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Samsung LED signage

For more information about The Wall, visit www.samsung.com/business or www.samsung.com/displaysolutions

Samsung Electronics Co., Ltd.
416, Maetan 3-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do 443-772, Korea

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The Wall
for Virtual production

Transforming the production process concept with The Wall

Due to the development of the latest game engines and real-time rendering technology, the use of virtual production is growing rapidly.

Virtual production offers filmmakers and producers a number of benefits, especially in terms of efficiency. It reduces the cost and lead-time of production compared to filming on location or using traditional green screen. Filmmakers and actors can interact with the actual backgrounds on display resulting in a clearer understanding of the content and focusing more on directing or acting. Production meets Post Production.

Samsung The Wall delivers the purest colors, superior contrast ratio and linear grayscale required for virtual production. The Wall is built for any studio environment offering custom screen sizes and design to streamline production process.

Meeting the needs of the virtual production industry
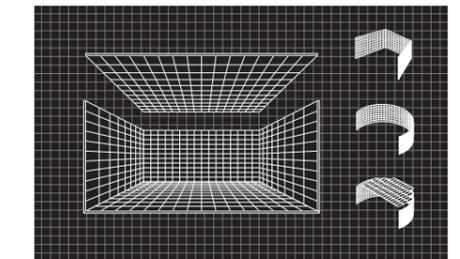

Superior picture quality

- Provides superior contrast ratio using MICRO HDR technology
- Displays twice the purity* of colour accuracy through Ultra Chroma technology
- Deliver true, natural shadow details via 20bit processing and linear grayscale

* Figure is based on internal testing standards against Samsung's conventional LED Signage.

Fit for the studio

- Minimizes flicker lines through industry top level 7,680 Hz refresh rate
- Ensures every screen is synchronized, with Framelock
- Showcases smooth and clear fast-paced visuals, at 120fps, with MICRO Motion

Customizable design

- Offers flexible screen sizes, with modular technology
- Enables custom studio design2, supporting various installation options such as ceiling, curved and L-type

Deliver **unparalleled contrast ratio** through **MICRO HDR**

Present **accurate color** with **Ultra Chroma Technology**

Showcase **shadow details** through Linear **Grayscale & 20bit Processing**

Prevent **flicker lines** through 7,680 Hz refresh rate

Conventional LED   The Wall

Provide **smooth and clear visual** in fast-paced motions with **120 FPS MICRO Motion**

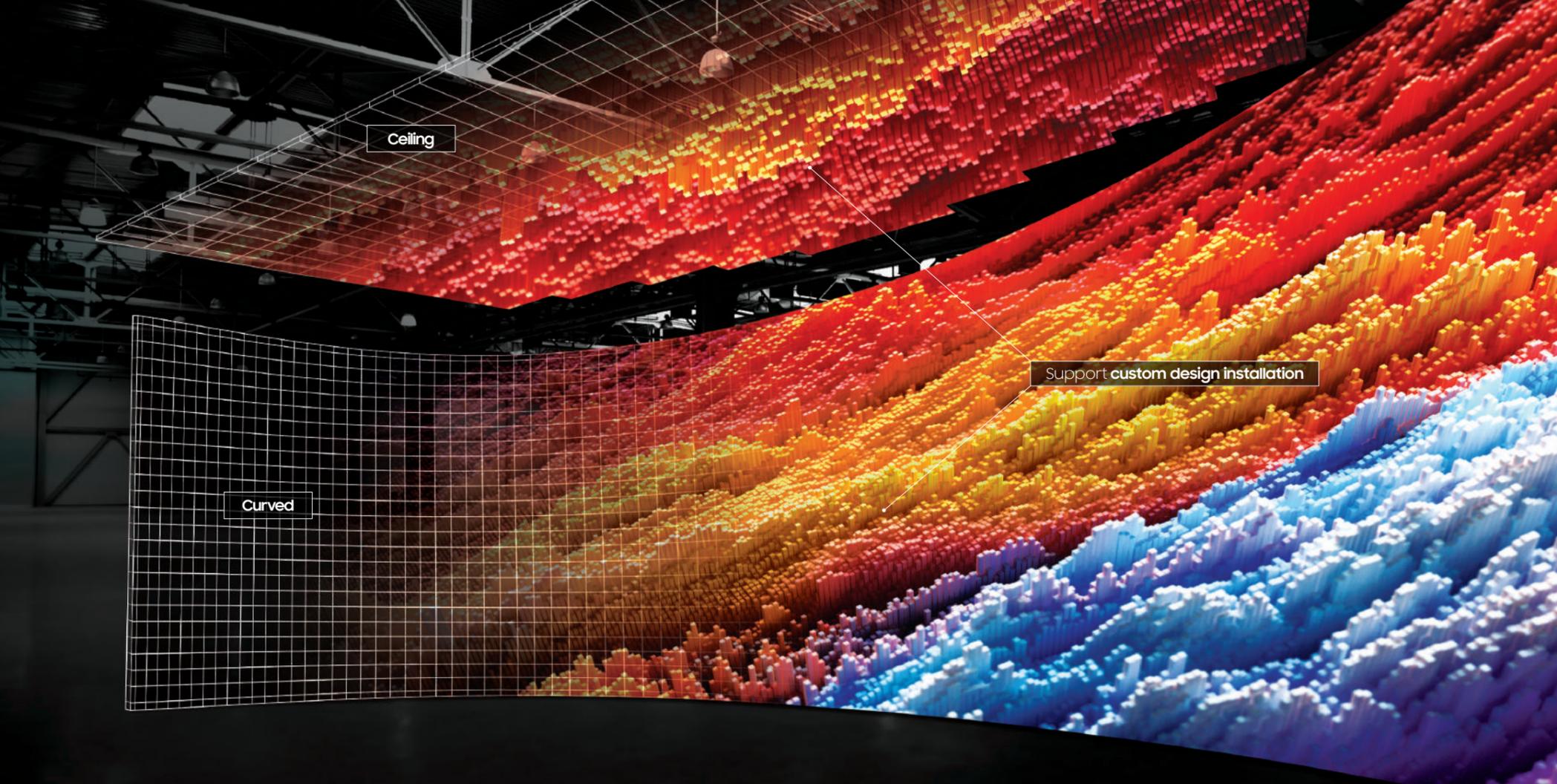Ensure **frame synchronization** through **Framelock**

Conventional LED   The Wall

Superior picture quality

When it comes to creating content with virtual production, picture quality is one of the most important factors. LED displays in virtual production are used as a background, with the aim of presenting a realistic 3D scenery on camera. This requires a high-resolution display delivering accurate colors, superior contrast ratio, and natural grayscale. The Wall features MICRO HDR to illuminate ideal peak brightness and contrast in every scene for precise, true-to-life imagery. Plus, with Ultra Chroma Technology, The Wall ensures every color is shown as it was intended for twice the purity* of color. The Wall's 20bit processing and linear grayscale highlights intricacies in every scene, delivering continuous natural shadows and pure tones.

* Figure is based on internal testing standards against Samsung's conventional LED Signage.

Fit for studio shooting

There are many concerns associated with using LED displays in-studio. There are flicker lines which occur when shooting the image on display through a camera. Also, when multiple screens are used, the screens may not synchronize with each other, resulting in screen tearing. The Wall addresses these concerns, offering all features required for a professional studio setting. The Wall minimizes flicker lines by supporting an industry top level 7,680 Hz refresh rate. Additionally, the refresh rate can be adjusted based on camera frequency. The Wall's Framelock guarantees all content is synchronized to prevent screen tearing. Also, The Wall converts 60fps video signals into a 120fps video stream, removing motion judder and enabling smooth and clear content in slow motion shooting.

Ceiling

Support **custom design installation**

Curved

Customizable design

The Wall has full flexibility to build an ideal studio for any customer need. Every studio has a different size of given space, and the required screen size is inevitably different. As a modular display, The Wall is completely free to scale up or down according to the studio environment. In addition, The Wall provides various installation options -concave, convex, inclined, L-type position, and more, providing custom design support according to the type of shooting of each studio.

Specifications

Model		IWA		
		IW008A	IW012A	IW016A
Physical Parameter	Pixel Pitch	0.84 mm	1.26 mm	1.68 mm
	Diode Type	Flip-chip RGB LED	Flip-chip RGB LED	Flip-chip RGB LED
	Cabinet Size (LxHxD)	806.4 x 453.6 x 36.5 mm	806.4 x 453.6 x 36.5 mm	806.4 x 453.6 x 36.5 mm
	Cabinet Weight	11.2 kg / 30.6 kg	11.2 kg / 30.6 kg	11.2 kg / 30.6 kg
Optical Parameter	Brightness (Peak/Max) (1)	1,600 nit / 500 nit	1,500 nit / 800 nit	1,400 nit / 1,000 nit
	Contrast Ratio (2)	24,000 :1	24,000 :1	21,000 :1
	HDR Compatibility	LED HDR / HDR10+ support / AI Picture	LED HDR / HDR10+ support / AI Picture	LED HDR / HDR10+ support / AI Picture
	Viewing Angle (Horizontal / Vertical)	170° / 155°	170° / 155°	170° / 155°
	Bit Depth	16 bit (Internal processing 20bit)	16 bit (Internal processing 20bit)	16 bit (Internal processing 20bit)
Electrical Parameter	Video Rate	100/120 Hz	100/120 Hz	100/120 Hz
	Input Power Range	100~240 VAC, 50/60 Hz	100~240 VAC, 50/60 Hz	100~240 VAC, 50/60 Hz
	Power Consumption - Max	476 (W/m²) / 174 (W/Cabinet) (TBD)	383 (W/m²) / 140 (W/Cabinet)	411 (W/m²) / 150 (W/Cabinet)
	Power Consumption - Typ	355 (W/m²) / 130 (W/Cabinet) (TBD)	233 (W/m²) / 85 (W/Cabinet)	225 (W/m²) / 82 (W/Cabinet)
	Refresh Rate (3)	11,520 Hz	11,520 Hz	15,360 Hz
Operational Parameter	Power Redundancy	Yes	Yes	Yes
	Working Temperature / Humidity	0°C~+40°C / 10%~80%RH	0°C~+40°C / 10%~80%RH	0°C~+40°C / 10%~80%RH
	Storage Temperature / Humidity	-20°C~+45°C / 5%~95%RH	-20°C~+45°C / 5%~95%RH	-20°C~+45°C / 5%~95%RH
	IP Rating	IP20	IP20	IP20
	LED Lifetime	150,000 hours	150,000 hours	150,000 hours
Connectivity	Controller	SNOW-AAE	SNOW-AAE	SNOW-AAE
	Connectivity		Optical ※ HDBT is used for connecting only BT/WiFi module	
Certification	Safety	62368-1, 60950-1	62368-1, 60950-1	62368-1, 60950-1
	EMC	Class B	Class B	Class B
	Eye-protection	TUV Eye Comfort	TUV Eye Comfort	TUV Eye Comfort
Service	Service	Front	Front	Front
Features	Operating System	Tizen 6.0	Tizen 6.0	Tizen 6.0
	MagicINFO	Yes	Yes	Yes
Accessories	Accessories	Décor Frame (Standard), Frame Kit	Décor Frame (Standard), Frame Kit	Décor Frame (Standard), Frame Kit
Special Installation	Curve	Concave(6000R), Convex(6000R), L-type	Concave(6000R), Convex(6000R), L-type	Concave(6000R), Convex(6000R), L-type
	Inclination	Forward, Ceiling	Forward, Ceiling	Forward, Ceiling
	Rotation	N/A	N/A	N/A
	Other (3)	Hanging, Stacking, Dual-sided, Movable	Hanging, Stacking, Dual-sided, Movable	Hanging, Stacking, Dual-sided, Movable

(1) Peak value according to IDMS (Information Display Measurement Standard)
(2) Measured under 10lux light. Contrast in darkroom exceeds 1000000:1
(3) Referring to visual refresh rate

Size Chart

146" 182" 219" 255" 292"

4K 5K 6K 7K 8K

3.2 × 1.8m (10.6 × 6.0 ft)   4.0 × 2.3m (13.2 × 7.4 ft)   4.8 × 2.7m (15.9 × 8.9 ft)   5.6 × 3.2m (18.5 × 10.4 ft)   6.5 × 3.6m (21.2 × 11.9 ft)