

ACTIVE LED: INDIA'S FIRST MANUFACTURING FACILITY

*In a significant step towards strengthening India's LED display manufacturing ecosystem, **LEDX Technology** was introduced, reflecting the long-term vision to enhance quality control, streamline supply chains, and build a resilient 'Make-in-India, for the World' foundation. With a strong focus on innovation, process-driven manufacturing, and global benchmarks, the facility is all set to place India firmly in the global spotlight.*



INNOVATION MEETS MANUFACTURING PRECISION THROUGH **LEDX TECHNOLOGY**

Strengthening India's Active LED Manufacturing Ecosystem

Founded over 25 years back, Xtreme Media was born from **Sanket Rambhia's** inspiration from Times Square and vision to transform cityscapes in India through impactful LED displays—an ambition that has since positioned Xtreme Media as one of India's largest active LED display brands.

As the business scaled across diverse applications and geographies, the need for backward integration became evident. While India has strong system integration and assembly capabilities, critical components and processes remained dependent on overseas supply chains. This brought forth the immediate need to reduce overdependence on one

geography.

LEDX Technology was therefore conceived as a strategic move towards vertical integration—giving Xtreme Media greater control over quality, consistency, delivery timelines, and supplier reliability, while also creating a manufacturing base in India that is future-ready and capable of serving both domestic and global markets.



SMT AND POST SMT LINES



AGEING PROCESS



CABINET ASSEMBLY

INAUGURATION AND OPERATIONAL EXCELLENCE

LEDX was inaugurated in January 2026, with the factory going live in an accelerated timeline of just 11 months, a reflection of focused execution and strong operational planning. Equally challenging for the factory's successful commissioning was the alignment of vendors with LEDX's quality and performance benchmarks. Close collaboration during the setup phase ensured that supplier ecosystems were integrated seamlessly into the manufacturing vision of LEDX, enabling the facility to go live with consistency, reliability and long-term scalability.

Strategically located near the airport and port, the manufacturing facility offers significant logistical advantages, enabling faster movement of materials and improved supply chain efficiency.

The facility is overseen by a highly experienced engineering team, led by factory managers with over two decades of industry expertise, and supported by robust in-house R&D and proprietary intellectual property.

MARKET VISION AND LONG-TERM STRATEGY

Built on the pillars of Innovation, Quality, and Sustainability, and driven by a vision to position India at the forefront of global active LED display innovation and manufacturing excellence, LEDX stands firmly for *'Make-in-India, for the World'*.

While the LED display market in India has grown rapidly, quality variation, inconsistent component sourcing and dependence on fragmented overseas suppliers have remained persistent challenges for many around the world.

LEDX was established to address this very gap by creating a dependable manufacturing ecosystem focused on process control and standardised quality benchmarks. Beyond strengthening Xtreme Media's own supply chain, the facility is designed to support the wider industry by offering reliable, India-based manufacturing capabilities that reduce uncertainty around quality, timelines, and after-sales continuity.

For OEMs and ODMs seeking reliable white-labeling or end-to-end manufacturing solutions, LEDX is the partner of choice.

SCALE, STRUCTURE AND AUTOMATION

Spread across 10,000 sq. meters, this built-to-suit factory has been engineered around machines and processes from day one, with optimised floor loading, utilities, and a strict one-directional material flow that ensures efficiency, cleanliness, and safety. The factory also has an annual production capacity of 50,000 sq. meters.

At the heart of LEDX is a fully integrated manufacturing ecosystem—from incoming material inspection to final ageing and dispatch. Its advanced SMT infrastructure, planned for five scalable lines, is equipped with top-of-the-line machines and operates within an ESD-safe, dust-minimising epoxy-floored, climate-controlled environment, maintained at approximately 24°C and 40–50% humidity for precision and process stability.

Fully automated post-SMT processes include conformal coating for indoor modules and automated sealing and waterproofing for outdoor products, followed by rigorous module- and cabinet-level ageing of up to 72 hours.

Quality is engineered into every step

through a multi-layered assurance framework supported by high-precision Japanese and Korean equipment. This includes Incoming Quality Control (IQC), Solder Paste Inspection (SPI), Automated Optical Inspection (AOI), Pick & Place machine, Reflow Soldering Oven, IP validation, Conformal Coating Machine, AB Glue Machine, Screwing Machine—all focused on delivering long-term field reliability, not short-term performance.

PRODUCT PORTFOLIO AND TECHNOLOGIES

LEDX will manufacture a comprehensive range of LED display solutions spanning fine pitch, indoor, outdoor and rental applications, designed to address diverse client requirements across sectors. The pixel pitches would range from 0.9mm to 20mm.

The fine pitch LED display portfolio will incorporate advanced technologies such as flip-chip COB, deep black technology for enhanced contrast, true-colour reproduction, and common cathode design for improved energy efficiency.

Indoor displays are engineered with

high brightness levels, nano-coating for moisture protection, slim and lightweight cabinets, and a common hub card architecture that enables easy pixel-pitch upgrades and long-term scalability.

The outdoor LED display range is designed for demanding environments and will feature ultra-high brightness levels of up to 10,000-nits, IP66 ingress protection to withstand harsh weather conditions, and robust construction for consistent performance in public and high-impact outdoor settings.

The factory features a comprehensive portfolio of rental LED displays, catering to both indoor and outdoor applications to suit varied rental needs.

CUSTOMISATION AND CO-INNOVATION

At LEDX, customisation is driven through a structured co-innovation approach. From concept to creation, the team collaborates closely with clients to design and engineer custom LED display modules that are precisely tailored to their application needs. This begins with understanding the client's vision, technical requirements, and environmental

considerations, followed by joint development with the in-house engineering and R&D teams.

By integrating design, engineering, and manufacturing under one roof, LEDX enables faster prototyping, seamless iteration, and scalable production. This collaborative model ensures that every solution is not just customised, but purpose-built—delivering optimal performance, reliability and long-term value aligned with the client's objectives.

For OEMs and ODMs seeking reliable white-labeling or end-to-end manufacturing solutions, LEDX is the partner of choice.

CONCLUSION

LEDX Technology stands as a decisive response to the growing need for quality consistency, supply-chain reliability, and advanced manufacturing capabilities within the LED display industry. With its strong operational framework and global outlook, LEDX not only strengthens the company's supply chain but also contributes meaningfully to positioning India as a credible hub for active LED display manufacturing excellence.