

Control Room SOLUTIONS

Control Wall SOLUTIONS

Real-Time AWARENESS & Improved DECISION-MAKING

- HTS can provide you a video wall solution where your team can visualize and control SCADA systems, monitoring tools, and more on a seamless multi-HD display.
- Unites data from multiple sources on an interactive dashboard, providing a complete, real-time view of operational performance.
- Helps operators quickly access the information they need in order to make informed decisions

Benefits of a CONTROL WALL

Boost Situational Awareness

- A HTS video wall system integrates with your existing infrastructure, so you can display your SCADA system, maps, monitoring tools, TV, and more and control them in real-time on your video wall.
- This multi-tool visualization system helps operators monitor more thoroughly and detect issues faster.

Provides User-Friendly Control

- Our video wall software provides an intuitive interface for controlling content on the displays.
- Its user-friendly tools help operators work quickly and accurately, even under stressful conditions.
- A simple touch interface can be added for streamlined control of the system.

Benefits of a CONTROL WALL

Delivers 24/7 Reliability

- Video wall systems deliver 24/7 reliability and extreme resilience.
- LCD video walls feature redundant power supplies in every display, and select controllers offer redundant, hot-swappable power supplies.

Enables swift, accurate decision-making

- When an event occurs, our system provides operators with real-time information and dynamic control, helping them make decisions swiftly and accurately.
- Operators can instantly zoom in on areas of interest, pull in additional tools and data, and work collaboratively on the video wall.

Benefits of a CONTROL WALL

- Offers multiple content control options
 - With our system, you can choose the content control method that works best for your team.
 - Operators can arrange items on the video wall in real-time or simply load pre-arranged layouts of video and data sources.
 - Content layouts can even be scheduled in an automatic rotation.



Video Wall BASICS



- A video wall is a group of screens tiled together to create a single, large display surface.
- While the display is certainly the most visible part of a video wall system, it's actually just only one piece of a complex solution.
 - Have you ever wondered about the technology behind a video wall?
 - How do those individual screens communicate to act as a single display surface?
 - How do you control what appears on the displays?
 - How do you get your content onto the displays to begin with?
- Three main components of a video wall are the display, controller, and software

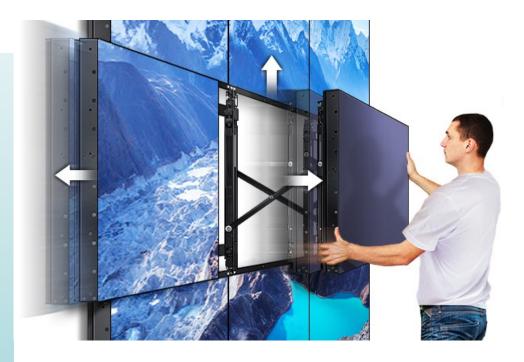
LCD Video Wall **DISPLAY**

- High-performance LCD Video Walls
 - Key Benefits include
 - Ultra-narrow bezels
 - LCD displays feature a thin-profile design and a screen-toscreen bezel width of as little as 3.5mm. This design minimizes the appearance of "seams" on the video wall, creating an immersive visual experience.
 - Superior brightness
 - Displays deliver high contrast ratios and brightness of up to 800 nits, making them an excellent solution for environments with significant ambient light. Brightness levels can be adjusted quickly and easily as needed.
 - IPS LCD with active backlighting
 - Displays feature IPS LCD, a display technology that delivers superior color reproduction and wider viewing angles than traditional TFT LCD. Images appear vibrant, colors are rich and nuanced, and content is clearly visible on your displays – even to viewers located at distances or extreme angles.



LCD Video Wall **DISPLAY**

- High-performance LCD Video Walls continued
 - Key Benefits include
 - 24/7 reliability
 - Our video walls are designed for use in 24/7 control rooms and other critical environments that demand continuous operation.
 - Range of Mounting Options
 - HTS video walls are engineered for easy serviceability.
 Our front-access push/pull mounting system allows any
 display to be pulled away from the video wall without
 affecting adjacent displays.
 - Active Backlighting System
 - Displays are built with active backlighting technology, which prompts the LED backlight to adjust automatically to content displayed on the screen. This system produces a larger color spectrum and higher contrast ratios for a superior viewing experience.

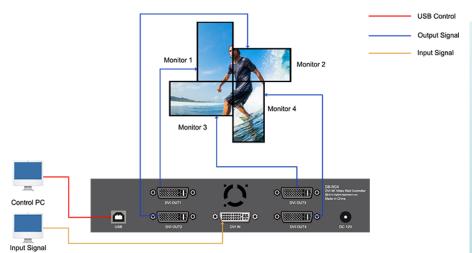


LCD Video Wall **DISPLAY**

- High-performance LCD Video Walls continued
 - Key Benefits include
 - Native Cat6 Video Inputs
 - LCD display features three native Cat6 video inputs. Our Cat6 inputs enable HD video transmission up to 70 meters using shielded, twisted-pair network cabling.
 - Anti-Reflective Glass
 - LCDs feature anti-reflective glass, which diminishes reflections and increases the brightness of the displays. We also offer an anti-glare option for applications where the video wall will be primarily viewed on-camera.
 - Optional Product Features
 - Redundant Power Supplies in Every Display
 - Native fiber optic video inputs
 - Interactive Touch



Video Wall CONTROLLER



- The video wall controller connects your content sources to the displays. It lets you control what content is shown on the displays, when and where it appears, and how it looks.
 - Using IP streaming or physical inputs, the controller captures content from all of your desired sources – like video cameras, computer workstations, and cable boxes – making the content visible and accessible on a single interface.
 - Based on the commands you make through the control software, the controller sends content to the displays and lets you arrange, scale, and adjust the content in real-time. Some controllers also let you build and save content arrangements offline before displaying them.
 - The controller allows all of the individual displays in your video wall to work together as a single canvas. This means that content can be placed on a single display, stretched across multiple displays, or dragged across the display surface.

Video Wall **SOFTWARE**

- Video wall software that pairs with the chosen controller provides an interface for controlling your displays, controller, and source content.
 - Most video wall software provides a "dashboard" of the system, including a real-time view of the displays and a list of your available content sources.
 - At its most basic level, video wall software allows you to select content sources and place them on your displays in real-time. Most programs also include tools for adjusting the appearance of content – including scaling, zooming, and cropping tools, brightness and contrast controls, and so on.
 - Some video wall software offers special presentation-building functionality. This may include the option to build and save a sequence of pre-arranged content layouts, which can then be presented manually or automatically on the displays. Select platforms also offer custom labels, graphical transitions, and other tools for enhancing presentations.

Meeting YOUR NEEDS

 We carefully evaluate each customer's activities, environment, and business objectives and develop a solution tailored to their needs.
 Below are some of the many areas we assess when developing systems for utilities.

Display Considerations

- Resolution requirements
- Ambient light in the environment
- Spatial constraints of the environment
- Desire for touch interactivity
- Mounting preference
- LCD or Projection

Controller Considerations

- Type of devices that will be used as content sources
- Quantity of content sources that will be displayed at once
- Number of video walls to be supported

Software Considerations

- Number of users who will be operating the system at once
- Desire for automatic content rotation
- Interest in custom features or integration

Other Considerations

- Desire to integrate audio or other additional systems
- Desire to integrate existing environmental systems
- Aesthetic and branding concerns
- Budget

Partners for YOUR VIDEO WALL

 We carefully evaluate and select partners who can best provide you a quality, reliable solution based on your needs.















Space Planning SOLUTIONS

Space **PLANNING**

- When planning your space, our team considers sight lines, acoustics, human factors, and movement patterns to reduce fatigue and increase safety and functionality.
- Our solutions accommodate health and safety legislation, ADA requirements, and other local and internal demands.
- We can work independently or in collaboration with your architects and designers to develop the optimal layout for your space.

Furniture **SOLUTIONS**

- HTS can furnish your control room with consoles, chairs, conference tables, and custom furniture.
- We source our furniture from industry-leading manufacturers who specialize in control room furnishings.
- All furniture is designed to withstand rigorous 24/7 use and to support operator comfort, vigilance, and productivity over long shifts.
- Whether you choose to sit, stand, or both, we can provide the right option for you.





Lighting **SOLUTIONS**

- HTS can supply and install a variety of lighting systems for your control room.
- Your lighting system will be optimized to reduce eye strain, increase vigilance, and eliminate glare and reflections on your video wall.
- Your lights can also be controlled and automated through the video wall, even integrating them to your system to create an immediate alert for critical areas.

Audio SOLUTIONS

- By having the ability to specifically control and route audio signals, efficiency can be improved.
- High intelligibility is critical to Control Rooms and audio signals can be routed to overhead zoned speakers, or to desktop headphones.











Hardware **SOLUTIONS**

 Howard can streamline your operation with a complete line of servers, desktops, and laptops to suit your control room's needs.



Installation & Integration PROCESS

Step 1: Installation Team Briefing

• Before traveling your site, our installation team will meet with your project manager, engineers, and staging technicians for a thorough briefing on your system. This step ensures that our installers have a full understanding of your system components, use-case, and scheduling requirements.

Step 2: Complete System Installation

• During the installation process, all displays, mounting, controllers, and software are fully assembled at your site and prepared for integration. Our team takes pride in providing a smooth, efficient, and professional installation experience for every customer.

Step 3: AV Integration

• After installation is complete, our technicians integrate all components of your video wall system and any supplemental technology into your existing environment. Our programmers configure any control systems that will be used to automate the video wall or external devices. Finally, we connect your desired content sources so that your system is ready to use. Our technicians have years of experience integrating our systems and are committed to delivering a seamless solution.

Step 4: Detailed Testing Process

• Before closing out your installation, our technicians will perform a full commissioning process. Each component of your video wall system will be carefully inspected and tested to ensure it is properly installed and optimized to fulfill your requirements.