ACTIVE LED VIDEO WALLS - DEMYSTIFYING THE AV ENIGMA

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The ever changing video market is reaching new heights with active LED video walls. From projection to plasma displays; LCD to LED, the continuous journey for large size display wall is always challenging. The indirect light of projection system, to the thick breaking lines of Bezel in LCD and LED is always disturbing the impact of the high resolution content. The cost of Micro LED panels and the alignment issues didn't allow it to be a success.

The evolution journey of direct LED video wall panel increased tremendously post pandemic. The most popular P10 is no more in tender specs now after the pixel sizes have gone down as low as 0.8 mm. (It is now lesser than earlier days LCD panel resolution).

Features like this, along with the seamless large size and flexibility to design it in any shape is making it a popular mode of display not only in OOH, but for indoor applications too.

The other factor is the contrast and brightness-10K lumens brightness is making the OOH possible to fight the day light brightness.

The projectors were slowly diminishing the indoor market with increasing market size of IFP panels. With introduction of 98", the projection systems in meeting rooms started losing its space. And now with the reducing gaps between the pixels, it has started losing space in auditoriums, large training and meeting rooms too.

The Indian market is getting flooded with numerous manufacturers, some of them are actual manufacturers, while many are just into white labelling of the products of China factories.

The right pick for the application is still a mystery for many integrators. The selection of the right product is a challenge in the absence of proper understanding of the technology and the components inside the panels. It is high time for the solution providers in AV industry to understand the important key factors of a video wall as the market size of these walls is significantly increasing due to their increasing applicability and demand.

Why Are Active LED Video Walls Becoming More Popular?

According to businessire.com, the Indian Indoor LED Display Market is projected to grow at a staggering CAGR of 19% during the forecast period 2020 - 2025.

This increase in business is due to the application right from shopping malls, retail business to NOC centres, board rooms, auditoriums, railway and airport to the outdoor advertisement segment.

LED display promotions can be favourable to pretty much every sort of business. All you need is the correct blend of inventiveness and incentive to grab the attention of all your prospective business customers.

Three key reasons active LED video walls are becoming more popular:

- **No seams:** In spite of thin bezels of flat panel displays when paired together to create video walls, and with LED installed properly, there isn't a single line, making it completely seamless.
- **Design flexibility:** The designer gets a free hand to make his/her own resolution, shapes and positions. The LED video walls can be flat, hollow, curve or oval shaped. Also, It can be transparent to be displayed on glass windows as well. The choice of various pixel sizes, brightness and weather proof options, makes it useful for a wider range of applications. The slim sizes along with addition of interactive overlay makes it useful for workplaces with a boundless pixel area. The hardware-based IP solution displays PCs and video sources in freely scalable windows on monitors and videowalls makes it useful for wider applications. All sources can be freely and individually placed, scaled and moved – even on a single monitor – for the simultaneous display of x-different sources. Thanks to the modular architecture, the solution can be extended to a virtually unlimited number of sources and screens.
- **Physical performance:** Can have enough light pixels to deliver 8K or more depending on the sizes LEDs are much brighter to operate in a bright sunny day in an outdoor application with IP68 making it weather proof, and can last in the field for 10 years (100000 hrs life) or longer. They also don't require much maintenance, they can do their own colour calibration (if at all required) and can be designed for a 24/7 application.