The 7-Tip Guide to Easy Video Wall Designs
Make Building Video Walls Easier. Think Matrox.

Video walls allow tremendous opportunity for your business to tell a compelling narrative. Corporate settings—foyers, business centers, meeting rooms, and event or tradeshow installations—can all benefit from eye-catching video wall installations that showcase your vision and your ideas, up on big screens.

Striking video walls don't have to be complicated or expensive undertakings; from single-card installations to intuitive hands-on customization, Matrox has a range of tailored solutions to fit your needs.

Award-winning C-Series multi-display graphics cards are the driving force behind striking video wall installations.

Industry "sweet spot" is a 3x3 video wall configuration with a C900 card. Roll over the image to view additional configuration options.

What hardware do I need to build a video wall?

Graphics cards are the behind-the-scenes players of video walls, the driving force behind the visual imagery. Hardware selection determines the number of screens your video wall can include; with the award-winning Matrox C-Series™ multi-display video cards, a single graphics board can drive six or nine outputs. The single-slot cards deliver high-density display with low power consumption—an important consideration in a corporate setting where energy consumption is a concern and space requirements are at a premium.

C-Series cards can easily be paired or matched to expand video wall sizes with as many as 18 high-resolution monitors. The board-to-board framelock feature synchronizes the refresh of all the displays, promising pristine image quality for all HD, UHD, or 4K contents. The included Matrox PowerDesk™ desktop management software features a comprehensive set of tools to manipulate extended display identification data (EDID), bezels, and stretched desktop over your multi-monitor installation. Whatever your display needs, C-Series cards ensure the reliability, stability, and ease of deployment expected in demanding environments.

What is the benefit of a stretched desktop for video walls?

With a stretched desktop, the system treats all displays as one large seamless canvas, allowing you to maximize any window or video to fill all of the monitors.

Ideal for running videos on AV presentation systems, in meeting rooms within corporate environments, or tradeshow displays, a stretched display places full focus on a single showpiece content. Video walls are great options for corporate environments seeking a large-scale display to captivate and engage audiences with targeted messaging while avoiding a single large screen. Single screens limit the size and shape of the video wall and offer inadequate pixel density, while multiple monitors provide flexibility and scalability for any installation.

What is the best configuration for my video wall?

Choosing the right configuration should consider the physical space available in the environment and the desired size of the monitors, as well as the typical viewing distance of the installation. One of the most popular video wall set-ups is the 3x3 configuration, an industry "sweet spot" where the aspect ratio of both HD and UHD video contents is preserved. Keeping the focus on your content and message, 3x3 installations benefit from having no bezels in the exact center of the wall.

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MuraControl is a premium performance video wall management software providing an easy and intuitive way to manage your video wall.

With MuraControl, easily manipulate layout designs to include text and image overlays and picture-in-picture, amongst others.

Manage and control local sources and applications with MuraControl software.

Render HTML5 feeds to have real-time updates—such as weather news and social media feed—appear as part of the video wall.

C-Series cards are available with Mini HDMI or Mini DisplayPort connectors; each offering unique advantages in terms of display density and resolution. With the C680 graphics card, you can drive up to six 4K displays with a maximum resolution of 4096x2160 pixels. The C900—the world's first single-slot, nine-output graphics card—lets you power nine monitors, each with a 1920x1200 pixel maximum resolution.

Whatever your needs, C-Series cards offer a range of configuration options, comprising 2 to 18 screens; click here for the full list of video wall possibilities customizable to your setup.

How can I easily control contents on the video wall?

With your video wall in place, next comes management of your desired contents for display. Software paired with the video wall provides the control component of video wall installations.

Matrox MuraControl™ is a premium performance video wall management software providing an easy and intuitive way to manage your video wall locally or remotely. Benefit from user-friendly tools to control inbound and outbound content streams, customize layouts and design, and create, save, export, import, and delete layouts/ presets. MuraControl clients profit from our upgrade and software-support program.

Available as a feature-rich, single-license software for Microsoft® Windows® or as a free, lighter version app for iPad®, it can be used to create and manage layouts offline or in real time. Offline management enables users to design layout specifications that can be saved and accessed at the appropriate time. Complex design schemes may be better suited to offline layout management, whereas real-time access to layouts allows up-to-the-minute changes of content or feeds as circumstances warrant. No matter what the situation demands, Matrox products make managing your video walls a snap.
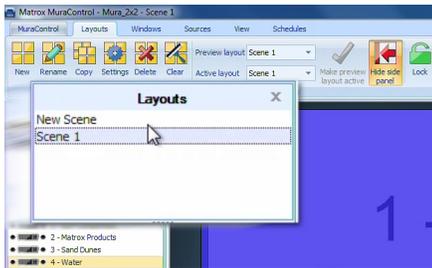
How can I customize my displays?

Pairing C-Series and MuraControl lets you tailor presentations and displays on an optimized hardware/software platform boasting pristine video wall displays.

Use MuraControl to manipulate layout designs for all your display needs. Text and image overlays capture viewers' eyes, while picture-in-picture lets multiple contents display onscreen simultaneously, meaning you can highlight multifaceted aspects of your business. Colour key and blending ensures all visuals are shaded to your exact requirements

Additional control features provide the ability to: Manage and control local sources and applications, including VLC[1], HTML5, PowerPoint[2], images, VNC[3], and webpages[3].

Render HTML5 feeds to have real-time updates display as part of the video wall. Social media feeds, weather updates, and stock charts are easily incorporated as web-based contents that support your vision.

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Schedule switches between predefined layouts/presets to showcase different contents at particular times of the day.

Schedule switches between predefined layouts/presets to showcase different contents at particular times of the day. From targeted advertisements to corporate messaging to revolving digital contents, Matrox understands that digital fluidity is key to a striking video wall display. MuraControl includes a console display feature, which uses a laptop or an add-in card to easily manage the video wall on a separate, dedicated monitor behind the scenes

What options do I have for building video walls that can capture external sources? What about building bigger video walls?

Pairing graphics cards with capture cards expands the capabilities of your video walls. Matrox Mura IPX Series encode and decode video wall controller cards deliver multi-channel 4K capture and hardware-accelerated H.264 IP encoding and decoding capabilities across video walls.

Matrox understands your need for simple set-ups and our complementary range of products provides the means to capture both physical and external IP sources. With Mura IPX cards, you can easily stream all or part of the video wall to remote locations within your corporate environment, and record portions of or the complete video wall for archival purposes. Facilitate collaboration with Mura IPX, featuring easy-to-use connections from IP or camera sources directly into your video wall. The Mura IPX product line is ideal for control rooms, digital signage, AV presentation, and other applications requiring high-density capture, encoding, streaming, recording, decoding, displaying, and control.

Bigger is sometimes better, but no matter the size of video wall, Matrox product lines provide the flexibility to customize the solution you need. Combined with Mura IPX cards, Mura MPX Series products enhances video walls and/or operator workstations with universal capture support, advanced video processing, and networking capabilities on configurations of up to 56 outputs and many more inputs. A video wall improves visibility, within company facilities as well as at events or tradeshows.

This is great! What next?

Visit the Matrox C-Series and Matrox MuraControl product pages to discover more about these hardware and software solutions, or contact us directly to find out how we can help with your next video wall installation.

Learn more about C-Series

Learn more about Matrox MuraControl

Request more Info

1) VLC: Volume and Play/Pause functionality.
2) PowerPoint: Previous/Next slide; Play/Pause slide switching.
3) Mouse and keyboard. Please consult the MuraControl User Guide and the MuraControl Release Notes for more information on application compatibility.

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