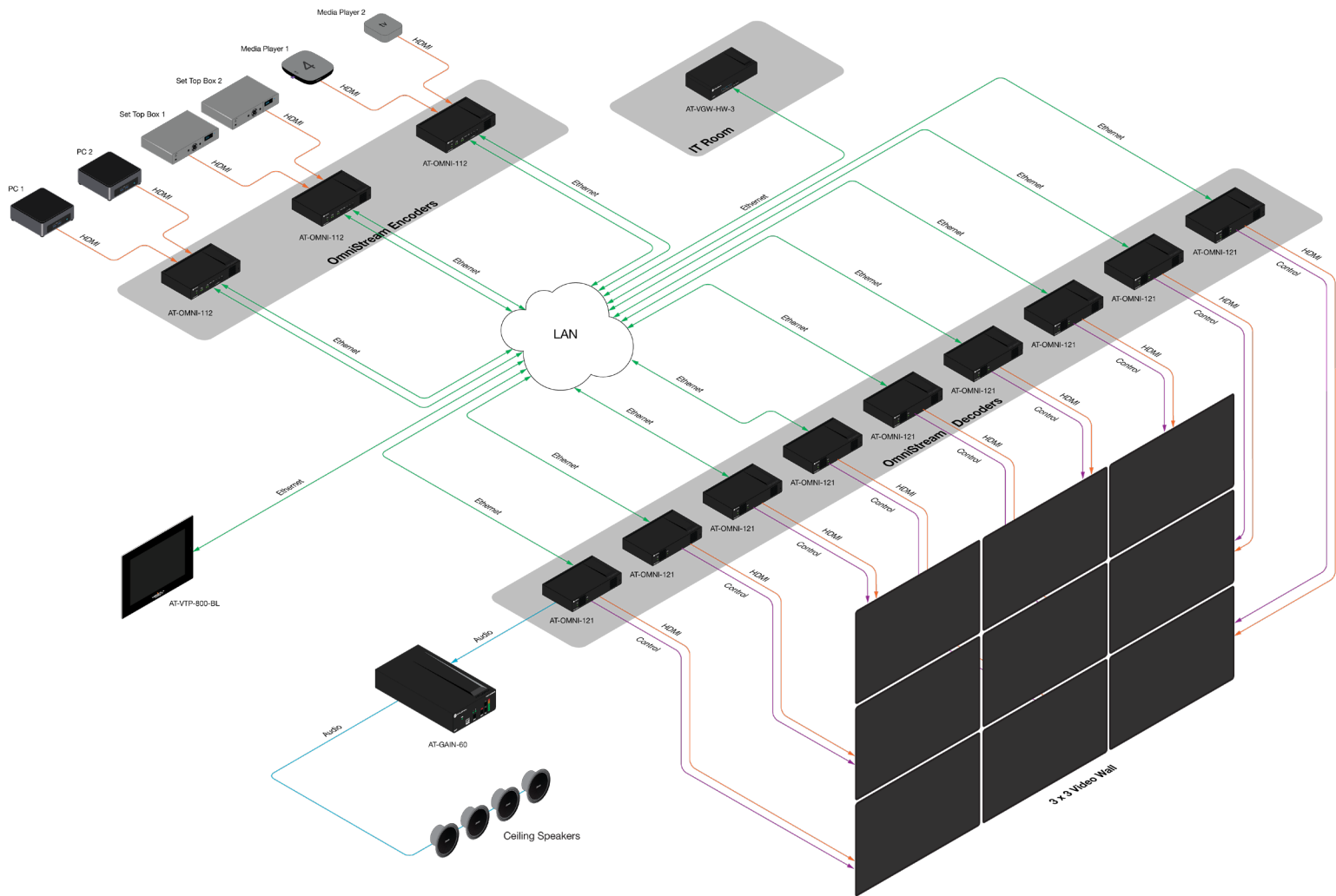
# Cabling and Connectivity

Panduit unshielded Category 6A cabling provides the highest performance and optimal reliability for delivery of LAN data to connected AV equipment.

# Resources

AV over IP solutions such as OmniStream have special requirements when it comes to IT infrastructure and network switching. Refer to the following documents from the Atlona.com website for additional information:

- [OmniStream IT Deployment Guide](#)
- [OmniStream Certified Network Switches](#)



## Informational Video Wall Bill of Materials

QTY	Description	SKU
3	Atlona OmniStream Dual-Channel Networked AV Encoder	AT-OMNI-112
9	Atlona OmniStream Single-Channel Networked AV Decoder	AT-OMNI-121
1	Atlona Velocity System Hardware Gateway	AT-VGW-HW-3
1	Atlona Velocity System 8" Touch Panel	AT-VTP-800-BL
1	Atlona Power Amplifier – 60 Watts	AT-GAIN-60
	Panduit Vari-MaTriX HD Category 6A Copper Cable	PUP6AHD04BU-G
	Panduit Category 6A RJ45 UTP Jack Module	CJ6X88TGBU
	Panduit Category 6A UTP Field Term RJ45 Plug	FP6X88MTG
	Panduit Category 6A 28 AWG UTP Patch Cord	UTP28X7BU
	Sources, displays, speakers, and miscellaneous cabling	Furnished by others



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