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P1.86 | INDOOR LED DISPLAY

- **Ultra-Fine Pixel Pitch** – 1.86 mm spacing for ultra-clear, high-definition indoor visuals.
- **Wide Viewing Angle** – Bright, vivid, and accurate colors from every direction.
- **High Brightness & Refresh Rate** – ≥800 cd/㎡ and ≥1920 Hz for smooth, flicker-free images.
- **Compact & Lightweight** – 321*160 mm module, only 0.6 kg for quick and easy installation.

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LED Module Technical Parameters

Product: P1.86 Indoor Full Color LED Display (SMD1212 – 1R1G1B)

Item	Parameter
Model Number	P1.86
Module Size	321 × 160 mm
Pixel Pitch	1.875 mm
Pixel Density	284,444 dots/m²
Pixel Configuration	1R1G1B
LED Package	SMD1515
Module Resolution	128 × 128 dots (W × H)
Best Viewing Distance	1.8 m – 10 m
Panel Current	6 – 6.5 A
Max. Power Consumption	45 W
Module Thickness	16 mm
Module Weight	0.6 kg
Drive Type	Constant Current Drive
Scan Mode	1/32 Scan
Port Type	HUB75E
Brightness (White Balance)	≥600-1200 cd/㎡
Refresh Rate	≥1920 Hz
Ingress Protection (Front/Rear)	IP30 / IP20
Maintenance Type	Front Service
Life Span	≥ 100,000 hours

2. Product Features

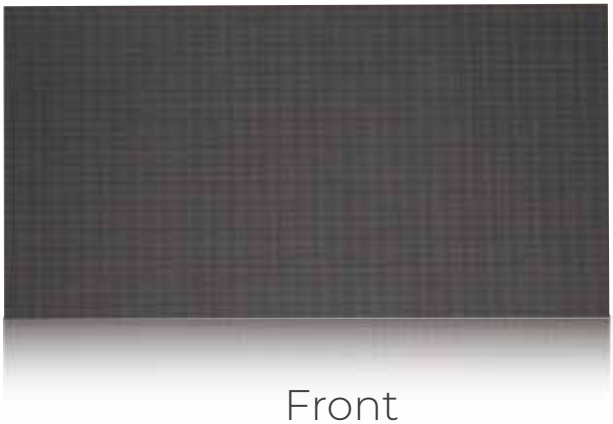
- Ultra-Fine Pixel Pitch (1.86 mm): Enables ultra-high resolution indoors for stunningly clear and detailed visuals.
- Wide Viewing Angle: Delivers consistent, vivid colors from all directions.
- 3-in-1 SMD LED Technology: Superior RGB color mixing for lifelike and vibrant images.
- Lightweight & Compact: Small footprint and reduced weight allow easy installation and removal, saving both time and labor.
- Advanced SMD Packaging: Ensures brightness, uniformity, wide viewing angle, and stable performance.

3. Core Components

- LEDs: High-grade 1515 black LEDs with premium chips from world-renowned manufacturers, ensuring long lifespan and excellent image quality.
- Driving IC: High refresh rate, high grayscale constant current IC from top global manufacturers, ensuring superior driving performance and stability.
- PCB: Multi-layer circuit design for uniform current distribution, efficient heat dissipation, enhanced EMI resistance, and prevention of color block issues at low grayscale levels.
- Drive & Control: Dedicated 16-bit constant current IC with high grayscale and refresh capability, plus a unique shadow-elimination circuit to protect LEDs and prevent surge leakage.

Module Image Display

Back



Front

5. Packaging

- Packaged in high-quality cardboard boxes.
- Equipped with protective corner covers and pearl cotton inserts to prevent damage during handling and transportation.

6. Installation

Simple, efficient installation with modular design.
Application Areas: Government halls, corporate lobbies, conference rooms, exhibition centers, commercial complexes, stage performances, event venues, and more.

Lifting type

- The LED display is suspended from the ceiling using metal supports.
- Best suited for large venues like airports, train stations, shopping malls, or conference halls where wall or floor space is limited.

Mosaic Installation

- The LED screen is embedded into a wall, creating a flush, seamless appearance.
- Ideal for indoor applications in lobbies, control roor or exhibition halls where aesthetics and space-savi are important.

Wall Style

- The LED display is directly mounted on the wall surface.
- Simple, cost-effective installation for meeting roor classrooms, advertising boards, or retail stores.

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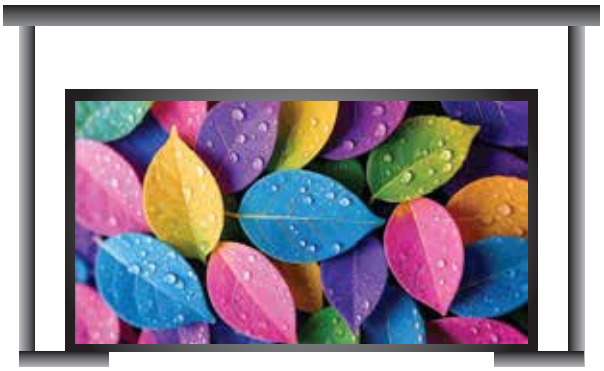
Hanging Type

- Similar to lifting, but designed with a top-mounted frame for support.
- Commonly used for indoor advertising, stage backdrops, or event halls.



Floor Style

- The LED display is fixed on a free-standing floor structure.
- Suitable for exhibitions, temporary events, or locations where wall mounting isn't possible.

Pole Mount

- The LED screen is installed on a single or dual pole stand, usually outdoors.
- Perfect for outdoor advertising, roadways, public squares, and information boards.

6. Usage & Safety Guidelines
Working Environment

- Indoor use only.
- Avoid high temperature, humidity, or corrosive (acid/alkali/salt) environments.
- Keep away from flammable materials, gases, and dust.
- Operating temperature: -20°C to +50°C (optimal: -10°C to +40°C).
- Storage temperature: -30°C to +60°C. Store in a dry, ventilated place away from corrosive substances and flammable materials.
- Avoid strong impact or sharp object collisions during transport.

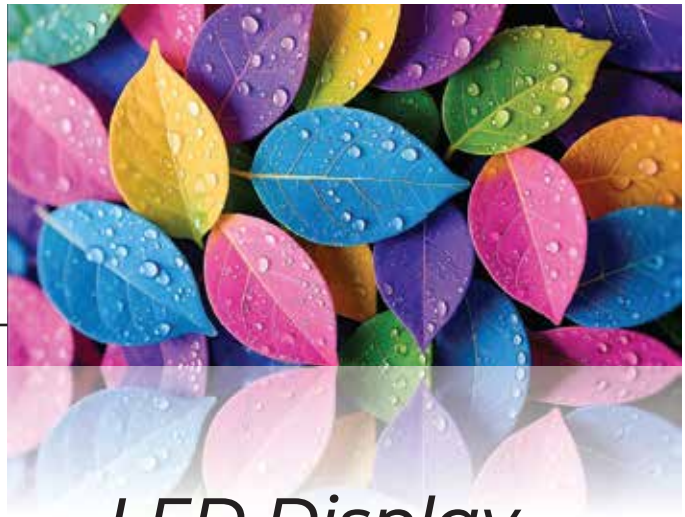
Operation

- Do not reverse power terminal connections.
- If malfunction occurs during the warranty period, return to the manufacturer or repair under authorized after-sales guidance.
- Handle carefully during assembly/disassembly to prevent tool damage.
- Ensure proper grounding and protection against lightning and static electricity.
- Do not switch power on and off repeatedly within 1 minute.
- Avoid long-term shutdown:
- Use at least once every 15 days, powered on for 4 hours.
- In high humidity environments: use weekly for 4 hours.
- Do not display a full-white image at maximum brightness for more than 30 minutes. Dynamic video playback is recommended.

Cleaning

- Clean the module surface with a soft-bristle brush only.
- Do not use liquids or solvents, as these may damage the LEDs.

7. Wiring Diagram



LED Display Controller

Video Splicer

Video Matrix

Switcher

Computer

Surveillance Camera

Wireless Router

Video Camera

Media Player

Mobile Device

Input Source

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Contact US

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