

Dec. 2021

LG Broadcasting Display Solutions

LED Signage | Video Wall | LG UltraFine Display OLED Pro | Transparent OLED









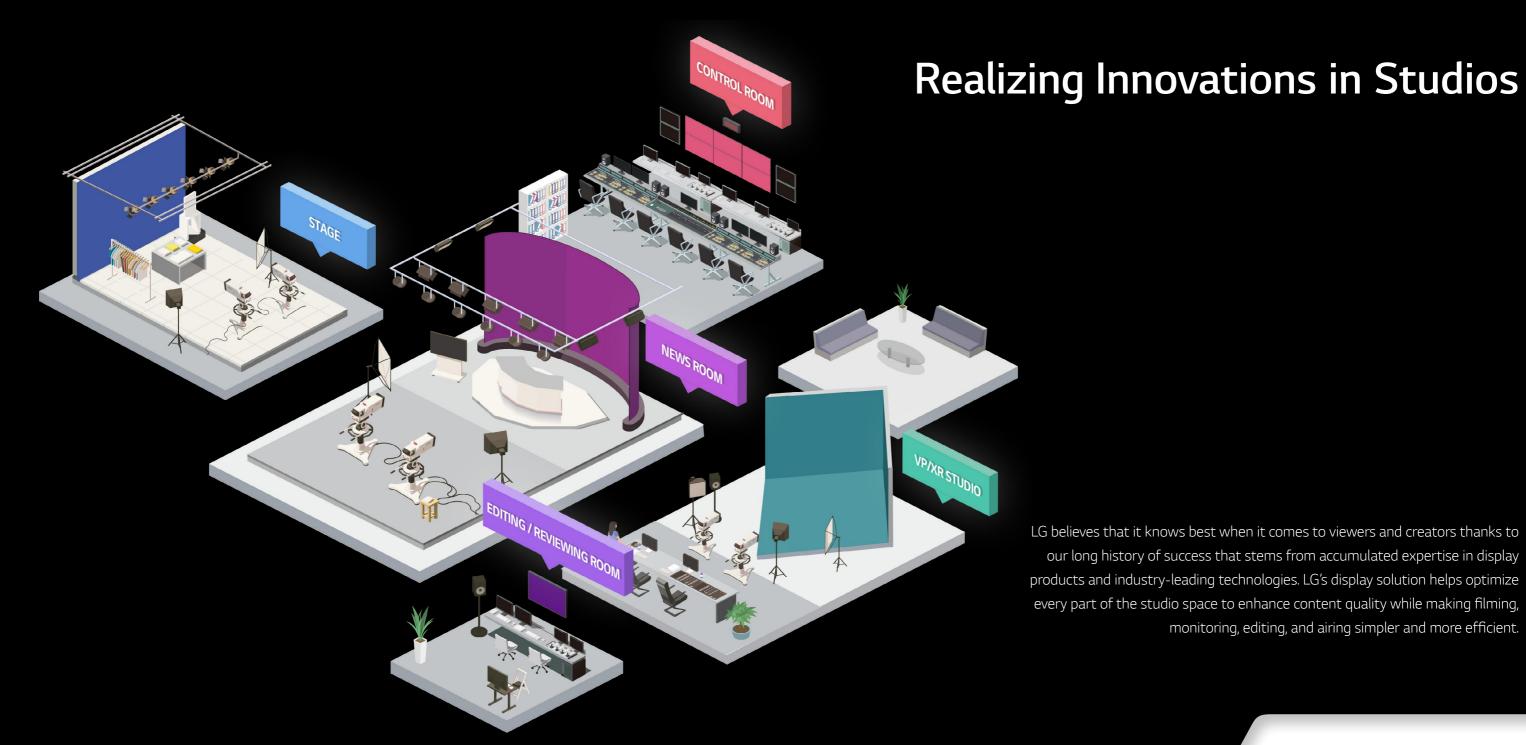




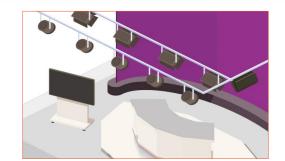
Digital technology for motion pictures and imagery have been dramatically improving. Along with this trend, broadcasting industry and television networks continue to raise the bar on studio backdrops and set designs as they look for ways to engage viewers and present stories with compelling visuals.

At the same time, there has been a dramatic increase in attempts to modernize studios and production processes by adopting the latest technologies to provide high-quality content. One of the most evident changes is the mega-sized backdrops in newsrooms and transparent displays for supplementary content. Also, bezel-less, lower pitch LED displays are being adapted to realize innovative studio designs. The latest revolution of 'Metaverse' is further expected to push equipping the broadcasting industry with technology to create VR/XR/AR video content.

In addition, as production and editing of high capacity 4K UHD video contents become more prominent, studios are improving infrastructures for these activities.



BIRD'S EYE VIEW



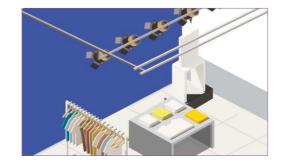
News Room

LG LED Bloc Indoor LED (LSCB) LG MAGNIT Transparent OLED



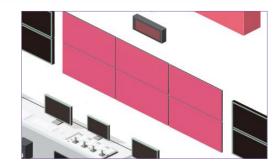
VP / XR Studio

LG LED Bloc / LG MAGNIT Ceiling LED (LSCA, GSCA) Floor LED (LFCG) LG UltraFine Display OLED Pro



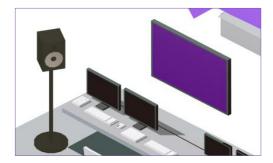
Stage

LG LED Bloc Indoor LED (LSCB) Transparent OLED Stretch



Control Room

Video Wall UHD Signage LG UltraFine Display OLED Pro



Editing / Reviewing Room

LG UltraFine Display OLED Pro

NEWSROOM

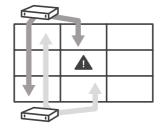
Delivering News with Impact and Accuracy

The newsroom is at the center of any network, and must be able to fully engage viewers so they can find out about the events occurring almost every second around the globe. Therefore, news reporting must be dynamic and intuitive. For this reason, backdrops have become the key for successful news delivery.

Brilliant Images with Excellent Reliability



High resolution with a fine pitch or below enhances the accuracy and impact of message delivery.



With optional embedded back-up power supply unit and signal redundancy, customers can assure the continuous operation of the screen.



Long product lifetime and reliable operation secure stable real-time airing.



LG LED Bloc (LSAA) SMD, 4 Pixels in PKG

Optimum Cable-less Al-powered Image Processor (alpha7) High Reliability



Indoor LED (LSCB)

Ultra Slim Depth Mini and Curved Cabinet Easy & Seamless Operation



LG MAGNIT (LSAB)
1R, 1G, 1B (Chip on Board)

Infinity Black
High contrast ratio (150,000:1,10lux)
Processing Depth : 20bit



Transparent OLED (55EW5PG-S)

High Transparency (38%, Set) Alluring Design with a Stand Slim & Sleek Design



HOME SHOPPING STAGE

A Space Where Products **Become Stars**

Live home shopping shows are all about making the product shine. The stage for live home shopping shows must be focused on delivering every little product detail while providing accurate information and communicating with viewers.

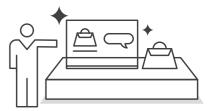
Engineered for Effective Communication



Large-scale LED displays help to deliver life-like product details to the viewers at



Eye-catching and unique product display stands can be created with ultra stretch



Advantages of the stage space and live situation are maximized by showing the backgrounds through transparent OLED displays.



(LSCB)

Ultra Slim Depth Mini and Curved Cabinet



LG LED Bloc (LSAA) SMD, 4 Pixels in PKG

Optimum Cable-less



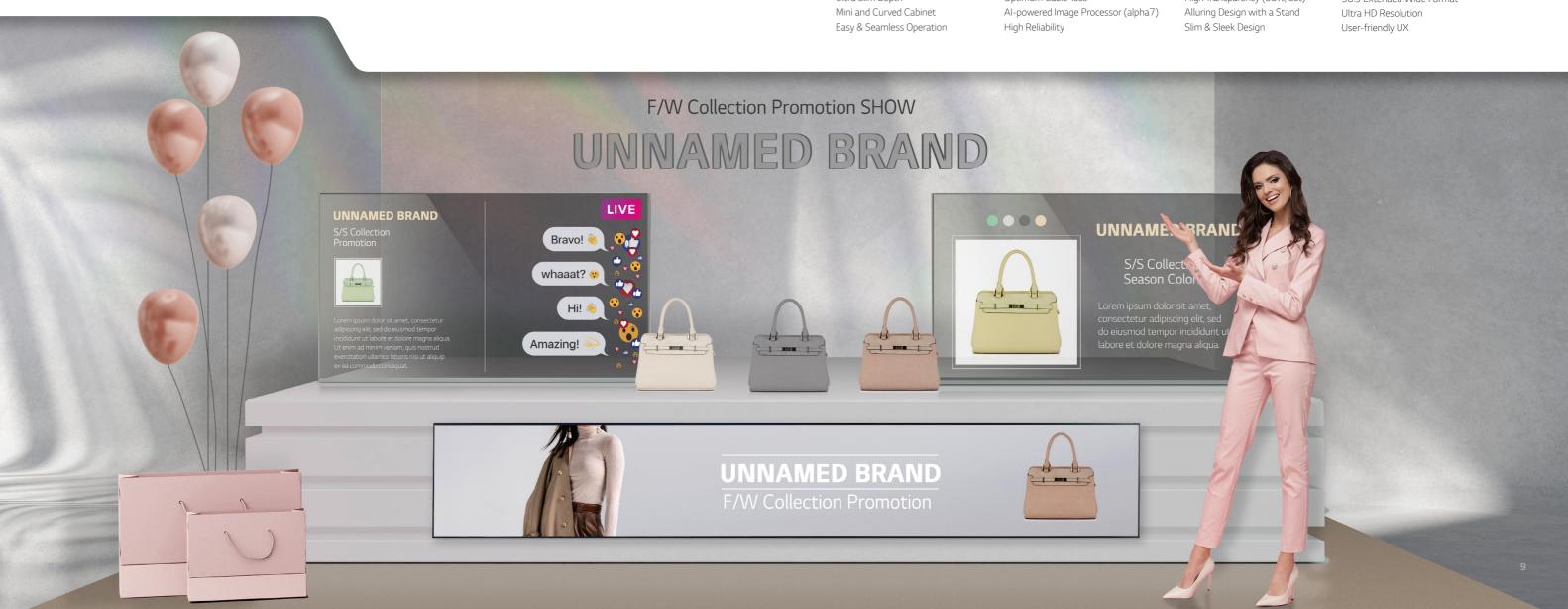
Transparent OLED (55EW5PG-S)

High Transparency (38%, Set) Alluring Design with a Stand Slim & Sleek Design



Ultra Stretch Signage (86BH5F)

58:9 Extended Wide Format Ultra HD Resolution

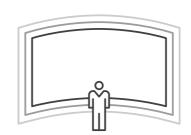


VP/XR STUDIO

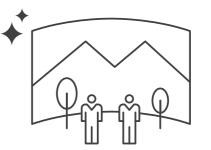
Transforming Imagination into Reality

With the help of computer graphics, anything is possible with virtual production studios. This cuttingedge technology can create immersive content and dramatically lower production costs by eliminating the need to find the perfect location and physically being there.

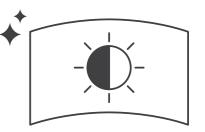
Super-sized and Super-realistic



Offered in extremely large screen sizes and in various shapes for realizing diverse compositions.



Creates realistic depictions through displays that reflect the camera and lighting conditions of VR/XR studios.



Much improved from traditional chromakey, live pictures and graphics through LED displays are used to create various scenes.



LG LED Bloc (LSAA) SMD, 4 Pixels in PKG

Optimum Cable-less Al-powered Image Processor (alpha7) High Reliability



LG MAGNIT (LSAB) 1R, 1G, 1B (Chip on Board)

Infinity Black
High Contrast Ratio (150,000:1,10 lux)



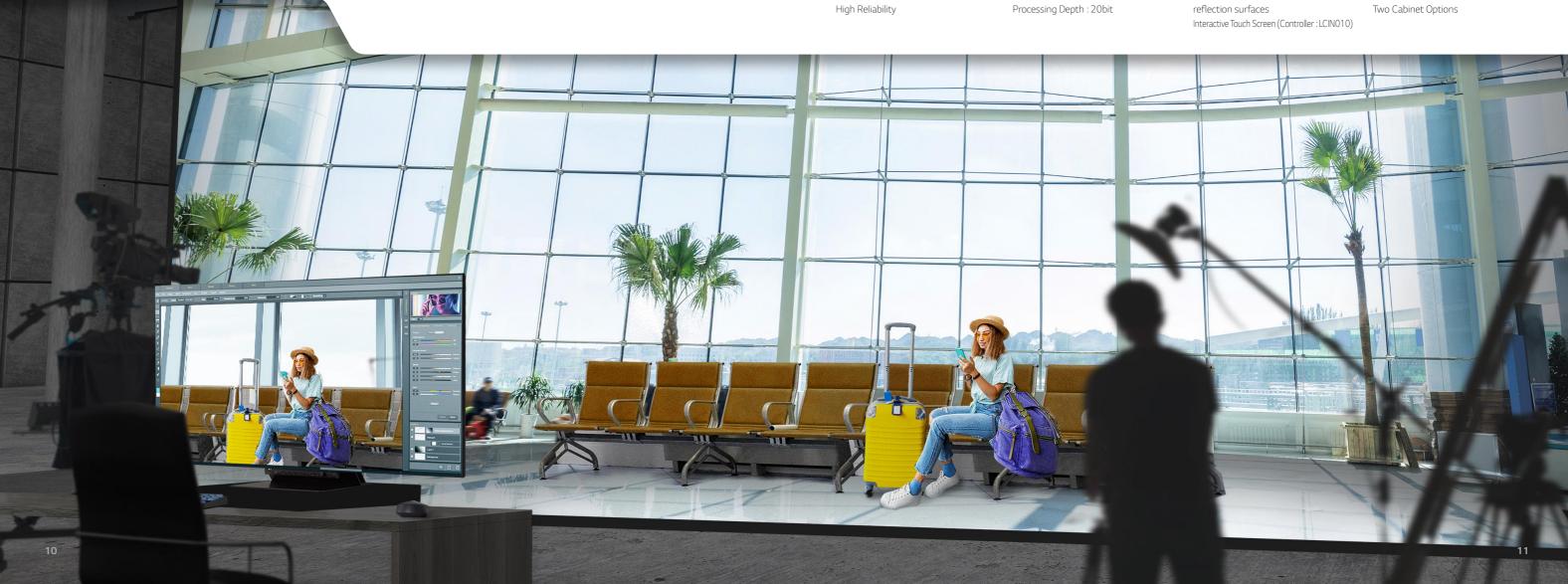
Digital Floor LED (LFCG)

High Durability IP65 protective non-slip mat and antireflection surfaces



Ceiling LED (LSCA, GSCA)

90° Corner Design Available Fast Assembly and Easy Maintenance Two Cabinet Options

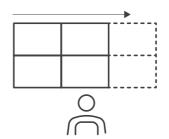


CONTROL ROOM

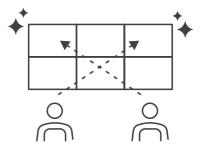
The Heart of a Broadcasting Studio

Control rooms perform a pivotal role in production since all the video sources are gathered and monitored in real-time. Because recordings from all cameras set in different angles are handled, flawless operation regardless of large data is imperative.

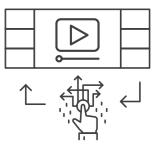
Extreme Convenience and Improved Efficiency



Large size super narrow bezel video walls display videos from various channels by dividing the screen in optimal sizes.



IPS display with wide viewing angle delivers clear images so that everyone in the control room can see the screen more clearly.



High-definition screens allow more accurate detection of video sources for enhanced operation.



Video Wall (VSM5J) -0.44mm Even Bezel Wide & Higher Viewing Ang



UHD Signage

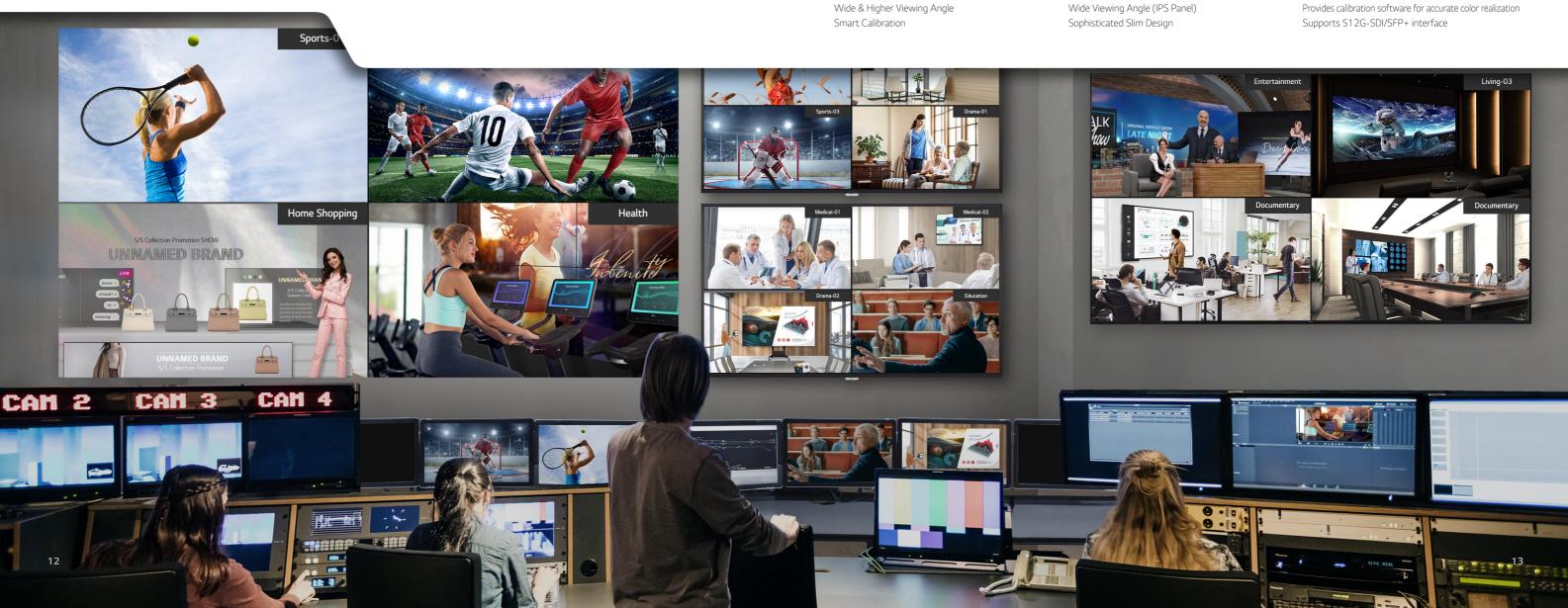
(UH5F-H)
Superb Picture Quality with Ultra HD Resolution
Wide Viewing Angle (IPS Panel)



OLED Pro 65

Supports various HDR formats (HLG, Dolby Vision, ST2084)
Provides calibration software for accurate color realization

UltraFine Display OLED Pro (65EP5G)



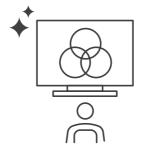
EDITING / REVIEWING ROOM

Adding the Final Touch to Reach Perfection

The editing room is where color adjustments, CG/VFX production, and sound edits are made. Editors check the color tones and picture quality of the recorded video and perform various edits such as color correction, color grading, and special effects for perfection.

Precision and accuracy are crucial in this space. As video and audio technology continues to evolve, new high-tech system equipment is often added or modified.

Maximizing Engineering Expertise

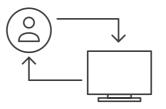


Equipped with special calibration software and supporting various HDR formats for experts to realize the accurate color. (HDR Format Support of 65EP5G: Dolby Vision, ST.2084, HLG)

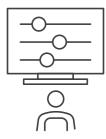


UltraFine Display OLED Pro (65EP5G) OLED Pro 65

Supports various HDR formats (HLG, Dolby Vision, ST2084) Provides calibration software for accurate color realization



A control panel provides shortcuts to frequently used functions and profiles featuring different monitor settings and picture quality options.



Multiple tools including audio level meter and area markers make editing easier than ever.



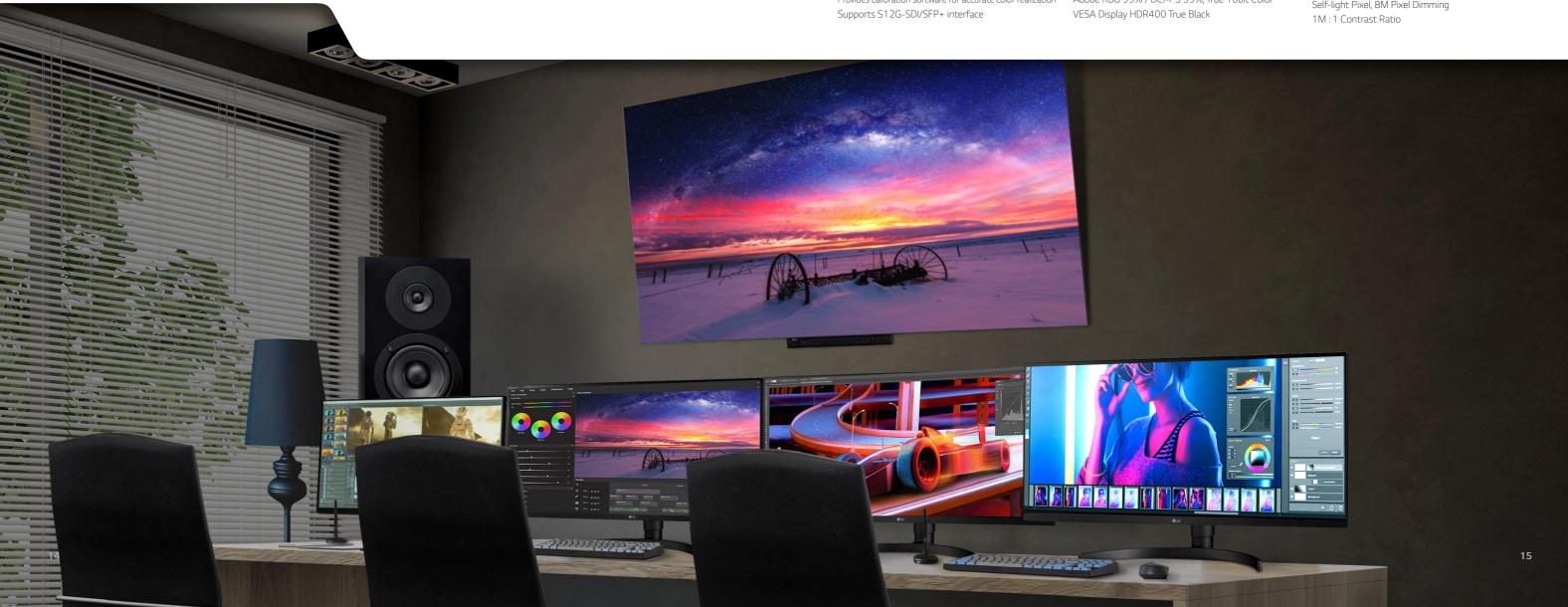
UltraFine Display OLED Pro (32EP950) OLED Pro 32

32" UHD (3,840 × 2,160) OLED Display Adobe RBG 99% / DCI-P3 99%, True 10bit Color



UltraFine Display OLED Pro (27EP950) OLED Pro 27

27" 4K (3,840 × 2,160) OLED Self-light Pixel, 8M Pixel Dimming



LG's Innovative LED Display Technology for Improved Broadcasting Studios



Natural gradation can be attained when screens are filmed with cameras in the broadcasting environment (lighting, color temperature, and brightness).



V-Sync (Vertical Synchronizing Signal) Adjustment

Screen frequency is adjusted to eliminate wavy noise caused from mismatched frequencies between camera and screen.



Fire Safety Standard Certification:
BS476 Part7 1st grade minimizes
damages from fire and IP Rating
Certification (Front IP50 and Back IP20)
protects circuit from dusts and debris.

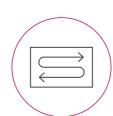


Various care programs including 24/7 support (LG ConnectedCare, LG ExtendedCare) and Front services are offered while cable-less design minimizes product failure.



Color Gamut Mapping Improvement

By accounting for the broadcasting environment (lighting, color temperature, and brightness), customers can set the color area to the desired output (e.g. BT 709) when filming screens with a camera.



Signal and PSU Redundancy

Optional power unit provides continuous operation at time of a power module failure, promising a more reliable broadcasting.



Expert-level fine pitch LED display which comes in any design for various studio sizes, minimizes moire effect to deliver excellent picture quality.



High Refresh Rate of 3,840 Hz

Ideal for shooting with cameras and TV broadcasting while minimizing flicker and enabling smooth playbacks.



High Contrast Ratio of 150,000:1 (10 lux)

Detailed expression of lighter and darker colors deliver better picture quality.

* LG MAGNIT



Improved Black Expression

Removing the package surrounding R, G, B LED chips and applying LG's own Full Black Coating technology allow richer black expression.

* LG MAGNIT

Calibration Solution - LED

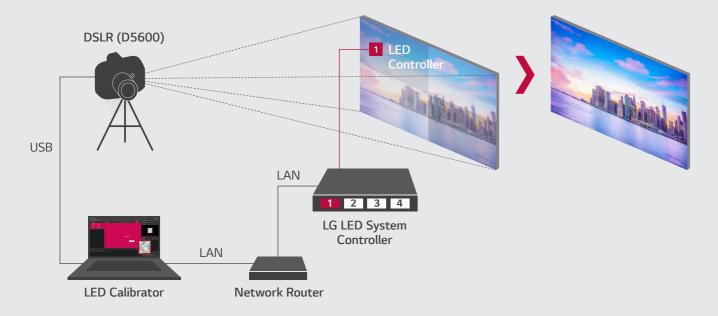
LG LED Calibrator for Flawless Picture Quality

Calibration Solution During the Manufacturing Process

Picture quality enhancement through pixel calibration and module calibration



Calibration Solution During the Installation Process



An LED calibration tool enables you to control the white balance of LED display modules. Users can easily adjust it by using an LED calibrator and a camera.

With the LG LED Calibrator, the white balance set value for each LED module can be checked and fine-tuned while DSLR such as Nikon D5600 can operate an automated calibration algorithm. LG's LED calibrator features can be used to modify a variety of elements including white balance, gamut mapping, color temperature and pixel-level uniformity.

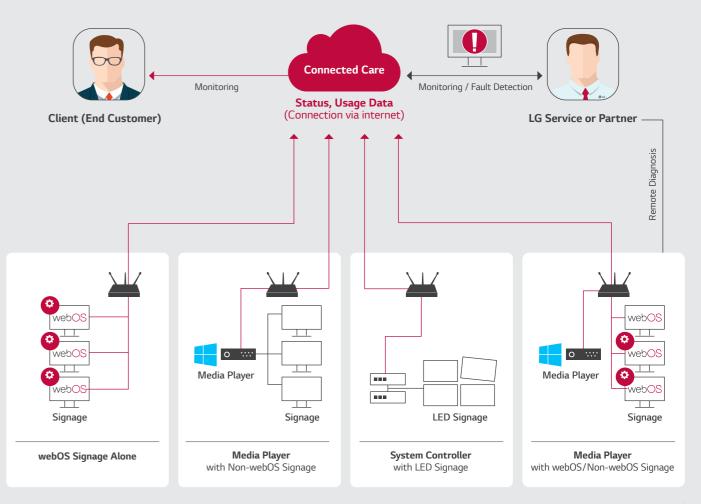
Promising You Piece of Mind

LG's Total Care Service will bring relief by offering a cloud-based remote management solution and various warranty programs to choose from.

LG ConnectedCare

REMOTE MANAGEMENT SOLUTION

LG ConnectedCare is a cloud service solution to remotely manage the operating status of signage displays installed in your workplaces. It provides troubleshooting and remote-control services via monitoring by LG Service, ensuring the stable operation of your business.



^{*} Models with LG LED Calibrator. LCLG003/005 - A/B, LAA015FL

LG UltraFine Display OLED Pro (65EP5G)

Versatile OLED with Accurate Color, Customized to Suit Your Needs



OLED Performance - Predictable Images

- DeltaE∢2



Self Emissive Pixels
- Maximum Local Contrast



Advanced Video Formats
- HDR-10, HLG, DolbyVision



Hardware Level Calibration
Multiple 1D, 3D LUTs

Diverse I/O Interfaces

A variety of input interfaces are provided including HDMI, quad loop-thru SDI (BNC), IP (SFP+ & RJ45). Supported IP formats include ST-2110 and ST-2022-6. Also included interface is a Genlock input for use in broadcast and virtual production applications.



Convenience and Functionality

The control panel provides shortcuts to frequently used functions and profiles featuring different monitor settings and picture quality options. Also, a variety of user selectable on-screen features are available such as Markers, Zoom, Audio Level Meters, and Waveform & Vector Scopes.



Calibration Solution - LG UltraFine Display OLED Pro (65EP5G)

Advanced Calibration Functionality Allows the Display to Achieve High Picture Quality

CalMAN S/W Exclusively Developed for LG UltraFine OLED Pro

Controls color temperature, gamma, gamut, and uniformity of chromaticity and brightness.

* Sold separately through CalMAN S/W distributors



LG's Calibration Solution, SuperSign WB

Refines color temperature and uniformity of chromaticity and brightness.



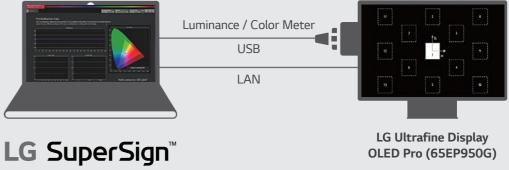
Precise Calibration of Display Area

While other tools can only control 1~2 points for chromaticity and brightness uniformity, CalMAN and SuperSign WB offer 9/13/25 point options for more detailed calibration of the entire monitor area.









* Calman S/W sold separately, and only applicable to model 65EP950G

20 * Calman S/W sold separately, and only app

BROADCASTING DISPLAY LINE UP



LG MAGNIT Micro LED (LSAB)

Brightness	P0.9 : 1,200 nit (Peak.) / 600 nit (Max.) P1.2 : 1,600 nit (Peak.) / 800 nit (Max.)
Cabinet Size $(W \times H \times D)$	Main : 600 × 337.5 × 44.9 mm Secondary : 600 × 337.5 × 44.9 mm
Serviceability	Front and Rear (Module: Front Only)
HDR Compatibility	HDR10, HDR10 Pro
Contrast Ratio	150,000 : 1



LG LED Bloc (LSAA)

Brightness	LSAA012-MX/SX : 600 nit (Max.) 1,200 nit (Peak) LSAA015-MX2/SX2 : 800 nit (Max.) 1,600 nit (Peak)
Cabinet Size (W × H × D)	LSAA012-MX/SX: 600 × 337.5 × 44.9 mm LSAA015-MX2/SX2: 600 × 337.5 × 44.9 mm
Cabinet Weight	LSAA012-MX/SX : 7.3 kg LSAA015-MX2/SX2 : 7.7 kg
Serviceability	Front and Rear (Only from the front)
IP Rating	IP20 / IP20 (Front / Rear)



Ultra Slim LED Signage (LSCB)

Brightness	800 nit
Pixel Pitch	1.56 / 1.87 / 2.50 mm
Refresh Rate	3,840 Hz
Serviceability	Front
IP Rating	IP30



Digital Floor LED (LFCG)

Brightness	3,000 nit
Pixel Pitch	3.91 mm
Refresh Rate	3,840 Hz
Serviceability	Front
IP Rating	IP65



Ceiling LED (LSCA)

Brightness	1,000 nit
Pixel Pitch	2.97 / 3.91 mm
Refresh Rate	2,880 / 3,840 Hz
Serviceability	Front or Rear (One Option Only)
IP Rating	IP30





Ceiling LED (GSCA)

Brightness	5,000 nit
Pixel Pitch	3.91 / 4.63 mm
Refresh Rate	3,840 Hz
Serviceability	Front or Rear (One Option Only)
IP Rating	IP65



Video Wall (VSM5J)

Screen Size	55"
Panel Technology	IPS
Aspect Ratio	16:9
Native Resolution	1,920 × 1,080 (FHD)
Brightness	500 nit (Typ.)
Contrast Ratio	1,100:1

^{*} VSH7J (700 nit)



UHD Signage (UH5F-H)

Screen Size	98" / 65" / 55" / 49" / 43"
Resolution	3,840 × 2,160
Brightness	500 nit (Typ.)
Surface Treatment (Haze)	3% (98": 1%)
Orientation	Portrait / Landscape
Operation Hours	24 / 7
Interface	HDMI (3) / DP / DVI-D / USB 2.0 (2) / RS232C / RJ45 / Audio / IR

BROADCASTING DISPLAY LINE UP



Transparent OLED (55EW5PG-S)

Screen Size	55"
Panel Technology	OLED
Native Resolution	1,920 × 1,080 (FHD)
Brightness	150/400 nit (APL 100% / 25%, Without Glass)
Transparency	38% (SET)



Transparent OLED (55EW5G-A)

55"
150 / 400 nit (APL 100% / 25%, Without Glass)
1,920 × 1,080 (FHD)
38% (SET)
Anti-salinity Coating
IP67



Ultra Stretch Signage (88BH7G)

Screen Size	88"
Aspect Ratio	32:9
Native Resolution	3,840 × 1,080
Brightness	700 nit
Contrast Ratio	1,100:1



Ultra Stretch Signage (86BH5F)

Screen Size	86"
Brightness	500 cd/m²
Aspect Ratio	58:9
Bezel	4.4 mm (L/R), 5.9 mm (T/B)
Depth	81.7 mm
Interface	HDMI (3), DP, USB (2), Audio, DVI-D, RS232C, RJ45, IR



UltraFine Display OLED Pro (65EP5G)

Screen Size	65"
Brightness	1,000 / 950 / 450 / 175 nit @D65 (APL 3% / 10% / 25% / 100%)
Design Type	Desktop Stand (Rear: Handles, VESA Mount Capable)
Calibration	Programmable 1D/3D Hardware LUTs, LG SuperSign Software (White Balance) (* Uniformity to EBU Grade 1 level, CalMAN-Ready)
Connectivity	SDI, SFP+, HDMI, Audio Output, LAN, Remote In/Out, USB, RS-232C, REF In (Gen-Lock), Others
Functions	Marker, Audio Level Meter, Waveform/Vector Scope, HDR/SDR Comparison, Remote IP Control App, etc.
Panel / Resolution	OLED / 3,840 × 2,160 (UHD)



UltraFine Display OLED Pro (32EP950)

Screen Size	31.5"
Resolution	3,840 × 2,160
Brightness	250 cd/m² (Min.)
Colour Gamut	AdobeRGB & DCI-P3 99% (CIE1976) (Typ.)
Contrast Ratio	1M:1 (Typ.)
VESA DisplayHDR™	DisplayHDR™ 400 TRUE BLACK
Colour Calibration	YES
HW Calibration	YES



UltraFine Display OLED Pro (27EP950)

Screen Size	26.9"
Resolution	3,840 × 2,160
Brightness	250 cd/m² (Min.)
Colour Gamut	AdobeRGB & DCI-P3 99% (CIE1976) (Typ.)
Contrast Ratio	1M:1 (Typ.)
VESA DisplayHDR™	DisplayHDR™ 400 TRUE BLACK
Colour Calibration	YES
HW Calibration	YES