



About us

PowerOn Automations Private Limited incorporated in early 2000's - Pioneers in LED screens with creative designs for Fixed Installation Projects and Rental Applications for over 17 yrs.

We integrate the LED screens with Controllers and related Software. Our technical expertise team handles each project as per customized requirements. We ensure on best quality supply with high clarity outputs and prompt after sales service.

We make tailor-made LED Displays understanding our Customer's need and deliver it to their complete satisfaction.



Our vision is to be the foremost provider of innovative LED display solutions, inspiring seamless integration of technology and aesthetics.

We envision a future where our displays transform spaces, captivate audiences, and redefine visual experiences.

Through relentless innovation and unwavering commitment to quality, we strive to be seeking cutting-edge display solutions that leave a lasting impression.

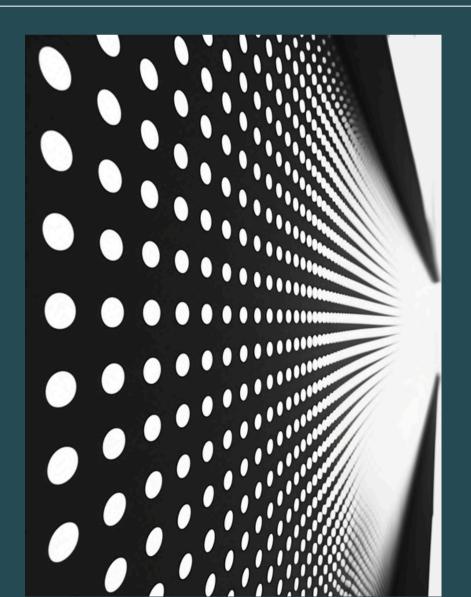


Our mission is to deliver unparalleled LED display solutions that exceed expectations in performance, reliability, and design.

Committed to sustainability, we aim to minimize our environmental footprint by offering energy-efficient displays and responsible business practices.

With a focus on customer satisfaction, technological excellence, and social responsibility, we aim to set new standards in the LED display industry."

)2	About Us, Vision & Mission
)4	Features of LED Videowall & Applications
05	IIndoor LED Videowall & Parameters
06	Outdoor LED Videowall & Parameters
07	Digital Standees / Posters
08	Structures & Cabinets
9	Controllers & Connections
0	Gallery of our Indoor Installations
1	Gallery of our Outdoor Installations
2	Gallery of special custom made designs
3	Information Blog
4	Assembly & System Integration
5	Rental LED Videowall



LED displays are a versatile and efficient display technology that offers superior brightness, durability, and flexibility. Their ability to deliver high-quality visual content in various environments makes them a popular choice for a wide range of applications, from advertising and entertainment to corporate and public displays.

Key Features of LED:

- Durability
- Energy Efficiency
- Environmental friendliness
- Flexibility in size & shape
- ▶ High Brightness
- High Refresh Rate
- ▶ High Resolution & Clarity

- Lightweight and slim design
- Long Lifespan
- Low Heat emission
- Modular Design
- Seamless Integration
- Versatile mounting devices
- Wide Viewing Angles



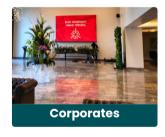




























Active LED Displays captivates audience that yields higher productivity and enhance advertisement values.







Particulars	Fine Pixel LED			Indoor LED			
Model	P1.2	P1.5	P1.8	P2	P2.5	Р3	P4
Pixel Pitch (mm)	1.2	1.5	1.8	2	2.5	3	4
Module Size (mm)	320*160	320*160	320*160	320*160	320*160	320*160	320*160
Module Resolution (Dots)	256*128	208*104	172*86	160*80	128*64	104*52	80*40
Pixel Density(Dots/m²)	640000	422500	288906	250000	160000	105625	62500
Max. Power Consumption (W/m²)	≤580	≤580	≤439	≤439	≤457	≤413	≤465
Avg. Power Consumption (W/m²)	≤194	≤194	≤147	≤147	≤153	≤138	≤155
Brightness (cd/m²)	600-1000						
Contrast	≥5000: 1	≥5000: 1					
Refresh Rate (Hz)	1920 - 4200 Hz						
Viewing Angle	160°						
Operating Temp (°C)	-20 — 60						
Input Power Voltage	AC110-220V± 15%, 50/60 (Hz)						
Life-Span	≥100000 Hours						
Controlling Feature (Offline model)	Asynchronous (In-built memory, LAN, HDMI, USB, Wifi, Mobile App, Cloud)						
Controlling Feature (Online model	Synchronous (Online, LAN, HDMI, DVI, DP, SDI, HD Signals)						
Cabinet Size(W* H, mm)	Depends on the individual project						







Outdoor LED Displays, with very high brightness for use in daylight and engages the attention of viewers from extra wider angles.







Particulars	Outdoor L	.ED)			Diecast Cabinet	
Model	P2.5	Р3	P4	P6	P8	P3.9	P4.8
Pixel Pitch (mm)	2.5	3.0	4.0	6.0	8.0	3.9	4.8
Module Size (mm)	320*160	320*160	320*160	192*192	320*160	250*250	288*288
Module Resolution (Dots)	128*64	104*52	80*40	32*32	40*20	64*64	60*60
Pixel Density(Dots/m²)	160000	105625	62500	27777	15625	65536	43264
Max. Power Consumption (W/m²)	≤648	≤786	≤909	≤946	≤866	≤800	≤800
Avg. Power Consumption (W/m²)	≤216	≤262	≤303	≤315	≤289	≤380	≤380
Brightness (cd/m²)	5000 - 70	5000 - 7000					
Contrast	≥5000: 1	≥5000: 1					
Refresh Rate (Hz)	1920 - 4200 Hz						
Viewing Angle	160°						
Operating Temp (°C)	-20 - 60						
Input Power Voltage	AC110-220V± 15%, 50/60 (Hz)						
Life-Span	≥100000 Hours						
Controlling Feature (Offline model)	Asynchronous (In-built memory, LAN, HDMI, USB, Wifi, Mobile App, Cloud)						
Controlling Feature (Online model	Synchronous (Online, LAN, HDMI, DVI, DP, SDI, HD Signals)						
Cabinet Size(W* H, mm)	Depends on the individual project						







Dynamic LED Displays on wheels for effective signages, program charts & welcome slides are popular for their versatility, high visibility and ease of use.







- ▶ Attractive & Effective communication
- Customized sizes
- Cost effective & Big savings
- Can play text, images & videos
- Easy Plug & Play System
- Portable and movable
- Stand alone on Wheels
- Various communication modes
- Wifi, USB, HDMI, LAN, Mobile Application & Cloud



Modular Frames for Wall Mounting Design:

Wall mounting LED Videowalls are predominantly assembled on a box frame structure which is totally modular in design. Specifically no welding is required and structure is assembled using tripod type accessories. Such system is unique in the Indian marker. The alignment is perfect and enables seamless finish. The assembly at site is done within a short period of hours and more importantly does not cause hindrance to aesthetic interiors of the client's site. These structures are made out of CNC machining process and are of 2mm crca powder coated sheet steel or galvanized material. The other assembly parts are made of either 2.5 crca electro plated parts or cast iron moulded parts. This design of LED videowall is a unique innovative design of our company in the Indian market.









- Easily expandable in width or height
- Flexible designs to suit site conditions
- ► Galvanized 2.00 mm sheet structures
- Modular non-welded structures
- > Optional cover plates in addition offers rigidity
- > Seamless firm & perfect alignment



Sheet Metal CRCA Cabinets



Diecast Aluminum Cabinets

A <u>Video Processor</u> converts video input signals into viewable content. The video sources being converted are usually HDMI, DVI, or VGA signals from cable boxes, media players, or computers. These signals are then converted for displaying on LED Screens.

Synchronous Controllers are Video processors, in which the computer has to be connected always to display the contents.

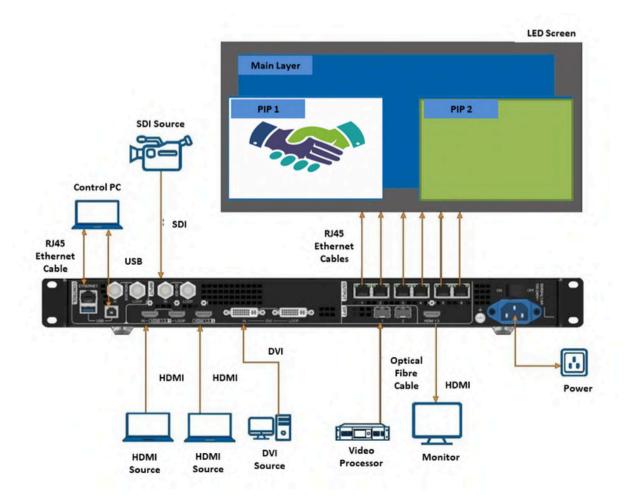
Asynchronous controllers has got inbuilt memory space and can play the contents, from its internal storage, hence the computer can be disconnected after transferring the messages.





Synchronous Controller

Asynchronous Controller



Few of our prestigious Indoor LED Videowall Installations:

























Few of our prestigious Outdoor LED Videowall Installations:

























Special Custom made designs of LED Videowall:



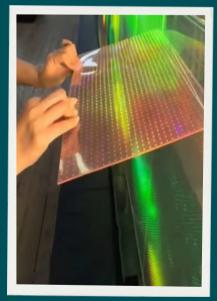






















Comparison of LED Videowall vs conventional projection methods







Description	LED VIDEOWALLS	PROJECTORS / TELEVISIONS
Brightness	LED video walls offer superior brightness, making them suitable for environments with high ambient light.	Limited brightness compared to LED video walls, can struggle in well-lit environments.
Resolution	High resolution with small pixel pitch options, allowing for detailed and clear images.	Varies widely, with high-end models offering good resolution, but often not as sharp as LED displays.
Colour Accuracy	Excellent color accuracy and contrast ratios.	Good, but can be affected by ambient light and projection surface.
Viewing Angle	Wide viewing angles ensure consistent image quality from different positions.	Generally good, but image quality can degrade at extreme angles.
Size & Shape	Highly customizable in size and shape, can create large and unconventional displays	Image size, determined by throw distance and screen size.
Installation	Professional installation; modular design allows for scalability.	Requires a flat projection surface. Rigid sizes only.
Durability	Highly durable, built to withstand continuous use and harsh conditions.	Less durable, sensitive to dust and environmental factors.
Maintenance	Requires occasional maintenance, and individual lamps / pixels can be replaced.	In case of repair, entire screen needs replacement.
Operating Cost	Low operating costs due to energy efficiency and longevity.	Higher operating costs due to higher maintenance of screen replacement.

LED Video Walls are best for large-scale, high-impact displays in environments with high ambient light or where flexibility in size and shape is needed.

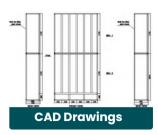
Televisions / projectors are suitable for home use and smaller office venues under essentially dim light.



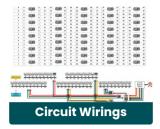








Detailed drawings marking the measurements and size of the LED videowall is prepared and approval taken from client before production.



Each copper cable is cut to size and crimped with cable sockets using industrial tools and fixtures. The wirings are complete with ferrules and cable ties to ensure firm connections over the life of display.



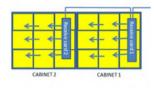
All inward components and raw materials are tested for its performance and certification as per BIS standards. At every stage of system integration, the procedural norms are verified and quality test is approved.



Wall mounting LED Videowalls are predominantly assembled on a box frame structure which is totally modular in design. Specifically no welding is required and structure is assembled using tripod type accessories. This design of LED videowall is a unique innovative design of our company in the Indian market.

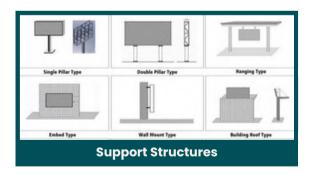


Outdoor LED display screens are assembled onto Metallic cabinets made out of 1.6mm or 2.0 thickness of CRCA sheet and duly powder coated or galvanized. The cabinets are made to IP 65 class of protection in the front side and IP 54 at the rear side.



Software

Software Configuration of LED Display: This vital element of the product is carefully carried out by application of configuration files and duly synced with Firmware updates. The circuitry wiring for data and power is done carefully taking into consideration of optimum conditions for flawless functioning over the life of the product.



Support Structure: We make suitable support structures to assemble outdoor LED display screens. Such support structures can be either free standing uni pole or double pole structures made of MS pipes and square pipes. Structures are also made for mounting the LED display on the façade / facia of the building either in straight, L shaped or Circular arrangements as per design specifications. Size of the pipe and square pipes are designed taking into consideration of the weight of the display unit and the height of the display fixing. Enough space shall be provided behind the LED display considering the convenience of maintenance work in future. Suitable cad drawings are made and taken approval of the client before fabrication.



Technical Training and Support:
As per user manual, complete training will be imparted to client from the point of using the LED display to its full potential. Timely online support will be given at any time and whenever it is called for, support will be extended at the site.

Rental installation of LED Videowall for your prestigious events

We have another verticle as LED Rental Division servicing clients for over 17 years, with our LED Videowalls, to add grandeur life to your events and celebrations.

We are equipped with large inventory of state of the art Full Colour LED Display Screens of P3 and P2 series, to a total volume of 5,000 sq.ft.. Started with 4 cabinets and now flourished into various models put together of 2500 cabinets

We also have sophisticated controls such as; Advanced video processors from Novastar; Multi Display DATATON Watchout Servers; Servers of Resolume Avenue and Arena and big library of graphic files. We have in-house graphic designer for making 3D and anamorphic contents.

The services of our Professional team of Administrators, Engineers and Support Staff are our core strength area. With utmost care and commitment, we are trained to execute assignments to the Delight of Customers.























- Annual / Cultural Fests
- Any Celebrations
- Audio Launch
- Conferences
- Corporate Events
- Inauguration Events
- Medical Conferences
- Music Concerts
- ▶ Public Announcements
- Sports Events
- > Trade Shows / Exhibitions
- Wedding Events

Stunning Displays, Unforgettable Impressions LED VIDEOWALLS

Please Contact us for further details

POWERON AUTOMATIONS PVT. LTD.
S 6, PHASE 2, DR. V.S.I. ESTATE,
THIRUVANMIYUR, CHENNAI – 600 041.
TAMILNADU, INDIA

CONTACT : +91 96000 86547 / +91 96000 10891

EMAIL: ledboards@poweronled.in