

A large, high-resolution 4K display is mounted on a wall in a modern building lobby. The display shows a vibrant scene of two hot air balloons floating over a mountain range at sunset. The lobby is dimly lit, with people walking and an escalator visible in the background, creating a sense of a busy, contemporary environment.

Why more businesses are
installing large 4K displays

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INTRODUCTION

Large 4K Ultra-High-Definition (UHD) displays present a huge opportunity for businesses that are looking to elevate their brand image, add wow factor to their messaging and create an exciting customer experience. With incredibly detailed images, stunningly bright colors and jaw-dropping sizes, large 4K displays could be exactly what you need to create an unforgettable environment for your patrons

WHY 4K?

The larger the display, and the closer visitors can get to it, the more important it is to have 4K capability. Higher resolutions mean that the image has more detail, so with 4K's 8.29 million pixels (3840 columns and 2160 rows of pixels) compared to Full HD 1080p's 2.07 million (1920 columns and 1080 rows of pixels), 4K displays are able to show greater details that become very noticeable on larger screens. Visitors will see the difference in important branding elements, product representations, smoother lines and other aesthetics.

A 4K display also makes it possible for customers to get quite close to a big screen without noticing the pixels that make up the image. With a 98-inch Full HD 1080p display, for example, people would need to be at least 13 feet away before the pixels would disappear. But with a 98-inch 4K display they could be as close as seven feet. So with 4K, you could have a much larger display, even a video wall, in a smaller space without hindering the amazing visual experience.

And then there's 4K's extreme color gamut. 4K UHD panels are Rec. 2020 color space compliant, providing a much wider range of colors than a Full HD panel's ITU709 color space. 4K UHD are able to reproduce colors that cannot be shown with the ITU709 color space and, therefore, can more faithfully reproduce branding and product colors.

Large 4K displays are a powerful strategy for businesses that want to capture and hold customer attention and maximize their message's impact.

A long-time innovator in commercial displays, LG offers large 4K displays in 65", 70", 75", 79", 86" and 98" class sizes, all with the integrated webOS for Signage platform and SuperSign content management software support. These state-of-the-art displays are ideal for hotels, restaurants, retail stores, airports, command and control centers and any business wanting jaw-dropping image quality with long-term reliability.

4K video walls command attention anywhere

Businesses are taking full advantage of the excitement and benefits of 4K by creating massive 4K video walls for branding, marketing imagery and related content. A video wall is a configuration of usually four or more individual LCD/LED screens placed together to create an impressively large video image. In recent years technology improvements and engineering breakthroughs have allowed thinner bezels in video walls, creating a nearly seamless look. For maximum effectiveness in a video wall configuration, LG offers the most advanced, thin and ultra-thin bezel designs.



CREATE A 4K CONTENT CHAIN

It's important to note that it's not enough to simply purchase a 4K display if you want to view native 4K content. Your entire content chain will need to support 4K video. Products designed for use with native 4K content must also support HEVC (High Efficiency Video Coding), the new H.265 encoding/decoding standard, which compresses 4K video signals so they don't overwhelm the network.

LG 4K Upscaling optimizes non-4K content

Keep in mind that simply streaming Full HD 1080p, 720p or standard definition content to a 4K display will result in graphics that are either way too small, or expanded and distorted. Non-4K content needs to be prepared for a 4K screen via a process called upscaling.

LG's 4K upscaling function is state-of-the-art, delivering UHD image quality with the lower resolutions. The same content a business has already been using on their existing digital displays will look even better on an LG 4K commercial display, even when viewed from up close.

LG's exclusive Tru 4K Upscaler uses a multi-step process with an algorithm to analyze, continually refine and optimize the incoming video signal before it is displayed on the 4K screen. Visitors at close viewing distances will not see individual pixels or distracting scan lines in the picture. They will, however, see the significant improvement in detail and overall clarity—our best representation of high definition on a 4K display. Any digital video source connected via HDMI, USB, or over wired or wireless Internet will be upscaled automatically, and the function is always active.

4K UHD—the dazzle is in the details

- The ability to get up close to the screen without the image breaking down is one of the most exciting and engaging things about a 4K display.
- Every pixel from a 1080p screen could fit onto one quarter of a 4K screen.
- 4K UHD panels can resolve Excel spreadsheets and CAD drawings in a format with excellent resolution.
- 4K UHD panels are Rec. 2020 color space compliant and can reproduce branding and product colors.
- 4K UHD display technology is an award-winning alternative to traditional print-based art. As a feature, 4K displays represent the most flexible solution for designers and architects to create an unforgettable experience in any space that can be transformed.



IPS (IN-PLANE SWITCHING) MAKES THE MOST OF 4K

LG's IPS-based panels provide a true wide viewing angle of up to 178 degrees, where colors and contrast remain consistent and data is clearly readable. With non-IPS displays, the viewer needs to be centered directly in front of the screen to realize the best performance—at an angle color and contrast decrease dramatically and text becomes illegible. IPS technology vastly improves off-angle viewing, which is extremely important in areas with heavy foot traffic. IPS panels also feature a built-in temperature control that eliminates image degradation and screen blackening that can occur with conventional displays placed in direct sunlight.

Shine Out™ Technology outshines the sun

LG's Shine Out technology is well-suited solution for delivering crisp, clear and vivid 4K content in areas with direct sunlight, bright ambient light or harsh indoor lighting.

When displays are placed in front lobby areas or window-facing applications where there might be a lot of sun, the harsh reflection and glare can wash out even the best images. To preserve image quality, Shine Out technology features an anti-glare, anti-reflective overlay that does not soften the image like conventional anti-reflective coatings. Instead, it actually increases contrast ratio and color saturation while deflecting the light. The overlay also protects the screen surface, which is very important in a public environment where people can get close to the screen and bump into it, scratch it or hit it with an object.



IPS 4K

What makes IPS 4K panels better?

- A true wide viewing angle that retains high image quality
- Superior color reproduction for critical image evaluation
- Runs considerably cooler than VA (Vertical Alignment) panels
- Energy efficient for greater corporate responsibility and cost savings
- More stable and reliable—no image distortion when mounted on a wall or when tapping/rubbing on the panel
- Improved thermal stability preserves image quality and can extend the life of the display
- Color accuracy remains consistent over long-term use, for greater ROI
- 3-year warranty

ADVANCED LOCAL DIMMING DEEPENS BLACKS, INCREASES CONTRAST

With LG's 4K displays, the backlighting in specific areas of the screen can be controlled to increase contrast and provide a clearer image. LEDs that can be switched on and off are installed behind the screen's liquid crystal pixels. This means that a specific area on the screen that is displaying black can be darkened even further, by switching off the LEDs separately from other brighter areas where the LEDs are switched on. The result is reduced light leakage, substantially deeper blacks and excellent contrast.

OLED 4K displays—the pinnacle of 4K image quality

LG's 65-inch OLED Dual-View Curved Tiling Display creates a beautifully curved design using slim tiles that form customizable

displays linking 2, 3 or 4 tiles together. This pencil-thin display with dual-sided view enables images to be mirrored or swapped on either side of the display, efficiently utilizing space. OLED's self-lighting pixels brighten, dim or turn off completely to deliver perfect black and infinite contrast, for the ultimate in 4K image quality.

4K display technology with ultra-close viewing distances and realistic image reproduction allows for a window simulation in applications where the view is lacking or no windows exist.



65-inch OLED Dual-View Curved Tiling Display

PLATFORM AND SOFTWARE

webOS for Signage

LG 4K displays feature LG's webOS for Signage platform, which allows systems integrators to download content and develop customized applications that fit their exact needs, and update it simply and quickly via a smartphone or tablet. LG's 4K displays feature a high-performance system-on-a-chip (SoC) which works with webOS for Signage to lower the cost of ownership by eliminating the need for PCs or external media players.

SuperSign™ Lite

Web-based content authoring and operation solution player

Offered as a bundle with LG's External Player and SuperSign Embedded Player

- Connects up to 50 clients
- Supports Dual Content Editor in both PC App and Web
- Includes 70 design templates



SuperSign™ C

Monitor control and auto calibration software

- Remote monitor control solution
- Enhanced auto calibration—accurate color adjustment in 2 - 3 minutes

To learn more about LG's large 4K displays click on the links below or call 1.800.897.8788

[LS95A 98-inch class UHD Commercial Display](#)

[UH5C 86-inch class UHD Commercial Display](#)

[UX340C 79-inch UHD Commercial Display](#)

[75UH5C 75-inch UHD Commercial Display](#)

[UW340C 70-inch UHD Commercial Display](#)

[UH5B 65-inch UHD Commercial Display](#)

[EE5C 65-inch OLED Dual-View Curved Tiling UHD Commercial Display](#)

ABOUT LG

The LG Commercial Displays Division serves customers in the lodging and hospitality, digital signage, systems integration, healthcare, education, government and industrial markets. Based in Lincolnshire, Ill., with its dedicated engineering and customer support team, LG Commercial Displays Division delivers business-

to-business technology solutions tailored to the particular needs and goals of business environments. LG is a 2016 ENERGY STAR Partner of the Year – Sustained Excellence, with numerous products on the EPEAT Registry.