LG Broadcasting Display Solutions

From studios to viewers, delivering life-like picture quality

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Evolution of Display Technology for Broadcasting

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.
Realizing Innovations in Studios

LG believes that it knows best when it comes to viewers and creators thanks to our long history of success that stems from accumulated expertise in display products and industry-leading technologies. LG’s display solution helps optimize every part of the studio space to enhance content quality while making filming, monitoring, editing, and airing simpler and more efficient.
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)
- Indoor LED (LSCB)
- LG MAGNIT (LSAB)
- Transparent OLED (55EW5PG-S)

- Optimum Cable-less
- Ultra Slim Depth
- Infinity Black
- High Transparency (38%, Set)

- AI-powered Image Processor (alpha7)
- Mini and Curved Cabinet
- High contrast ratio (150,000:1, 10lux)
- Alluring Design with a Stand

- High Reliability
- Easy & Seamless Operation
- Processing Depth : 20bit
- Slim & Sleek Design

MONTH STATISTICS
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 home.

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

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

ULTRA STRETCH SIGNAGE

(86BH5F)

- 58:9 Extended Wide Format
- Ultra HD Resolution
- User-friendly UX

LGE LED Bloc (LSAA)

- SMD, 4 Pixels in PKG
- Optimum, Cable-less
- AI-powered Image Processor (alpha7)
- High Reliability

TRANSPARENT OLED

(55EW5PG-S)

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

INDOOR LED

(LSCE)

- Ultra Slim Depth
- Multi and Curved Cabinet
- Easy & Seamless Operation

Advantages of the stage space and live situation are maximized by showing the backgrounds through transparent OLED displays.
With the help of computer graphics, anything is possible with virtual production studios. This cutting-edge 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**

- Diffused 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)**
- 560, 4 Pixels in PKG
- Optimum Cable-less
- AI-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)
- Processing Depth : 20bit

**Digital Floor LED (LFCG)**
- High Durability
- IP65 protective non-slip mat and anti-reflection surfaces
- Interactive Touch Screen (Controller : LDN010)

**Ceiling LED (LSCA, GSCA)**
- 90° Corner Design Available
- Fast Assembly and Easy Maintenance
- Two Cabinet Options
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.

**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**

- **Video Wall (VSM5J)**
  - 0.44mm Even Bezel
  - Wide & Higher Viewing Angle
  - Smart Calibration

- **UHD Signage (UH5F-H)**
  - Superb Picture Quality with Ultra HD Resolution
  - Wide Viewing Angle (IPS Panel)
  - Sophisticated Slim Design

- **UltraFine Display OLED Pro (65EP5G)**
  - Supports various HDR formats (HLG, Dolby Vision, ST2084)
  - Provides calibration software for accurate color realization
  - Supports 12G-SDI/SFP+ interface

High-definition screens allow more accurate detection of video sources for enhanced operation.
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.
LG's Innovative LED Display Technology for Improved Broadcasting Studios

Enhanced Grayscale
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.

Stability and Durability Guaranteed
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.

Easy and Convenient Maintenance
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.

Bezel-free Large Screen with High Resolution Fine Pitch
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

* Some features may vary between optional and standard for different models.
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.

* Models with LG LED Calibrator: LCLG003/005 – A/B, LAA015FL

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.
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 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.

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.
### LG MAGNIT Micro LED (LSAB)

- **Brightness**
  - P0.9: 1,200 nt (Peak) / 600 nt (Max.)
  - P1.2: 1,600 nt (Peak) / 800 nt (Max.)

- **Cabinet Size (W × H × D)**
  - Main: 600 × 337.5 × 44.9 mm
  - Secondary: 600 × 337.5 × 44.9 mm

- **Cabinet Weight**
  - LSAB015-MX2/SX2: 7.7 kg

- **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 nt (Max.) 1,200 nt (Peak)
  - LSAA015-MX2/SX2: 800 nt (Max.) 1,600 nt (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)

### Ultra Slim LED Signage (LSCB)

- **Brightness**
  - 800 nt

- **Panel 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 nt

- **Panel Pitch**
  - 2.91 mm

- **Refresh Rate**
  - 3,840 Hz

- **Serviceability**
  - Front

- **IP Rating**
  - IP65

### Ceiling LED (LSCA)

- **Brightness**
  - 1,000 nt

- **Panel Pitch**
  - 2.91 / 3.91 mm

- **Refresh Rate**
  - 2,880 / 3,840 Hz

- **Serviceability**
  - Front or Rear (One Option Only)

- **IP Rating**
  - IP56

### Ceiling LED (GSCA)

- **Brightness**
  - 1,000 nt

- **Panel Pitch**
  - 3.91 / 4.33 mm

- **Refresh Rate**
  - 3,840 Hz

- **Serviceability**
  - Front or Rear (One Option Only)

- **IP Rating**
  - IP30

### Video Wall (VSM5J)

- **Screen Size**
  - 55”, 65”, 75”, 86”, 98”

- **Panel Technology**
  - IPS

- **Aspect Ratio**
  - 16:9

- **Native Resolution**
  - 3,840 × 2,160

- **Brightness**
  - 500 nt (Typ.)

- **Contrast Ratio**
  - 1,100 : 1

### UHD Signage (LH5F-H)

- **Screen Size**
  - 55”, 65”, 75”, 98”

- **Resolution**
  - 3,840 × 2,160

- **Brightness**
  - 500 nt (Typ.)

- **Surface Treatment (Haze)**
  - 3% (98”)

- **Orientation**
  - Portrait / Landscape

- **Operation Hours**
  - 24 / 7

- **Interface**
  - HDMI (3) / DP / DVI-D / USB 2.0 (2) / RS232C / RS45 / Audio / 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 (Home / Wall, VESA Mount Capable)
- **Calibration**: Programmable 1023dLm Hardware LUT, LG SuperSign Software (White Balance, Uniformity to BU Grade 1 level, CalMAN-Ready)
- **Connectivity**: DVI, SFF+, HDMI, Audio Input, LAN, Remote In/Out, USB, RS-232C, Power 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**: 32.5"
- **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

Ultra Stretch Signage (86BH5F)

- **Screen Size**: 86"
- **Aspect Ratio**: 4:3
- **Native Resolution**: 3,840 × 1,080
- **Brightness**: 700 nit
- **Contrast Ratio**: 1,100 : 1

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

Transparent OLED (55EWS5G-S)

- **Screen Size**: 55"
- **Native Resolution**: 1,920 × 1,080 (FHD)
- **Brightness**: 150/400 nit (APL 100% / 25%, Without Glass)
- **Transparency**: 38% (SET)
- **Design Feature**: Anti-salinity Coating
- **IP Rating**: IP67

Transparent OLED (55EWS5G-A)

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

Ultra Fine 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

Transparent OLED (55EW5G-A)

- **Screen Size**: 55"
- **Native Resolution**: 1,920 × 1,080 (FHD)
- **Brightness**: 150 / 400 nit (APL 100% / 25%, Without Glass)
- **Transparency**: 38% (SET)
- **Design Feature**: Anti-salinity Coating
- **IP Rating**: IP67