



The Ultimate Guide to LED Walls

Everything You Need to Know About LED Walls for Your Next Trade Show, Conference, or Nightclub Event

A Publication of

TST  [®]
TOTAL SHOW TECHNOLOGY

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01

Introduction

Introduction

LED video walls are becoming increasingly popular for creating impactful and dynamic experiences that connect with audiences. They can create a dramatic entrance or backdrop in a wide variety of spaces and applications.

Bright and bold LED walls make an impression and can add a “wow” factor to conference stages and trade show displays. Strategically chosen walls with vibrant content can create a commanding stage in a general session or draw attention from across the trade show floor.

Fortunately, these days LED video walls aren't just for large-scale conferences or elite exhibitors anymore.

In recent years, LED video walls have become practical and cost-effective for smaller-scale shows. It's becoming increasingly common to replace the traditional pipe and drape found at hotel and convention center trade shows with LED video walls. Today, LED video walls can be found at corporate conferences, trade shows, hotel meetings, and nightclub events.

Here, we'll cover everything you need to know about LED video walls, including video wall selection criteria, size, pixel pitch, content, and design. We'll also share LED wall ideas for trade shows and conferences and provide a handy LED wall checklist.

Ready? Let's jump in!

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What Are LED Video Walls?



LED walls are used for stage backdrops, decorative stage elements, trade show exhibits, and nightclub events. They are the brightest, most vibrant option for displaying content, graphics, and video. They can also be used to create a wide variety of display shapes and sizes.

An LED wall is essentially a large screen that displays graphics, slides, videos, information about products or services, or other text and visual content.

Also called a video wall, an LED wall is constructed of small, interconnected LED tiles that, together, display one cohesive image.

Each LED wall tile has a specific number of pixels. The more pixels each tile has, the higher the visual clarity (resolution) of the wall — and the closer someone will be able to stand to the wall while still being able to see the content displayed on the wall clearly.



Big

The size of LED walls alone is a surefire attention grabber.



Bright

LED walls display vibrant images with bold, saturated colors.



Immersive

It's a viewing experience with movie theater energy.

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What to Look for in an LED Wall



First and foremost, decide why you want to use an LED video wall and where you want to use it.

Do you plan to use an LED wall to display images or videos that market your products or services? Do you want to promote sponsors, share key information (such as a conference agenda), or simply draw attention and pique curiosity?

Or maybe you've seen LED walls at conferences and trade shows and you want to try them out at your next show.

Once you've determined your goals, you'll want to make important decisions about what LED wall will best meet your needs.

What to Look For ...

SIZE

LED video walls are bigger than standard projection screens, and they're used to display big, bold images.

CONFIGURATION

An LED wall can be configured in shapes and sizes that can't be achieved with standard projection screens.

VISIBILITY

Because an LED screen emits its own light, it's much brighter and more vibrant than a projector and screen.

Resolution

High-resolution LED walls use arrays of individual light-emitting diodes (LEDs) to display images and video. LEDs are small and can be placed close together, so LED walls can achieve a high resolution.

LED walls can display high-resolution images and videos with a high level of brightness, making them easily visible from a distance.

Brightness in LED walls refers to the amount of light emitted by the individual LEDs. A high-brightness LED wall will have a higher level of luminosity, making the images and videos displayed on it more visible in well-lit or outdoor environments.

Questions to Ask Your AV Production Partner

- Will the LED wall be near other lighting sources?
- Will proximity to other light sources make the LED wall display hard to see?
- Will the brightness of the LED wall be affected by factors like viewing angle, contrast ratio, and color temperature?



Customizability

LED walls can be customized to display different content for different audiences.

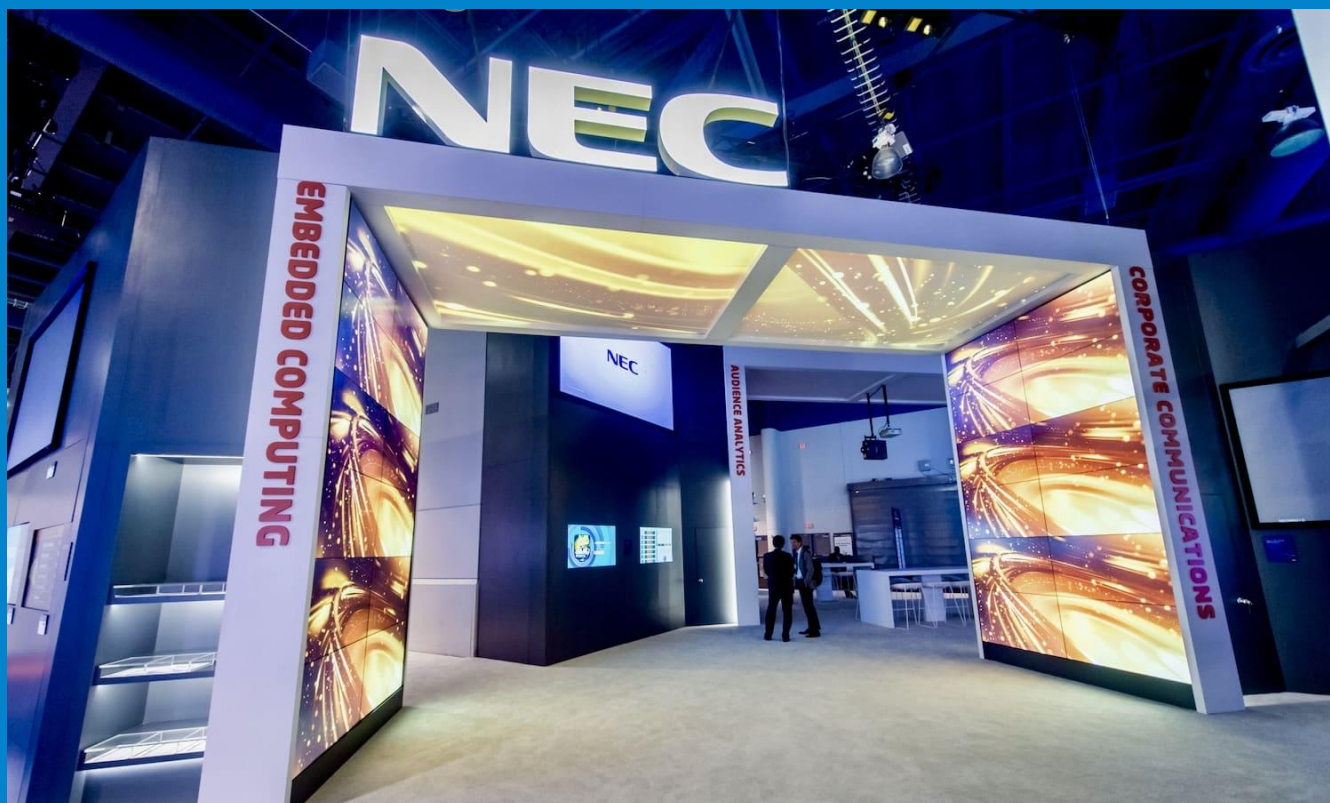
When discussing your LED wall needs with your AV provider, be sure to review the following details:

- **Size and Shape** – LED walls can be configured into a variety of sizes and shapes, allowing them to fit into different spaces.
- **Resolution** – LED wall resolution can be customized to suit different needs. High-resolution LED walls can display very fine details and text, while lower resolution walls may be used to display larger images or videos.
- **Brightness** – Some LED walls can be very bright, making them suitable for outdoor or well-lit environments, while others may be dimmer, making them more suitable for indoor or darker environments.
- **Color** – LED walls can display a wide range of colors, allowing for a dynamic and vivid display.
- **Pixel Pitch** – Pixel pitch is the distance between the centers of two neighboring pixels. Pixel pitch can be as small as 0.6mm for high-resolution displays or as large as 20mm for larger displays with lower resolution.
- **Control System** – LED walls can be controlled by computer software or mobile devices to allow for easy customization and real-time adjustments to be made to the display.

Questions to Ask Your AV Production Partner

- What pixel pitch and resolution do you recommend that we use?
- Should we consider experimenting with different wall shapes and configurations?
- Will we be able to change the content displayed in real time?
- Will you test our content on the LED wall before the show to make sure that the content displays exactly as intended?





Durability

LED walls are built to last. With proper handling, they can withstand the wear and tear of regular use in even the busiest trade show environment. Here are some durability benefits of exhibit LED walls:

- **Rugged Construction** – LED walls are typically made with high-quality materials that are designed to withstand frequent setup, use, and tear down. Rugged construction makes them well-suited for trade show environments, where they may be assembled and disassembled multiple times.
- **Heat Dissipation** – LED walls are designed to dissipate heat effectively, which helps to prevent damage to the LEDs. In fact, heat dissipation makes them more durable in high-temperature environments.
- **Water and Dust Resistance** – Some LED walls are water and dust resistant, which can protect them from damage during transport and make them ideal for outdoor applications.
- **Brightness and Color Consistency** – LED walls have high levels of brightness and color consistency, which helps to maintain image quality even after extensive use.
- **Lightweight, Slim Design** – LED walls are lightweight, and their slim design makes them easy to transport and set up.

LED Walls vs. Projectors and Screens

LED walls offer superior image quality, reliability, and versatility for a wide variety of applications, and they offer several advantages over projectors.

To begin, LED video walls are brighter than typical projection screens, with bolder, saturated colors. LED walls produce brighter and more vibrant images, even in well-lit environments, due to their high brightness capabilities. For instance, if a venue has many windows or lots of natural light, content displayed from a projector onto a screen may be hard to see.

LED walls also have better contrast ratios, resulting in deeper blacks and more vivid colors. [Contrast ratio is a property of a display system, which is defined as the ratio of the luminance of the brightest shade (white) to that of the darkest shade (black) that the system can produce.]

In addition, LED walls are more durable and reliable. They don't need bulb replacements or experience image degradation over time. LED walls have no bezels (the borders between a screen and its frame), even when they're stacked. Seamless, bezel-free displays provide a more immersive viewing experience compared with projectors, which may suffer from image distortion at the edges of the projection.

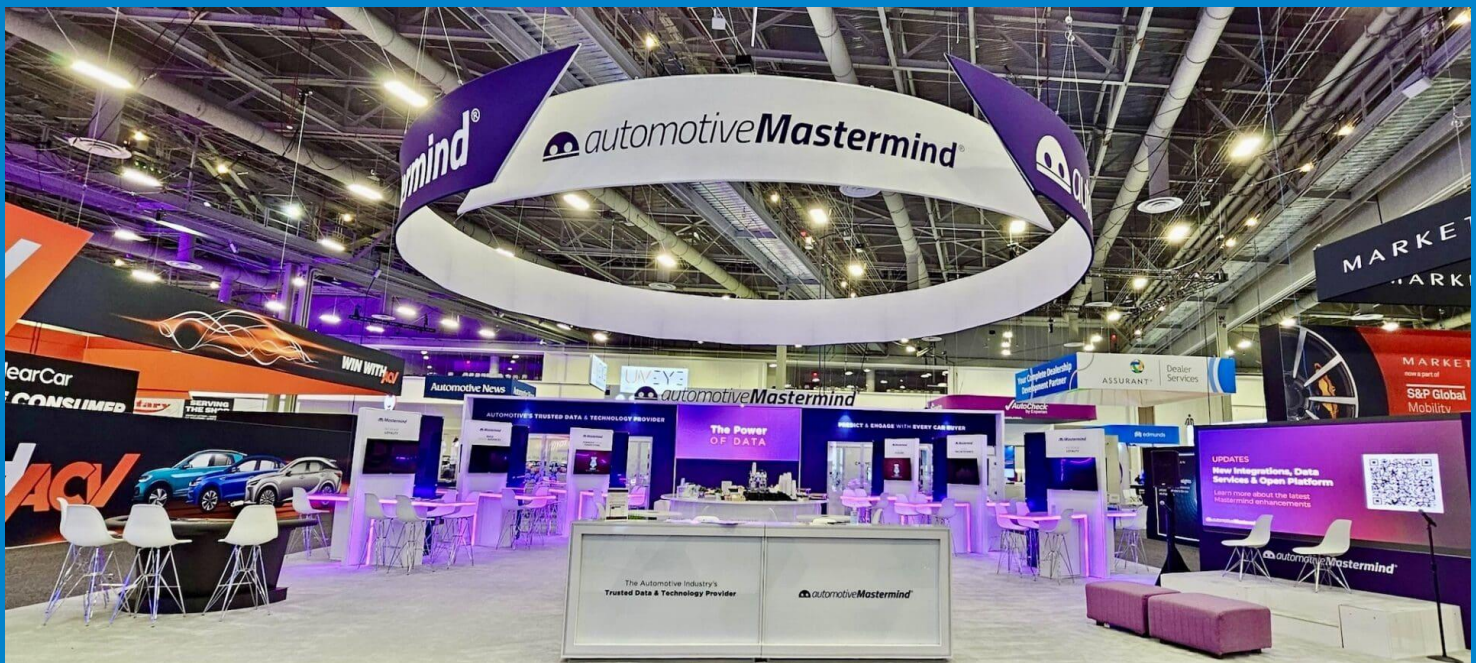
LED video walls are created by connecting individual LED video wall panels together and stacking them to create a composite image. Because images are delivered seamlessly across panels, they look great from any angle, essentially giving every attendee a front-row seat.

Large projection screens may require image blending due to size. However, limitations of the projector, interference from lighting, availability of lensing, and restrictions to throw distance could also require the use of multiple projectors and image blending.

Finally, a video wall often takes up less space than massive projection screens and projectors.

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How to Choose LED Wall Size



LED video walls are highly scalable and versatile, making them suitable for a wide range of sizes and shapes. Their modular design allows for customization according to specific requirements, whether it's a small display for a trade show booth or a massive installation for a stadium.

LED panels can also be manipulated and arranged to form curved or irregular shapes, providing flexibility in design and installation. Whether you need a standard rectangular display or a unique, unconventional shape, LED video walls can be adapted to meet your needs.

While the flexibility of LED walls is valuable, it's nonetheless important to choose the right size LED wall for your conference or trade show.

For a stage, you might measure the stage width and subtract 10 feet. For example, if the total stage width is 50 feet, a 40-foot LED wall might be appropriate.

For a 10' x 10' trade show booth, you might use a 10' wide LED wall as a back wall.

Or you might even use three LED walls inside the trade show booth to add impact.

LED Wall Aspect Ratios

Aspect ratio is the proportion between the width and height of an image or display.

For example, a 1:1 ratio means that the width and height are equal (square), whereas a 2:1 aspect ratio means the width is double the height (landscape).

Aspect ratio is typically expressed as a ratio of the width to the height. In other words, aspect ratios are independent of physical dimensions.

Take, for instance, either a small screen or a large LED video wall. If they have the same aspect ratio, the width-to-height ratio will be the same.

When displaying live feeds, it's beneficial to have a video wall with a 16:9 aspect ratio (width of 16 units and height of 9 units), which is the standard widescreen aspect ratio for video and display. However, it's not always necessary to have a video wall with the same exact aspect ratio to display the feed effectively.

Most video walls and display systems can handle various aspect ratios. They often have scaling capabilities to adjust the incoming signal to fit the native aspect ratio of the display.

If the aspect ratio of the live feed differs from that of the video wall, you might see letterboxing (black bars at the top and bottom) or pillarboxing (black bars on the sides) to compensate for the difference.

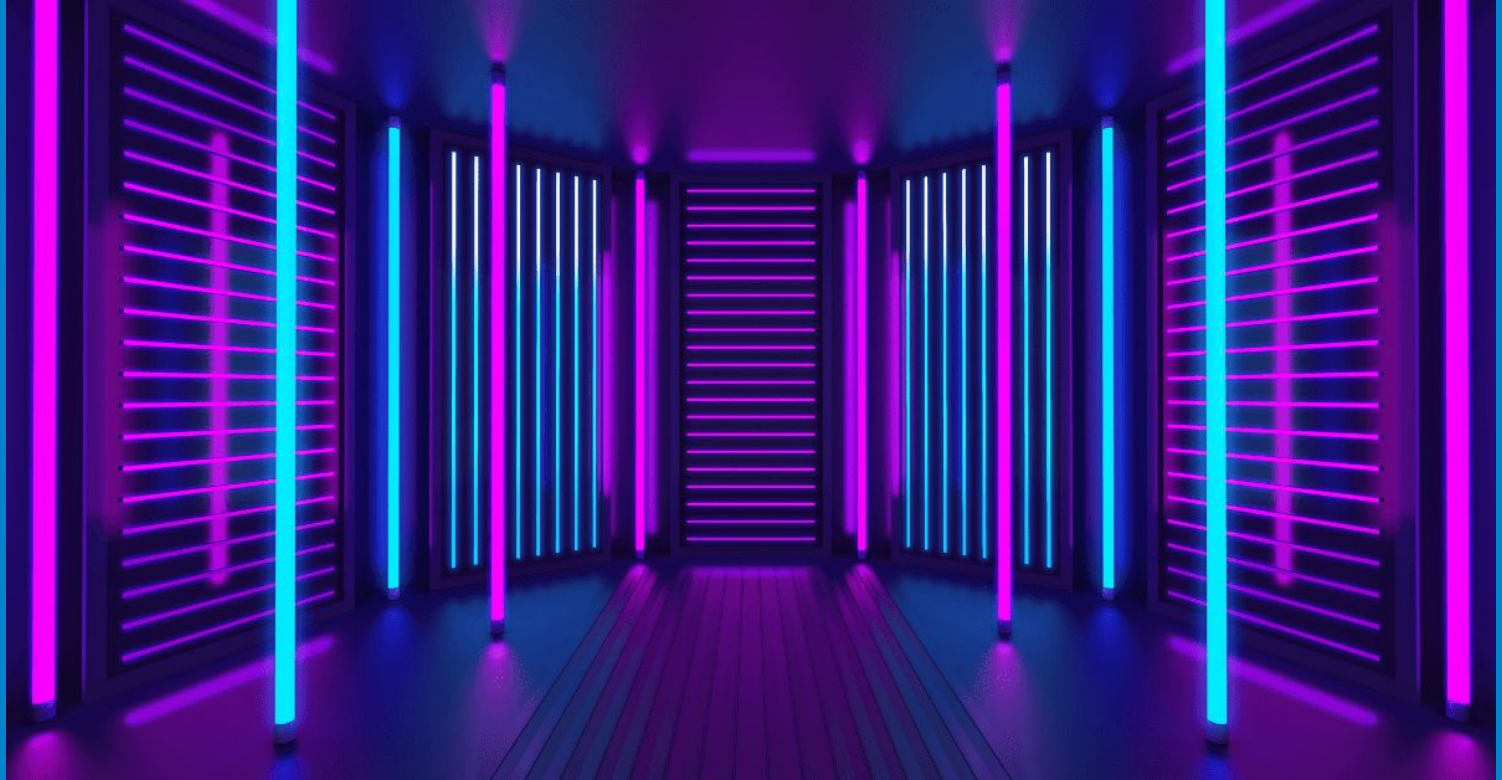
Depending on the display system and the content management software used, you may be able to adapt the layout of the video wall to accommodate different aspect ratios more effectively. For example, you could arrange multiple feeds or additional content alongside the live feed to fill the screen.

Of course, you can always customize the aspect ratio for LED video walls by creating content that exactly matches the aspect ratio of your screen.



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How to Select LED Wall Pixel Pitch



High-resolution LED walls with tight pixel pitch are an increasingly popular option at conferences and trade shows.

Some organizations want a 2.6mm screen or a 1.8mm screen. The idea is that the tighter the pixel pitch, the better the viewing experience.

With so many options available, it's hard to make an informed decision when choosing pixel pitch.

One reason the decision is such a tough one is that all LED walls may look pixelated under some circumstances and high definition in others. In some cases, organizations are making a larger investment than necessary.

Let's examine why this is – and review key considerations that will help you make the best LED wall investment decisions for your conferences and trade shows.

What Is Pixel Pitch?

The pixel density of your LED screen (measured as pixel pitch, sometimes called dot pitch) refers to the distance in millimeters between pixels.

Pixel pitch is measured from the center of one pixel to the center of the next pixel.

The lower (smaller) the pixel pitch, the more pixels per LED panel. The smaller the pixel pitch, the less empty space between pixels, which means higher pixel density and improved screen resolution.

For example, a screen with a pixel pitch of 1.8mm produces a higher quality image than a screen with a pixel pitch of 2.6mm. A screen with a pixel pitch of 2.6mm, in turn, produces a higher quality image than a screen with a pixel pitch of 5.9mm.

Some might argue that 3.9mm walls look pixelated whereas 2.6mm walls do not. The truth is that you can still see the pixels in a 2.6mm wall.

All LED walls can look crystal clear from some angles and low-resolution from others because LEDs are made up of pixels. Without pixels, there would be no image in the first place.

Regardless of the pixel pitch size, your images may look pixelated at times.

PRO TIP

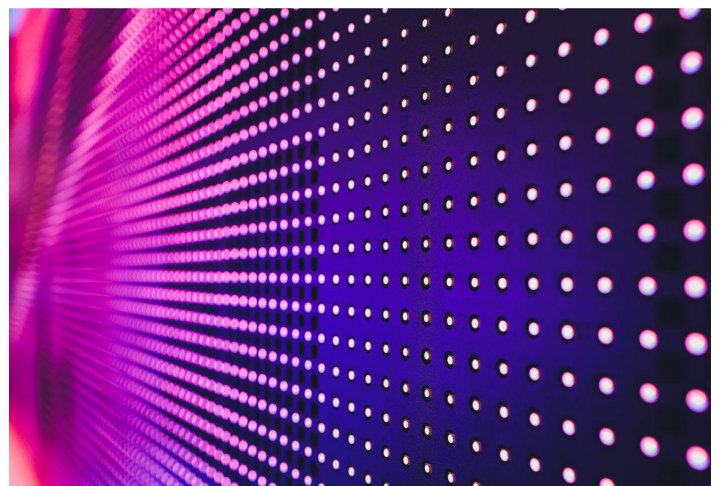
What's the ideal viewing distance for an LED wall? Start by estimating visual acuity distance – the distance someone must move away from an LED wall to no longer see individual pixels.

The formula is pixel pitch (in mm) x 10 = approximate visual acuity distance (in feet). If your LED wall has 2.6 pixel pitch, then

$$2.6 \times 10 = 26 \text{ feet}$$

Next, divide that number by half to find the recommended viewing distance. In this case, the optimal viewing distance is about 13 feet.

$$26 \text{ feet} / 2 = 13 \text{ feet}$$



How to Know What Pixel Pitch to Choose

Here are three key considerations when choosing pixel pitch:

1. **What's the viewing distance?** Are you trying to attract people from 20-40 feet away, or do you need to capture attention from only 5-10 feet away?

In a general session, the viewing distance may be 20-40 feet, and a 5.9mm screen may be sufficient. If the viewing distance is only 5-10 feet, however, a 2.6mm screen might make sense.

2. **What kind of content are you showcasing?** If your main stage content isn't 4K or 8K, you may not need a 1.8mm or 2.6mm screen. In fact, content that looks pixelated on a lower resolution screen is often the result of the viewing angle or the content quality.

Poorly designed content can look very problematic on a 2.6mm screen, while well-designed content can look amazing on a 3.9mm screen.

3. **What's your budget?** A 2.6mm screen is more expensive than a 3.9mm screen. Tighter pixel pitch can also drive other costs, such as processing and specialized equipment you might not need if you use a lower resolution wall.

An investment in tighter pixel pitch may make sense when you have a closer viewing distance, a very large wall, or 4K content shown on a smaller wall.

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LED Wall Content and Design



If you have decided to use LED walls at your event or in your trade show booth, you'll want to display eye-catching images, videos, and brand messages. You will want to use the video walls to tell compelling brand stories, showcase product features, and promote offers in an engaging way.

Determine Your Goals

First thing's first – your goals will drive the design of your content. Clarifying your goals will help guide content creation and ensure that it aligns with the overall purpose of the LED wall.

For example, what specific goals do you want to achieve with the content on the LED wall? Do you want to inform, entertain, promote a product or service, or reinforce your brand?

Know Your Audience

Understanding audience demographics and psychographics will help you identify the content best suited to that audience and tailor your content to their wants, needs, interests, and preferences.

Whatever your goals, it's wise to tailor your content accordingly. Developing a clear content strategy will ensure that the LED wall content effectively communicates your important messages.

Determine Where and When You'll Use LED Walls

To optimize content visibility, readability, and relevance, identify any environmental factors, such as indoor vs. outdoor conditions and lighting conditions. Also, when will the content be displayed (e.g., during events, specific times of day, 24/7)?

Indoor vs. Outdoor LED Walls

Indoor and outdoor LED video walls can be very different.

Considerations for indoor and outdoor LED walls vary due to environmental factors and usage requirements. For indoor LED walls, factors like brightness levels, resolution, and viewing distance are crucial for optimal viewing experience. Contrast ratio and color accuracy also matter for indoor environments with controlled lighting conditions.

Outdoor LED walls require higher brightness levels to combat sunlight. In addition, they require weatherproofing to withstand wind, rain, and temperature fluctuations, as well as durable construction to resist vandalism and environmental damage.

Weather protection, cooling systems, and pixel pitch are key factors in outdoor LED wall design to ensure longevity and visibility in varied conditions.

With outdoor LED video walls, brightness levels can wash out some of the colors and affect black levels. Black levels refer to the ability of the display to produce deep, true blacks. Lower black levels indicate better contrast and image quality, especially in dark scenes.

Achieving good black levels requires precise control of individual LED pixels and effective light-blocking technology within the display panel.

Of course, if you're using an outdoor LED video wall, bad weather may force you to move an event indoors.

If you're not sure if you'll be inside or outside, you might want to work with your AV production partner to choose a versatile wall that works well both inside and outside.

Use (or Don't Use) Color

If your signage includes a lot of text, consider using high contrast (white/black) and a clean, clear font, both of which can enhance visibility. While using white and black on an LED wall can be effective, it's important to consider how you use these colors and the overall design context.

White and black provide strong contrast, which can be visually striking and help certain elements stand out on the LED wall. However, too much use of white or black without careful consideration of other colors and elements can make the text boring or unreadable.

Depending on the content displayed on the LED wall, using white text or graphics on a black background (or vice versa) can make information easily readable from a distance. This is especially important in environments with variable lighting.

White and black can create a bold and modern aesthetic when used effectively on an LED wall. They can evoke a sense of sophistication, elegance, or minimalism, depending on the overall design.

However, using white and black in combination with vibrant or contrasting colors can also create visual interest and balance on the LED wall. Whatever you choose to do, be sure to consider how the use of white and black aligns with your brand identity.

Ultimately, the key is to use white and black thoughtfully and in a way that enhances the overall visual impact and effectiveness of your LED wall content.

Experiment with different color combinations, layouts, and design elements to find what works best for your specific needs and objectives.



Use Motion Graphics

If your content is intended to entertain, focus on motion graphics. Motion graphics can be a powerful tool for leveraging the capabilities of an LED wall to create immersive visual experiences.

Whether you're using it for advertising, entertainment, informational displays, or other purposes, motion graphics can often help you effectively communicate your message.

Use motion graphics to:

- Add movement and dynamic visuals to your content, making it more visually appealing. This can help draw viewers' attention and keep them engaged with your message.
- Tell a story or convey information in a compelling format. You can use animation and visual effects to demonstrate processes, illustrate concepts, or showcase products in a way that static images or text alone cannot.
- Offer opportunities for brand promotion. By incorporating your brand's colors, logo, and visual identity into the animations, you can reinforce brand recognition and leave a lasting impression on your audience.

Depending on the capabilities of your LED wall and content management system, you may even be able to incorporate interactive elements into your motion graphics, allowing viewers to engage with the content in meaningful ways.

PRO TIP: Make Your Message Visible

Text size on LED walls is a common challenge. When it comes to messaging on large-scale LED walls, less is more, particularly if getting your message across is non-negotiable.

It's also a good idea to use big and bold text with a clear, concise message. Text and graphics need to be large enough to be seen from the maximum viewing distance. Always test out your content before the event to make sure your message is clear and makes an impression.

PRO TIP: Design for the Wall

Effective LED wall design aims to engage viewers, convey messages clearly, and create memorable visual experiences.

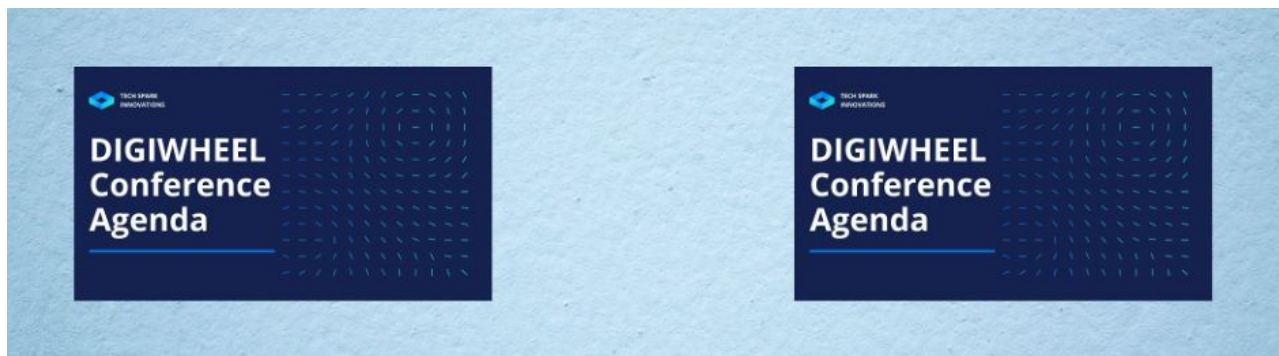
Designing for an LED wall involves crafting visually captivating content tailored to the wall's specifications – and to the needs of the attendees. You'll want to consider factors such as resolution, aspect ratio, viewing distance, and environmental conditions.

Be sure to have your AV provider test your content and provide a video of the display.

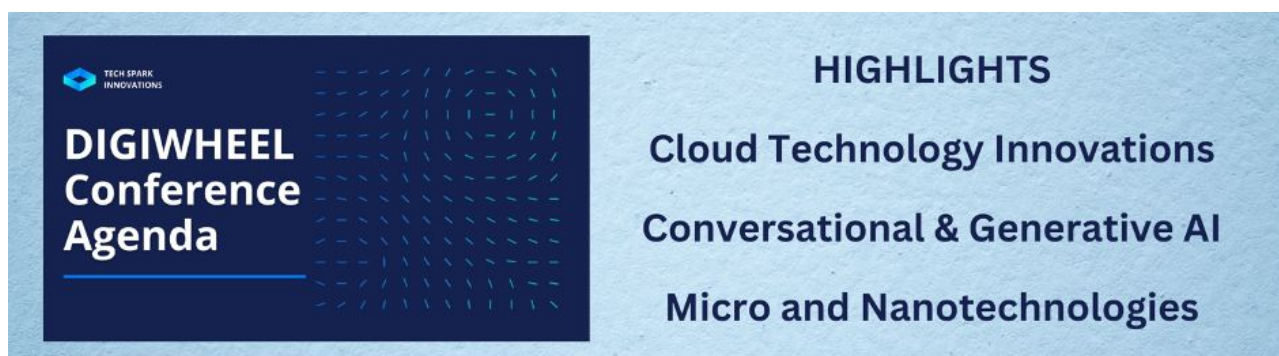
Confirm Your Slide Dimensions

If the aspect ratio of the LED video wall is 16:9, you can create slides, messaging, graphics, and videos using a standard PowerPoint template.

However, many LED walls will be a different shape. The easiest thing to do is to create standard 16:9 slides and display them using “picture-in-picture.” Picture-in-picture is when one program or video feed is displayed on the full screen while one or more other feeds or graphic backdrops are displayed in inset windows.



Alternatively, you can format slides so they fit the wall's exact dimensions.



The benefit of a picture-in-picture solution is that slides are easy to format, and viewers can simultaneously watch multiple programs or feeds on the same screen.

If you're not sure how to design your slides for LED walls, ask your AV production partner to weigh in.

07

LED Wall Ideas



Here, we've put together some real-world ideas to help you make the most of your conference or trade show LED walls.

Promote Your Sponsors

If you have event sponsors, try incorporating their social media presence by displaying their posts or running promotions on the LED wall. This increased exposure may work to both your advantage and theirs – and even enhance their ROI.

Alternatively, let your event sponsors know you'll promote their logo, messaging, or promo videos on your LED video walls for a sponsorship fee. They will gain much more exposure than they would with banners or a brief mention in an event program.

How to Optimize Your LED Wall

Increase Social Media Engagement

Here are some ways to tie in social media to create captivating attendee experiences:

- Encourage participation by asking attendees to mention your brand on social media. Display posts in real time on the LED wall. (A moderator can monitor wall content using a simple posting delay.)
- Host contests or polls on social media and display the results on the wall in real time to increase attendee excitement.
- Create a dedicated section on the LED wall to showcase user-generated content, such as photos, videos, and messages.
- Share behind-the-scenes glimpses of the event on social media and showcase posts on the wall to create a sense of inclusivity.

Go Interactive with Gamification

LED walls offer a dynamic platform for gamification, transforming spaces into interactive experiences. LED walls can use visuals, motion graphics, and interactive elements to immerse participants in games and challenges.

From educational quizzes to immersive simulations, LED walls elevate gaming experiences and increase engagement around your event or booth.

As just one example, you could use your LED video wall to display a leaderboard. Not only does a leaderboard allow attendees to engage in friendly competition, but it also helps you identify who is most engaged at the event.





Create Trade Show Booth Back Walls

Exhibitors often want to know if they should use an LED video wall as a back wall in their next trade show booth.

If they want to capture — and keep — their audience's attention, then the answer is probably "yes."

LED walls in trade show booths are very versatile. They can be used as a back wall in large booths or as a back wall in smaller booths at smaller venues.

LED back walls allow you to control your design and visual identity. Wherever they're used, you're sure to be noticed.

Use Trade Show Booth Back Walls

Trade Show Back Walls in Action

TST provided a 10×30 LED back wall for a trade show booth for a client show at the Mirage Hotel in Las Vegas.

The client used the LED wall to do a demo, and the picture was so bright and captivating that it drew attention from every corner. Attendees even approached the client to find out where they got it.

Our client's goal was to communicate their message as effectively as possible to as many trade show attendees as possible. They succeeded. The LED video wall was the hit of the show.

Seasoned trade show veterans often swap stories about vinyl-printed graphics that take hours to produce, require stressful last-minute changes, and require additional labor to install.

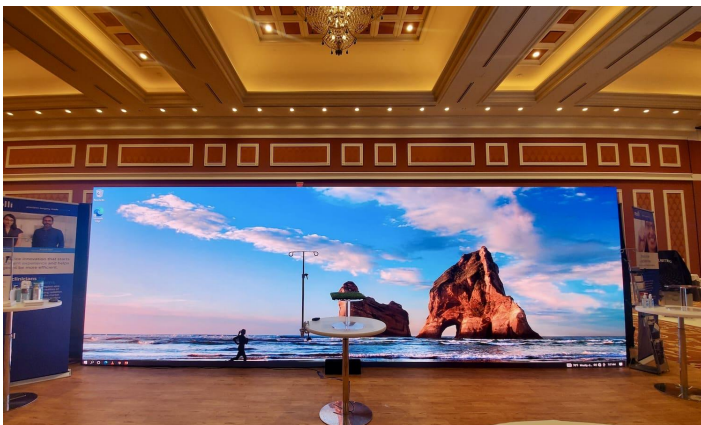
Here are three reasons why you should consider using an LED back wall for your next trade show booth:

1. An LED video back wall can take the place of a plain rental exhibit and transform your booth into a bright, lively, vibrant promotional tool for your brand.
2. An LED back wall can be programmed to display picture-in-picture, eliminating the need for a traditional monitor on a stand.

As a bonus, eliminating the monitor on a stand frees up floor space in the booth, improving the flow and giving the space a much more open, inviting, cleaner look.
3. Custom content and graphics can be displayed easily and changed easily, eliminating the need (and the hassle) for custom-printed graphics.

The best part?

No more stressful, costly, eleventh-hour changes. You'll engage attendees and gain peace of mind.





Try LED Cubes

LED Cubes are immersive LED displays that are ideal for trade shows, conferences, nightclub events, corporate meetings, and gala celebrations.

LED Cubes are three separate, state-of-the-art, LED video walls that function as self-contained units, creating an immersive LED video wall experience.

Coupled with great content, LED Cubes are an innovative, state-of-the-art solution that optimizes LED technology in an engaging and affordable way.

They're ideal for conferences and exhibits. Attendees love these multimedia experiences and talk about them long after the event is over.

LED Cube Benefits

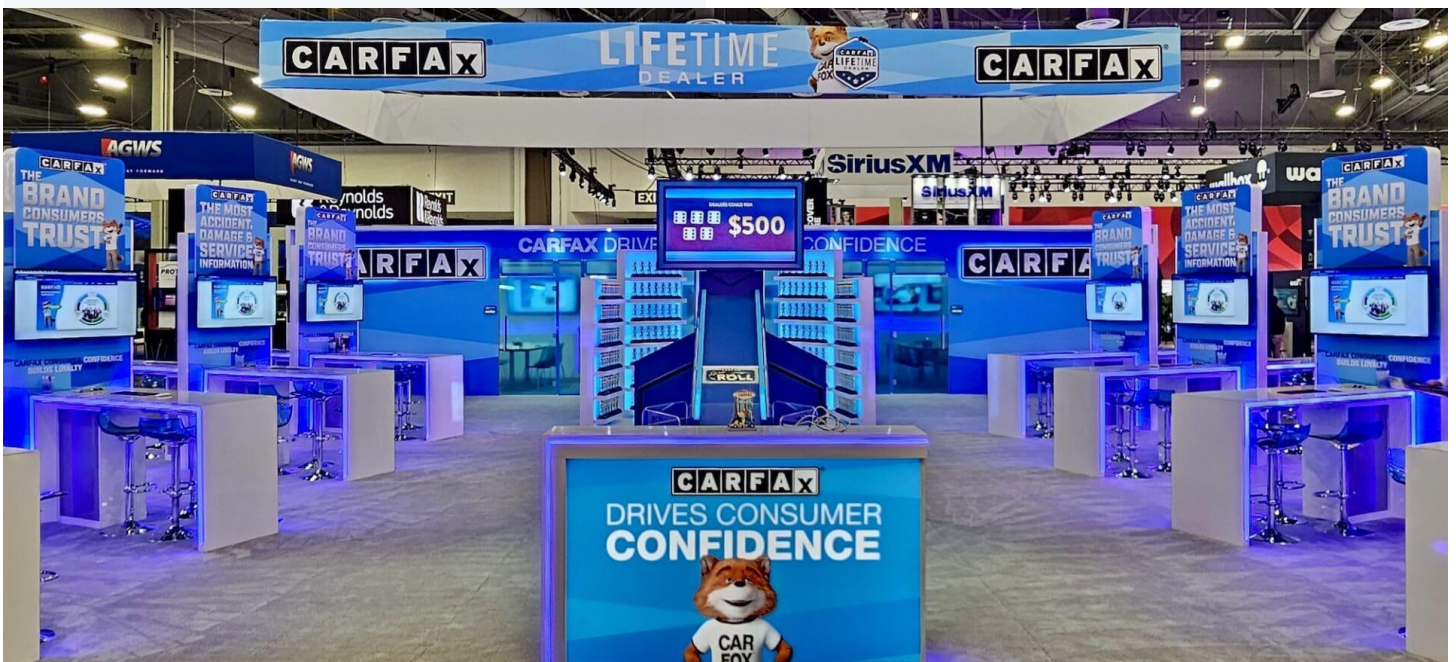
- You can have three walls (vs. one) full of animation, video images, and moving graphic elements.
- You can create a seamless, three-sided video wall with one image or video source. Alternatively, each wall can have its own image or video source.
- Streaming content can be changed from hour to hour.
- LED Cubes work equally well in spaces with bright light and low light.

Both LED walls and LED Cubes create an immersive experience and can capture attention from across the trade show floor or at an event in dramatic new ways.

You can use an LED Cube at your next conference or nightclub event to draw attendees. LED walls or an LED Cube can even be the most exciting photo booth your event attendees have ever seen.

LED walls and LED Cubes are a surefire way to pique curiosity, entertain, and delight. They will bring your event to life, and they'll be an experience attendees will long remember.

If you need an exceptional visual impact for your stage or trade show booth, an LED Cube or LED walls is probably the right solution for you.





Choose beMatrix LEDskin

Nothing quite brings out color and vibrance like beMatrix LEDskin®. You can use the beMatrix system anywhere and provide stunning visuals. For example, TST's team created the build above for a recent show and wowed the attendees.

With beMatrix LED walls, you can impress the crowds with animation, video images, and moving graphic elements. And you're not limited to the maximum (standard) dimensions of individual display screens. Instead, you can create totally seamless video walls that bring your trade show booth or conference stage to life.

BeMatrix LEDskin is lightweight, modular, easy to set up and use, and securely anchored. LED cabinets and frames can be customized to fit neatly into the beMatrix concept. Both the frame and the LEDskin allow seamless assembly and finish. The design is clean and elegant, and LEDskin modules offer optimum resolution, clarity, and responsiveness.

LEDskin fits seamlessly with the beMatrix concept and its frames. Instead of finishing the structure with textile, wood, or other infills, finish it with a beMatrix LEDskin video wall. Frames and graphics blend into one exceptional product.



Total Show Technology Is a beMatrix bePartner

TST is a premier LEDskin® provider in the exhibition service market through the exclusive beMatrix® bePartner AV program.

Being a bePartner means that TST knows how to set the stage. To be chosen as a beMatrix partner, TST had to demonstrate the following:

- Significant investment in beMatrix LEDskin inventory
- Completion of beUniversity training by key company employees
- Ability to serve clients throughout the U.S. and Canada
- Efficient order intake procedures and superior customer service
- Experience working with beMatrix customers and renting LEDskin

For conferences and trade shows, beMatrix LED walls are game changers – and TST has them for use at your next show.

08

Buying vs. Renting an LED Wall



Deciding whether to rent or buy an LED wall depends on various factors such as budget, frequency of use, customization needs, and long-term plans.

Here are some key considerations to help you make the right decision:

- Buying an LED wall requires a larger upfront investment compared with renting, but it could be more cost-effective in the long run if you use it frequently.
- If you need an LED wall for occasional events or short-term projects, renting might be more practical and cost-effective.
- If your needs are likely to change or you're unsure about future requirements, renting provides flexibility. However, if you have regular events or long-term installations, buying might be a better option.
- If you need specific wall sizes, resolutions, or configurations, renting might be best. Your AV partner should have a wide variety of walls for greater customization possibilities.
- When you buy an LED wall, you're responsible for maintenance and repairs, which can get expensive. With rentals, maintenance and repairs are handled by your AV partner.
- Owning an LED wall means you'll need space to store it when and arrange for transportation to and from events. When renting, your AV partner typically handles these logistics.

LED Wall Pricing

If you determine that buying an LED wall is the right decision, you'll need to nail down your budget. The following factors can impact the LED wall price:

- **Size** – The larger the LED wall, the more expensive it tends to be.
- **Pixel Pitch** – Higher resolution means images on your wall can be seen more clearly close up.
- **Rigging vs. Ground Support** – Rigging an LED wall will cost more.
- **Curved vs. Straight** – A curved wall costs more than a straight LED wall.
- **Content** – Depending on the aspect ratio of the wall, you may need special (more costly) video equipment to display the content.



Can LED Walls Be Used in Unconventional Spaces?

Traditional conference centers and hotels can typically accommodate LED walls.

When your venue is an unconventional space, however, you will need to work with your AV production partner to make sure an LED wall can be installed.

For example:

- Large LED walls require a lot of power, so make sure your venue can accommodate a three-phase power distribution.
- You'll need to know if you need rigging vs. ground support. If you want to suspend the LED wall high above your audience (also known as rigging), make sure your venue can accommodate it (they will need rigging points in the ceiling).
- Outdoor LED walls require a generator. Make sure you choose water- and wind-resistant LED walls.

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LED Walls Checklist

LED Walls Checklist

What Types of LED Walls Do You Offer?

What Are the Resolution and Quality of Your LED Walls?

What Is the Cost of Renting LED Walls?

Do You Provide AV Production Staffing and Support?

Can You Provide References and Examples of Past Rentals?

Can You Customize the Wall for My Event?

What Is Included in the Rental Package?

Is There a Minimum Rental Period?

What Is the Delivery and Pickup Schedule?

If you're considering using LED walls on your conference stage or in your exhibit, you're already well on your way to capturing the attention of attendees. However, not all LED walls are alike.

To ensure that you get the right technology and services for your event, be sure to ask your AV production partner the questions on the following pages.

LED Walls Checklist

What Types of LED Walls Do You Offer?

Ask about the different types and sizes of LED walls available for rent to determine which one best suits your needs.

What Is the Cost of Renting LED Walls?

For many event planners and exhibit builders, an LED wall is ideal for their needs. However, an LED wall will nearly always require more budget than a traditional projector and screen.

Talk to your AV production partner to get a sense of the cost of renting an LED video wall – and the potential benefits of its use.

Be sure to get a detailed breakdown of the rental cost, including any additional fees such as delivery, setup, and teardown charges. Clarify the billing structure – whether it's per day, per event, or another arrangement.

Is There a Minimum Rental Period?

Determine if the AV company has a minimum rental period and if they offer flexibility in case you need the LED wall for a shorter or longer time.

What Are the Resolution and Quality of Your LED Walls?

Make sure the resolution and visual quality of the LED wall meet your content and display expectations.

Do You Provide Onsite Staffing and Support?

Ask if the AV company offers onsite technical support during your event, including setup, troubleshooting, and teardown assistance.

What Is Included in the Rental Package?

Ask for a list of all the equipment and services included in the rental package, such as LED panels, mounting hardware, cables, and media players.

Can You Customize the LED Wall for My Event?

Discuss customization options for the LED wall, including content creation, branding, and any special effects or interactive features you may require.

What Are the Power Requirements?

Determine the power requirements for the LED wall and ensure that your event venue can provide the necessary electrical support.

How Will the LED Video Wall Be Installed?

Several factors can affect optimal placement and installation, including interior vs. exterior use, ambient light vs. direct light, sight lines and angles, wall space, viewing distance, and code requirements for the mounting structure.

Work with your AV partner to determine the most effective – and safest – way to install your video wall. Their certified team should be able to handle all the details for you.

LED Walls Checklist

How Is Content Managed and Displayed?

Understand how content is managed and displayed on the LED wall. Ask about content scheduling, playback options, and compatibility with your content sources.

What Is the Setup and Teardown Process?

Ask about the setup and teardown process, including the estimated time required to install and dismantle the LED wall.

How Big of an Issue Is LED Video Wall Safety?

LED video walls are heavy. If installed improperly, they can topple over and become quite dangerous. For floor models, make sure you have a weighted and counterbalanced structure behind the wall to prevent it from falling forward.

For LED video walls that will be up high above the ground, you'll want licensed riggers to make sure the walls are installed properly and meet TÜV safety, quality, and performance certification standards.

Is There a Backup Plan for Technical Issues?

Discuss contingency plans in case of technical issues during your event, such as spare equipment or rapid technical support.

Do You Have Liability Insurance?

Verify whether the AV company carries liability insurance to cover any accidental damages or incidents during the rental period.

What Is the Delivery and Pickup Schedule?

Coordinate the delivery and pickup schedule with the AV company to ensure the LED wall arrives, is set up, and is taken down and removed at the ideal time for your event.

In addition, avoid additional charges for trade shows by knowing your target data for freight move-in.

What Are the Terms and Conditions of the Rental Agreement?

Review the rental agreement carefully, paying attention to terms, conditions, cancellation policies, and any liabilities or insurance requirements.

What Permitting and Venue Coordination Are Needed?

Ask if the AV company can help you obtain permits and coordinate logistics with your event venue. The AV company should know the venue inside and out and should be able to help with logistical planning.

What Is the Payment Schedule?

Clarify the payment schedule, including deposit requirements and the final payment due date.

Can You Provide References and Examples of Past Rentals?

Ask for references from previous clients who have rented LED walls from the company. Also ask for examples of events where their LED walls and other AV gear were used.

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About Total Show Technology (TST)

Choose TST for All Your LED Wall Needs

LED video walls are becoming the de facto standard in ballrooms and booths for organizations that want to reinforce their brand or communicate an important message.

With so many options available, it's hard to know which LED video walls will best serve your needs. Choosing an LED wall and using it safely and effectively are no easy feat.

Work with a reputable AV production company that can provide end-to-end LED video wall rentals and support. Your AV partner should provide best-in-class video wall technology and should be able to help assess your video wall requirements. They should ensure that the LED walls are appropriate for the environment and weigh in on what size, model, and pixel pitch are right for your conference, trade show booth, corporate meeting, or nightclub event.

Their expert team should handle professional installation and tear down, as well as be on hand to test the equipment and troubleshoot any problems that arise.

Partnering with a reputable AV provider for your LED wall needs can enable you to display dynamic, eye-catching content while optimizing your AV technology budget. Your partner should ensure you don't over- or under-spec your shows while also helping you deliver an engaging experience that truly stands out.



Total Show Technology (TST) is the total show production solution for anyone who plans, manages, or produces trade shows, conferences, and nightclub events. Our services include LED walls, video, audio, lighting, staging, affordable trade show Wifi, laptop and gear rentals, and staffing.

In the events industry, what you know and who you know are everything. We've been a trusted resource in the Pacific Southwest since 1996, and we know all the venues and area resources inside and out.

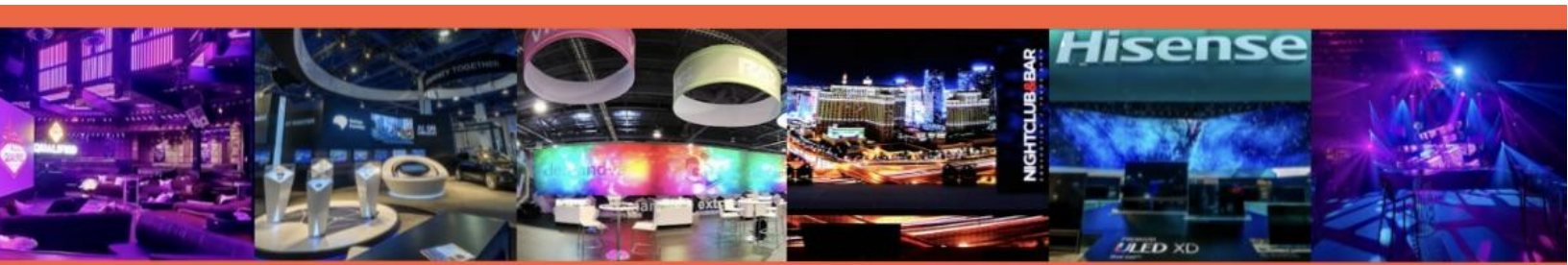
Based in Las Vegas, TST supports shows throughout the Pacific Southwest, and we travel with our clients to support their shows nationwide.

Whether you're looking for trusted audiovisual support or advanced event technologies that enable you to deliver your message effectively, TST helps your shows go off without a hitch and always makes you look good.

In an industry where almost anything can go wrong, we make sure everything goes right.

Together, we'll make your next conference or trade show booth a standout and enable you to capture attention from across the room or the trade show floor.

Reach out – together, let's build an experience!



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