



THE NEW RULES FOR MOUNTING AND INSTALLATION

New display technologies are requiring smarter approaches to AV installation and mounting. Here's a primer for AV pros.



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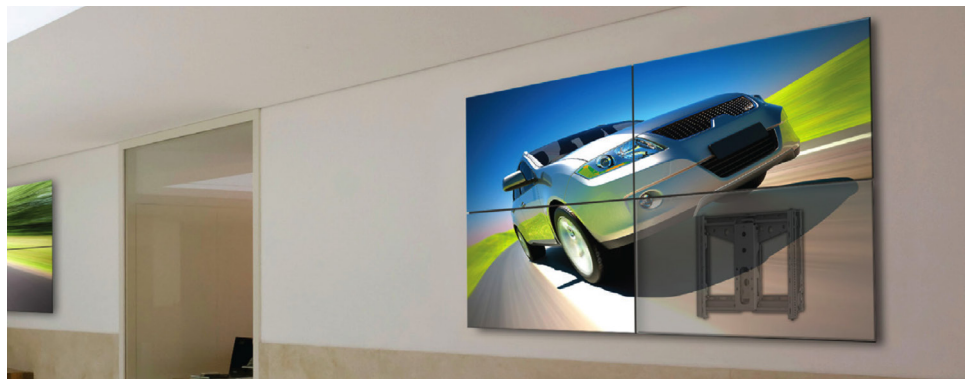
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THE NEW RULES FOR MOUNTING AND INSTALLATION

NEW DISPLAY TECHNOLOGIES ARE REQUIRING SMARTER APPROACHES TO AV INSTALLATION AND MOUNTING. HERE'S A PRIMER FOR AV PROS.

Introduction

The days of simply mounting LCD flat panels on the nearest wall are over. New display technologies like direct-view LED and more complex video walls, together with demanding customer



expectations and varied architectural spaces, are requiring smarter approaches to AV installation and mounting. Some of the key issues AV integrators need to consider as they work with mount manufacturers are: job scheduling and structuring, maximizing off-the-shelf solutions, crafting not only custom but also tailored solutions for complex projects, and matching their mounting solution partner's strengths to their preferred screen manufacturer's strengths. This white paper will guide AV integrators and end users on the best practices that work.

The Market Opportunity

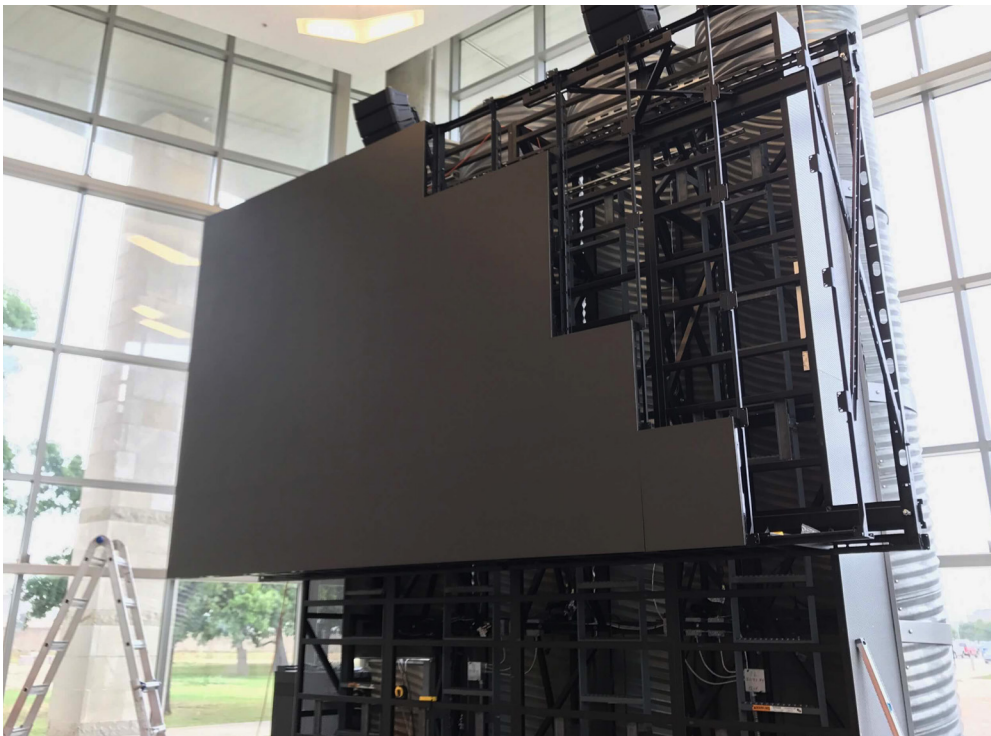
Changes in the display market today make navigating opportunity—and avoiding risk—trickier than ever. Understanding both the boom and the best opportunities for profitable growth are key to success.

The digital signage market is expected to grow from USD 19.61 billion in 2016 to USD 32.84 billion by 2023, at a CAGR of 7.4 percent between 2017 and 2023. LCD panels and video walls continue to drive the display side. But one of the biggest new growth drivers is direct-view LED in finer pixel pitch that is now more competitive in price with alternative displays. The prices for fine pitch direct-view LED are coming down, and the technology is seamless and almost infinitely expandable, with stellar images at any viewing distance.

“Several sectors dominate the LED video display market, including media/advertising, stadiums/venues, and retail,” says Chris McIntyre-Brown, Associate Director of Professional Equipment at Futuresource Consulting. These segments delivered over half the market value in the video display category last year. In 2016 the industry experienced a further drive into the retail space and a growing trend toward indoor applications. These included corporate, transport, and control room, which grew in value by 62 percent to surpass USD 1 billion. Much of this growth was driven by narrow pixel pitch direct-view LED, which has been hugely disruptive in the commercial display space, challenging LCD and projection platforms.

Key Questions to Ask Your Mounting Solutions Provider

As the use of displays in AV and digital signage booms, and as exciting new technology platforms such as direct-view LED come to market, why are many AV integrators and end users hitting operational and profitability roadblocks on installations? Because it's



The growth of direct-view LED is one of the primary market drivers. Shown here: direct-view LED being installed in a university center at Texas A&M.

too easy to fall into a commodity mindset that says, “Mounting solutions are similar—I’ll just use the mounting company we’ve always used.” Or, on the other end of the spectrum, it’s easy to fall into the trap of spec’ing in custom one-off solutions that sap the profitability from the job and don’t provide solutions that are scalable to future jobs.

Smart integrators avoid those roadblocks by asking these key questions as they select their display mounting solution provider:

- **Time is your most valuable asset:** The right structuring and scheduling will mean the difference between profit and loss on the job. Does the mounting provider deliver not just superior product—technically—but also work with you to structure and schedule the deliverables to fit the job schedule, exigencies, and nuances? And beyond just shipping mounts out to customers, do they also provide extensive in-the-field back-up and service, working with the integrator to make sure the displays are mounted and integrated in the most efficient way?
- **Off-the-shelf solutions for expanding your business:** Does the mounting provider have the right mounting solutions in their existing product line that take advantage of the latest mounting advances?
- **Beyond just “custom” mounting solutions:** Does the mounting solutions provider have a dedicated business unit that provides—beyond one-off custom designs—a dedicated solutions/engineering service that turns a risky custom job into a well-engineered, profitable one? And can those tailored solutions be scaled for future applications?
- **Is your mounting solutions partner also a proven partner of the top AV display manufacturers?** For smart AV integrators, mounting decisions are not separate from, but a key part of, both the integrator’s and the mounting company’s relationships with key OEM display suppliers (Samsung, Leyard, Planar, Christie, etc.) Does the mounting solutions provider have a long track record of working closely not only with those large display manufacturers, but also of designing new mounting products for their specific product lines?

Best Practices from Top Integrators and Demanding Users

Top AV integrators and their customers are finding new efficiencies—and increased profitability—when mounting any and all display configurations, from LCD flat panels to large LED video walls. And they’re doing that with one goal: to transform a market that previously swung from the commodity-driven hanging of flat panels to the overly cumbersome, custom, one-off, expensive engineering of large jobs.

Time is of the Essence

A top AV integration company that is on top of not just the technical trends in AV mounting but also the business-side changes is AVSIGroup, based in Houston, Texas. AVSIGroup designs systems and technologies for communication, collaboration, and display, and seamlessly integrates them into architectural spaces

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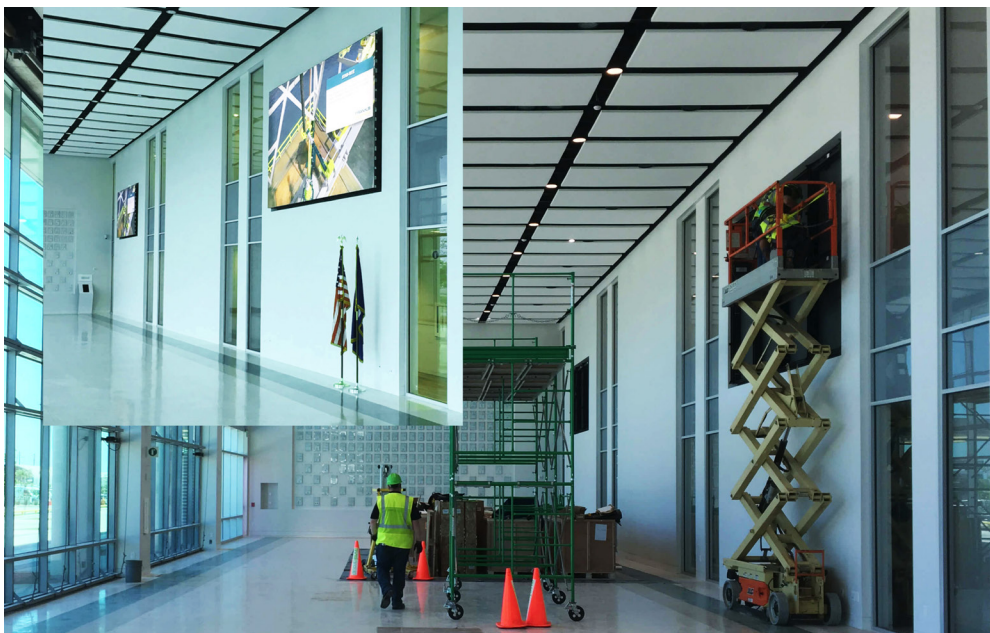
of all kinds. Their work covers all aspects of these projects, from conception to design/build/integration, preventive care, and maintenance of engineered systems.

According to Neal Hosier at AVSIGroup, who plays a critical role in the engineering process for many of AVSIGroup's largest and highest profile projects, it's all about the details, and how you pick—and work with—your mounting solutions partner. And that relationship works best when the mounting partner has, in-house, a dedicated business unit that provides not just the best off-the-shelf products or one-off custom designs, but also well-engineered, tailored, and scalable solutions.

"For many jobs, mounting is all about the simplest, best, and quickest," Hosier says. "And we learn those lessons over time—as to who has the best off-the-shelf solutions, that is important. I've been at this 30 years, having worked with a variety of mounting providers. Time is money, if you're an AV designer or integrator. And my guys know which mounting products are going to take them twice as long to put together out of the box. And they let me know right away."

Having worked with mounting provider Premier Mounts on almost all of their recent important jobs, Hosier sees several trends in the AV world, and he's honing the company's best practices to address those trends.

For a major direct-view LED installation in the great room of the administration building of Franks International, a large international company in the oil field service industry, the goal was to show off beautiful imagery of their ten-ton devices that grip the casing that goes down into oil wells. AVSIGroup worked with Premier Mounts—and that company's Premier Dedicated Solutions Business unit (PDS)—on a tailored solution. This installation took the best of their stock mounts but modified them for the application—while avoiding "custom" job costs and pitfalls. They tailored large scissor mounts for Planar LED walls that were 12 feet by eight feet, allowing the panels to extend out for servicing, since there was no rear access.



LED installation for Franks International, a large international company in the oil field service industry, in the great room of their administration building.

“The result of working with Premier Mounts’ PDS group was a great solution for a unique application,” says Hosier, “but one that I’m sure we’ll leverage for future jobs, because our relationship with Premier Mounts lets us do that.”

Hosier sees that trend of less rear access to video or LED walls, as well as more wireless connectivity to the displays, as trends that affect mounting on many jobs. There are more wireless devices today, as well as small form factor media players or PCs that go right behind the screen. And with ADA requirements, previously there was always a piece of furniture under the display. But today users can hang a thinner display, and a larger display, as a stand-alone, so it’s easier to conform to the typical ADA four-inch rule (on extension of the screen from the wall)—but then the issue becomes where to put the connectivity devices or media players. So mounting issues become more, not less, critical in today’s integration landscape.

A Retail Giant Looks Beyond “Custom” Mounting Solutions to Scalable Solutions

Tom Schneider, Lead Designer, Interactive Experience, Store Design, at Target is probably one of the savviest—and most demanding—end users of digital signage and AV displays in the country. Having begun his in-store technology design career at Best Buy, he joined Target to help them bring the very latest in-store digital experiences to the retailer’s millions of customers.

Target now has to compete with online shopping and get the shopper off the couch and into the store. So they have to create a better experience—and as part of that, they have to create some fun, share some information, and give some inspiration to shoppers. So Target is ramping up technology. And with a retailer at this level, it’s all about scale. “At the top levels of retail today,” says Schneider, “it’s no longer about digital signage, or digital displays. That’s the technology, but the focus from a marketing and a solutions perspective is enhanced experiences.”

Target has a new beauty floor pad, testing in 30 stores. Each area has two video projection screens. So how does Schneider value engineering and make it affordable, but with a solution that can be scaled? Technically, that is important: how do you scale and stay within the tech community (the installer community) that already uses this technology, to make it easy and scalable? Schneider’s role is to execute using the best resources that are reliable, predictable, and scalable when Target wants to take it to more store locations nationwide.

How do they do that? “If we do things nationally like we do at Target,” said Schneider, “we know how the national integrators are structured. Our top mounting solutions partner, Premier Mounts, knew the resources also that we had access to. That’s key: a mounting solutions provider that already has a great knowledge of, and relationship with, all the top AV integrators and also all the top display manufacturers, so that they act as your design and installation consultant.”

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Tom Schneider
Lead Designer,
Interactive Experience,
Store Design, Target

Target still uses LCD flat panels, but the company is moving more and more to direct-view LED and projection—all while keeping an eye on the “scalability” test so “custom” does not fall into the trap of “one-off.” Custom for Target means structuring the job in a way that works for the immediate need but that also can be scaled out in the future. For example, Target recently worked with Premier Mounts on direct-view LED, using Premier Mounts’ wall mount system that does not need front service and so saves on the construction costs associated with rear access mounting systems.

“Key to us,” says Schneider, “is the Premier Dedicated Solutions Business unit (PDS) that gives us that added confidence that we’re not just doing ‘solve-one-location custom’ but engineering and planning for efficiency and scale.”

Toward a New Tailored Solutions Paradigm for Display Mounting

Rich Pierro, who heads up the Premier Dedicated Solutions Business unit (PDS) services at Premier Mounts, says that for AVSIGroup, and for many of Premier Mounts’ top customers, “We act as an extension of the integrator’s install team. With LED for example, many integrators have not installed fine pixel pitch LED walls yet, so if we can train them while on site, it’s a win-win for everybody. And, as their full solution provider, we fulfill their immediate stock product requirement, engineer and manufacture tailored visual structures, and we perform the video-wall installation.”

The Premier Dedicated Solutions Business unit was recently strengthened and given more resources within the company, due to the unit’s success and track record as well as to increased demand in the industry for better, more consistent, more predictable mounting solutions for complex jobs.

Pierro and his team go beyond “custom.” For the team, it’s about scale. It’s about the level of complexity. What are they solving for, on a challenging job? Does it need to be heavily engineered, relative to their existing product line? Does it need prototyping? These are the issues that the Premier Dedicated Solutions Business unit addresses.

For the headquarters of a very large health care provider in New Jersey, Pierro and his PDS team addressed the challenges, with the integrator, of multiple LED arrays on one wall—they were all 11 feet high, but different widths, and they were all recessed into the wall.

Pierro and his PDS team worked with the AV consultant first. They could not go behind the wall. Also, they needed to be able to use all the displays as one image. And it needed to have all motorized, not manual, access. How would they mount large LEDs into a recessed wall and be able to scissor it out? With the solution they

“We are an extension of the integrator’s installation team.”

Rich Pierro
Premier Dedicated
Solutions Business
unit (PDS), Premier
Mounts



Premier Mounts
fine pixel pitch LED
structure testing and
training facility.

agreed on, they just push a button to bring it out to service it. “Don’t underestimate the importance of a motorized mounting solution,” says Pierro.

If you have a video wall with many panels and only a few hands available to service the cabinet, you can create safety risks for the person trying to pull the cabinet out to service it. The motorized solution not only keeps service technicians safe, but it also protects the investment in LED cabinets because the entire video wall moves out as a unit without flexing and risking damage to the LED cabinet. If you’re selecting a motorized mounting solution, be sure to check with your mounting partner to see if their system can be controlled through RF, IR, or RS232 or through control systems like Crestron, AMX, or Extron.

Playing Well with the Top AV Display Manufacturers

And for the most experienced, most demanding AV integrators, mounting decisions are not separate from, but are a key part of, both the integrator’s and the mounting company’s relationship with key OEM display suppliers. And they ask: does the mounting solutions provider have a long track record not only of working closely with those large display manufacturers, but also of designing new mounting products for their specific product lines? Prominent display manufacturers like Samsung, Planar, LG, Panasonic, and others have displays and screens in every part of this market. Your mounting provider should have the right mounting solutions in their existing product line that take advantage of the latest mounting advances from those top manufacturers. And they should also have vast experience working with those display providers on custom and finely tailored solutions.

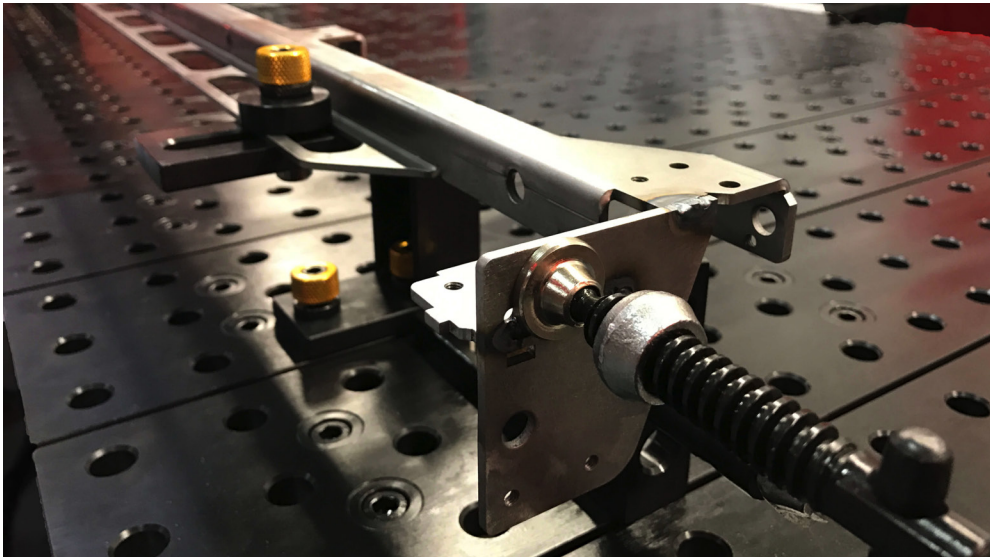
Ask your favorite display manufacturer: as a manufacturer of screens/displays, do they feel that some mounting solution providers are more in tune, in sync, with their displays—whether that be for “off the shelf” mounts or for “custom” and complex mounting? From both a purely technical spec perspective, as well as from an installation/service process perspective?



Premier Mounts\PDS
Production Facility,
Corona CA. NPP LED
Mount production,
final testing, and
packaging operations

Direct-view LED especially requires a partnership between the manufacturer, the mounting solution provider, and the integrator to ensure the end user’s satisfaction with the final product. Those manufacturers will share their experiences working with Premier Mounts that made the screens—and the AV integrator—look good to the customer and made the job easy to execute.

LED has different, and more delicate, mounting requirements than does a video wall made up of LCD panels. Integrating direct-view LED into architecture is much different than mounting other display technologies. No two manufacturers of LED tiles use the same configuration; there aren’t VESA standard mounting patterns; and the level of precision required at installation drives much tighter tolerances into



A welding operation
at Premier Mounts
facility in Corona, CA.

engineering and manufacturing processes. Also, the overall weight, size, and shape of large visual structures require careful planning and structural calculations to specify the proper architectural attachment methods and reinforcement.

According to Rich Pierro, Strategy and Business Development Consultant for Premier Mounts\PDS, “new display technology requires mounting solution partners who not only have off-the-shelf stock products, but who also possess the in-house engineering, manufacturing, and installation resources that ultimately deliver single-source partnerships and peace of mind to OEM manufacturers, integrators, and their clients.”

Pierro sees—from their perspective of providing engineered visual structures for all the LED manufacturers—a large increase in the use of direct-view LED for all applications, even in the higher education market, corporate boardroom, and other applications in the corporate AV market that were long the domain of the video projector or LCD panel.

Conclusion

Smart AV integrators are now following best practices as they choose a mounting partner—before they bid, and execute, their next job. Time is your most valuable asset—the right structuring and scheduling of the design and installation will mean the difference between profit and loss on the job. And the mounting part of the AV equation is crucial in that math. You need both the best off-the-shelf solutions for expanding your business—the right mounting solution partner can leverage solutions that take advantage of the latest mounting advances—and also the best tailored solutions for complex jobs. Look beyond “custom” mounting solutions to find a business solutions partner that can turn a risky “custom” mounting job into a well-engineered, well-structured, and tailored solution for your customer. Partnering with a mounting solutions company that provides stock products and full custom capabilities, along with engineering and installation services, can help ensure a safe and successful installation even when the requirements of the project involve unique structures, massive digital LED display sizes, and unique configurations.

Premier Mounts Industry Solutions

Premier Mounts serves the world's top AV integrators, brands, and enterprise businesses.

Premier Mounts' successful AV projects are at the intersection of the

best engineering, installation, solutions, and expertise required from a community of professionals. Premier Mounts combines vertical expertise in markets such as sports and entertainment, digital signage, hospitality, food service, retail, education, and commercial with a customer-first philosophy.

Premier Mounts boasts the longest-standing network of partners, which means that no matter where the project is or how tough the scope, a Premier Mounts partner is just down the street.

Today's complex AV projects require mounting solutions that enable new paradigms: convergence, efficient maintenance and upgrades, and most importantly, imaginative use of the digital display for information and entertainment purposes. With thinner, lighter, and more exciting displays, the design imperative has shifted from strength to creativity.

Price is important. Total costs are even more important. With elite design services, short lead times, and a commitment to delivering the right solution in a timely manner, Premier Mounts wins with service. Customers love the fact that they can reach a knowledgeable, experienced mounting professional with just one phone call.



For information:
www.premiermounts.com