Planning Conference LED Walls and Mobile Screens in Los Angeles

What to Think Through When Booking LED Screens for Your Event

Conference organisers in Los Angeles face a lot of choices when it comes to visual displays. LED walls, LED backdrops and mobile LED screens each serve a different purpose, and the wrong pick can leave your audience squinting at a blurry presentation or fighting with glare. The key is to plan around your venue, your content and your audience size before you sign any contract.

This guide walks through the main points to check so you end up with a screen setup that looks sharp, stays reliable and fits the flow of your event.

Screen Dimensions and Viewing Distance

The first thing to sort out is how big the screen needs to be. That depends on how far the furthest person in the audience will sit. A common rule of thumb is that the screen height should be at least one-sixth of the distance to the back row. For a room where the last row is 60 feet away, you want a screen about 10 feet tall. Too small and people at the back strain to read text; too big and the front rows get neck ache.

Width follows from the aspect ratio of your content. Most conference presentations use 16:9, so a 10-foot-tall screen would be roughly 18 feet wide. Check the venue ceiling height and stage depth to make sure the screen fits without blocking sightlines or forcing the speaker into a corner.

View the location on Google Maps

Mobile LED screens on trailers add another dimension. They are often used for outdoor sessions or overflow areas. The viewing distance rule still applies, but you also need to account for ambient light and the fact that people may be standing or walking past. A brighter screen with a wider viewing angle helps here.

Pixel Pitch and Image Quality

Pixel pitch is the distance in millimetres between the centres of two adjacent pixels. Smaller numbers mean higher resolution at the same screen size. For a conference where people will be as close as 10 feet from the screen, you want a pitch of 3 mm or less. For a backdrop behind a speaker on stage, 4 mm to 6 mm is usually fine because the audience is farther away.

LED backdrops are a popular choice for stage design. They create a seamless background that can display graphics, live feeds or ambient motion. Because the backdrop is often viewed from a distance, a slightly larger pixel pitch saves cost without sacrificing the visual impact. Just make sure the content is designed for that resolution - small text or fine details will look blocky on a wider pitch.

Mobile LED screens typically have a pitch between 3 mm and 10 mm depending on the model. For a screen that will be seen up close, such as in a breakout area, go for the finer pitch. For a roadside sign visible from 50 feet away, a larger pitch is perfectly adequate.

Brightness Levels and Ambient Light

Indoor conference venues usually have controlled lighting, so a brightness of 1000 to 1500 nits is enough. If your event has a lot of natural light from windows or glass walls, you may need 2000 nits or more to keep the image from washing out.

Outdoor screens need much higher brightness - 3000 to 5000 nits is common - to compete with sunlight. But brightness alone is not enough. The screen also needs high contrast and good black levels so that dark areas of your presentation do not look grey.

Ask the rental provider about the screen's contrast ratio and whether it has auto-brightness adjustment. A screen that dims automatically when the sun goes behind a cloud can save power and extend the life of the LEDs.

Signal Processing and Content Compatibility

Your screen is only as good as the signal feeding it. Check what inputs the screen accepts - HDMI, SDI, DisplayPort - and whether you need conversion boxes. For a multi-screen setup, you may need a video processor that can split a single source across several panels or blend multiple sources onto one big canvas.

If you plan to show live feeds from cameras, make sure the processor can handle the latency. A delay of more than a few frames between the speaker and the screen is distracting. For mobile LED screens that are part of a roadshow or an outdoor event, wireless transmission is sometimes used. Test the signal strength at the actual location beforehand, because interference from nearby structures can cause dropouts.

Also confirm that the screen supports the refresh rate your content needs. Standard video at 60 Hz works for most presentations, but if you are showing fast-moving graphics or sports footage, a higher refresh rate reduces motion blur.

Setup Requirements and Logistics

LED walls are heavy. A typical indoor panel weighs around 30 to 40 pounds, and a full wall can be hundreds of pounds. The venue floor must be able to support that weight, and you need a plan for getting the panels to the stage without damaging the building or the equipment.

Mobile LED screens come on trailers that need towing clearance and a flat, stable parking spot. Check the height of the trailer when raised - low bridges or power lines can be a problem. Also confirm that the generator or battery system can run the screen for the full duration of your event without refuelling.

Rigging is another consideration. If the screen is suspended from the ceiling, the venue's rigging points must be rated for the load. Never let a non-professional hang a screen. A qualified rigger should inspect the points and attach the screen using proper clamps and safety cables.

Power and Cable Management

LED screens draw a surprising amount of power. A 10-by-18-foot wall can pull 20 to 30 amps at 120 volts. Your venue's electrical distribution must have enough spare capacity, and you should have a dedicated circuit for the screen to avoid tripping breakers when the coffee station kicks on.

Cable runs from the power source to the screen should be as short as possible. Long cables create voltage drop and can cause the screen to flicker or shut down. Use heavy-gauge extension cords rated for the current, and tape down all cables with gaffer tape to prevent tripping hazards.

For mobile screens, the generator must be sized correctly. A screen that draws 30 amps needs a generator that can supply at least 40 amps continuous to allow for startup surge and other equipment. Also check the noise level of the generator - some venues have strict noise ordinances, especially in residential areas of Los Angeles.

Backup and Redundancy

Things go wrong. A single panel can fail, a cable can get pulled, or the video processor can crash. Ask the rental provider if they have spare panels on site and how quickly they can swap a faulty one. A good provider carries at least 10 percent spare panels for any large wall.

For the video source, have a backup laptop or media player ready. Run a rehearsal with the actual content to catch resolution mismatches or codec issues. If you are using a mobile LED screen, check that the trailer's levelling jacks are deployed properly - an uneven screen can cause the image to look distorted.

It also pays to have a technician on standby during the event. Someone who knows the equipment can troubleshoot signal problems or adjust brightness on the fly. Confirm with the rental company whether that is included or if you need to book it separately.

Local Considerations for Los Angeles Events

Los Angeles venues vary widely in their power availability, ceiling heights and loading dock access. A ballroom in a hotel on the Westside may have limited rigging points, while a convention centre downtown might have plenty of power but strict rules about floor protection. Check with the venue early about their specific requirements for LED walls and mobile screens.

Parking for mobile LED trailers can be tight in some parts of the city. Make sure the trailer can fit through the loading entrance and that there is enough room to raise the screen without hitting a tree or a building overhang. Some venues require a certificate of insurance from the rental provider before they allow a trailer on site.

One local option is Dizplay Inc. They serve the Studio City area and can advise on screen configuration, brightness levels and setup requirements for your specific venue.

Dizplay Inc. is located at 12400 Ventura Blvd, #611, Studio City, CA 91604, and can be reached at 888-827-8774.