

CINEMASSIVE

LCD vs. Projection Video Wall Solutions

CineMassive LCD video walls deliver truly mission-critical, long lasting, maintenance-free performance for a fraction of the price of comparable projection systems. In addition to requiring regular maintenance for “drift” realignment, color recalibration, lamp and filter replacements, the cost of a projection video wall can easily balloon to well beyond 10 times as much per panel in both initial and long-term cost as compared to a comparable CineMassive LCD-based solution. Projection systems are further limited to narrow viewing angles, fixed resolutions and require several feet of depth, optimized ambient lighting for suitable visibility and elaborate time consuming and expensive installation and maintenance procedures. The enormous inconvenience and perpetual recurring expenses for materials, repairs maintenance, and downtime that plague projection systems constitute a dramatic compromise in overall practicality, especially when compared to the affordability and reliability of the CineMassive LCD-based Video Wall alternative.

CineMassive LCD vs. Projection Video Walls	CineMassive Displays	Projection
Lamp Replacement (Every 8 Months)	⊗	✓
Filter Replacement	⊗	✓
Color Wheel Failure	⊗	✓
Maintenance Required	⊗	✓
Frequent Image Re-Alignment	⊗	✓
Flexible Mounting Options	✓	⊗
Fast & Flawless Installation	✓	⊗
Variable Resolutions (Up to True HD)	✓	⊗
5 Year Comprehensive Warranty	✓	⊗
Zero Downtime, Maximum Reliability	✓	⊗
Affordable Pricing	✓	⊗

Lamp Replacement CineMassive: Never Projection: Every 8 Months

Lamps cost upwards of \$900 each and have to be replaced on average every 8 months. In your typical 20-screen video wall within 5 years you will have spent hundreds of man hours replacing lamps and the material cost alone could easily exceed \$150,000.

Filter Replacement CineMassive: Never Projection: Yearly

Light Engines get extremely hot and require enormously powerful (and often quite loud) cooling fans to circulate air to help reduce bulb burnout rates. The air must be filtered to help keep the screens from becoming occluded and distorted with contaminants. Though not 100% effective, filters are the best option, but are certainly not free.

Color Wheel Failure CineMassive: Never Projection: Erratic

Projection systems use a rapidly spinning disc coated with thousands of tiny mirrors to generate the spectrum of light necessary to produce satisfactory image saturation and clarity. As with any machine, these moving parts will wear down and break in time over the course of normal use – exactly when failure will occur is completely unpredictable. It’s always a surprise to find your projection system sputtering pixilated noise no matter when it happens.

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Maintenance

CineMassive: Never/Easy

Projection: Monthly/Yearly

Projection maintenance is a more than yearly chore and often requires assistance from a certified technician. Lamp and filter replacement, color calibration and alignment protocols either require expensive automated hardware or expensive man hours and down time. CineMassive LCD Video Walls should never require a single man hour of maintenance for the duration of your warranty period. We have never had a Video Wall fail at any level while deployed, but if any panel should become damaged you will have a replacement unit on hand for a total downtime of minutes, not hours or days. Your defective panel then gets sent straight back to CineMassive where it will be replaced with a new hot-swappable replacement sent to your site for free.

Re-Alignment

CineMassive: Never

Projection: Monthly/Yearly

Projection solutions require extremely precise alignment and often include space-grade optical positioning mechanisms. The bulk of the installation in setting up a projection system typically relates directly to the taxing process of micro-millimeter alignment and re-alignment, calibration and re-calibration of these optical systems. Over time ambient vibrations, whether from the projector's own cooling system or simply from people using and moving through the facility, will often cause the projector's alignment to drift gradually "out of phase". The end result can leave segments of the wall overlapping or drifting apart, distorting or occluding the information space. Correcting alignment drift can be extremely difficult, time consuming, and always disruptive and expensive.

Mounting Options

CineMassive: Universal

Projection: Limited

Projection-based video walls require significant structural depth (usually several feet) to "throw" the projected image onto the screen. Some projection systems rely on expensive and fine tuned reflective optics and lenses to help reduce the depth required. All Projection systems will require several extra feet of depth either carved into the wall or simply protruding forward into your workspace. While not always a problem if you are building your space from scratch, the cost and inconvenience of retro-fitting your space for such a large piece of equipment can be time consuming, require the intervention of contractors and architects and is more often than not a cause of significant inconvenience and compromise. A CineMassive LCD Video Wall can be customized to stand freely in any space, or hung on any wall with customized depths ranging from just under one foot to no more than 2. A CineMassive Video Wall will be easy to install and work with any infrastructure or floor plan.

Ease of Installation

CineMassive: 1-Day

Projection: Weeks

CineMassive Video Walls are designed to be installed by anyone with a screw driver and a level in just a few hours. Simply attach the mounting trellis to the wall using the kit provided and slide the panels into place. It's that easy. Projection systems require days of expert onsite technician time and effort. Contractors often become involved in retrofitting your space to accommodate the depth of the projection system. All of this becomes a significant up-front investment in time, energy and money.

Resolution

CineMassive: Variable (HD)

Projection: Fixed

Projections solutions often take a "one-size fits all" approach. The result is a video wall that is only viewable from significant distances away from the actual wall. CineMassive Video Wall resolutions can be adjusted on-the-fly at any time with just a few mouse clicks. You can quickly scale from True HD high resolution output for maximum detail down to lower resolutions for viewing from distances of 5 to 50 feet away. With a CineMassive Video wall you will have the freedom to adjust the wall to your needs on the fly within seconds to allow your workspace to adapt to any workflow or content type.

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Warranty

CineMassive: 3YR Comp.

Projection: 1-Year Limited

Comparable projection systems will have required you to replace dozens of burnt out lamps (at a cost of close to \$150,000) and are only warranted in most cases up to one year, and the replacement lamps are typically only warranted for 90 days. CineMassive Displays delivers a comprehensive 3-year warranty with every product delivered and can be further extended to 5 years if desired. With a CineMassive Video Wall you will never have to realign, recalibrate or replace defective bulbs, filters or moving parts of any kind. CineMassive Video Walls are built for true 24-7 Uptime reliability. Simply turn it on and that should be it for the next several years, 24 hours a day, 7 days a week.

Reliability

CineMassive: Flawless

Projection: Problematic

Projection systems are built to fail. Vendors know their lamps and filters will die out and make a handsome profit selling replacement items. With a projection system you should expect to replace every lamp in your array about every 8 months. Dead bulbs are expensive, can take days or weeks to arrive from the other side of the country (or the world), are time consuming and difficult to replace and a constant concern. Imagine having a big black hole in your screen because you ran out of replacement bulbs.

CineMassive Video Walls use no moving parts and are engineered for 24-7 reliability for 5 years or more. If a panel is damaged you can simply swap it out with the replacement included onsite within minutes.

Price

CineMassive: Accommodating

Projection: Excessively Expensive

The upfront and maintenance costs of projection systems can be 5, 10 or 20 times the price for a comparable CineMassive Video Wall with identical resolution and information visualization capability. Projection system's maintenance costs alone often eclipse the total cost of ownership of the CineMassive Video Wall equivalent.

Gaps/Bezels

CineMassive: 7.2mm (combined)

Projection: ~1mm

Due to the complexity of their deployment and the fragility of their hardware, projection-based solutions are constantly vulnerable to projection drift and screen drift that can quite easily produce disruptions in the final image. Even at its best, many projection-based systems still are forced to maintain a gap between each projection cube in order to try to prevent the image from drifting. The end result is an extremely delicate structure vulnerable to failure and misalignment with a permanent seam between each individual projection screen that is comparable to the bezels in a CineMassive Video Wall while costing more than 10 times the price.

The Bottom Line

The Hidden Perpetual Expense of Projection Systems and enormous up-front cost multiples make LCD Video Walls an obvious choice. The razor-thin margin between panels comes at a substantial cost savings, dramatically increased reliability and flexibility. Your CineMassive Video Wall will deliver unsurpassed contrast, brightness and overall maintenance-free performance for years. Simply turn it on and that's it. CineMassive Video Walls are an obvious, cost-effective and full featured choice superior in almost every respect to the over-priced projection-based alternatives.

CineMassive LCD Video Walls have no moving parts, require zero maintenance, last for years under full warranty coverage, are viewable from anywhere in the room, under any lighting conditions and at any resolution, including true HD. Our video walls deliver true 24-7 mission critical reliability. Choose CineMassive Displays Video Walls and you will enjoy the reliability and performance only a professional-grade LCD video wall can deliver.