

Samsung UED Series video wall displays

Sleek premium-quality displays for
simplified, creative configurations



Highlights

- **Convey a sophisticated image with a slim and sleek design:** Promote products and services with simple-to-create video walls in a variety of unique configurations to attract customer attention.
- **Reduce space modification and installation effort:** Configure and install video walls in confined spaces more easily with narrow, lightweight displays employing LED BLU technology.
- **Implement the most advanced embedded video wall management solution:** Deliver state-of-the-art large format display (LFD) innovation without an additional PC unit using the 2nd Generation Samsung Smart Signage Platform (SSSP) software, powered by powerful quad-core processor in an embedded media player.
- **Reduce needless clutter with PC-less digital signage operation:** Eliminate clutter and the need for a separate PC to playback content, connect to a network with built-in Wi-Fi and a mobile app for display and content control from a mobile device.
- **Create an array of display screens with vibrant pictures and text:** Increase color consistency with enhanced color calibration technology while maintaining image ratios when changing orientation.

Promote products and services with a superb display

Merchandisers want to give their customers an immersive shopping experience. Many are installing video walls as a way to provide an impressive ambiance and to increase revenues. Because most retailers have limited space, they are seeking a LFD that enhances their surroundings without overwhelming them. The preferred LFD enables retailers to create near-seamless video walls with high-quality pictures and simplified content management.

Samsung UED Series video wall displays are an ideal choice for many retailers because managers can configure the displays based on available space and can control the display content with ease.

Available in 46-inch and 55-inch sizes, the UED Series features slim, sleek profiles and ultra-narrow bezels measuring 11 mm (0.43 in.). These sophisticated displays can be combined to create captivating video walls in myriad creative configurations for impactful, near-seamless, immersive viewing. Full high-definition (FHD) picture quality further attracts potential customers.

Create impactful content using the powerful quad-core processor with embedded media player

Build video walls in small spaces with extensive installation options

Multiple installation options help retailers design video walls wherever needed, even behind display cases. UED Series displays use edge LED technology that makes a single display or a wall of displays more comfortable to work around because fewer lamps are in use. With a depth as shallow as 29.9 mm (1.18 in.) and weighing as light as 10kg (22 lb.), UED Series displays enable businesses to create video walls within limited spaces.

Samsung technology also offers a dimming solution that generates deeper black tones by controlling the LED BLU (backlight unit).

Broadcast rich content with the most advanced embedded video wall management solution

The UED Series comes equipped with the most advanced embedded video wall management solution, the powerful 2nd Generation SSSP and MagicInfo® S2 software. This state-of-the-art LFD innovation platform eliminates the need for a separate PC to run the displays and is powered by the powerful quad-core CPU with a graphics card built into the embedded media player. It boasts a 1GHz quad-core CPU and 1.5GB double data rate (DDR3) dual 48 bit memory. SSSP is also compatible with various third-party solutions.

Plus, SSSP is equipped with a variety of features that simplify the design and deployment of display content, such as an interactive whiteboard and picture-in-picture (PIP) viewing, which can be enlarged to encompass over 50 percent of the display screen.

Launch a variety of versatile features with the processor's upgraded SoC technology

The UED Series is designed with upgraded SoC technology - the brains of the SSSP - providing convenience, simplicity of use and versatility. Included are features such as multi-channel scheduling, internal auto-play, built-in Wi-Fi and a mobile interaction application.

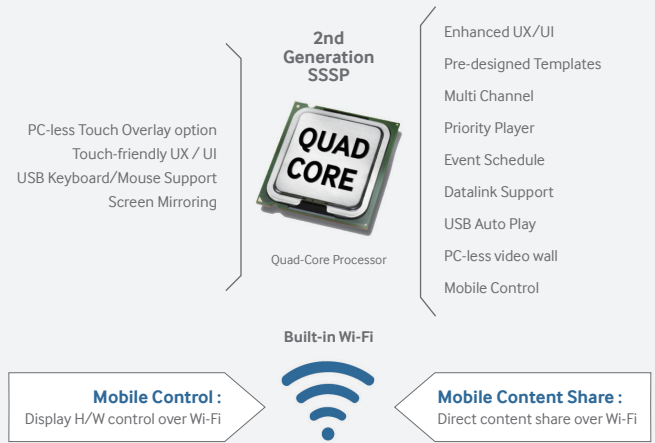


Figure 1. An integrated solution to provide a new digital signage experience

Manage displays directly from a mobile device while ensuring precision color uniformity

Perform direct playback and management without a PC or wire clutter

Samsung UED Series displays require no external PC to operate, either locally or over a network, which means there are no cumbersome wires or equipment to distract viewers from the message being delivered. Content playback, touch overlay support, as well as daisy chain and network connections, can all be performed without an external PC thanks to the embedded SSSP.

Plus, built-in Wi-Fi and a mobile app enable LFD control and direct playback of content directly from a mobile device or laptop. Clutter-free and wireless content sharing and display management results in a video wall that is sleek-looking and pleasing to the eye, which can enhance any business environment.

Create an array of screens with vibrant pictures and text

UED Series displays can be arranged to construct exceptional video walls. Refined color calibration, improved picture quality, a bezel-to-bezel width of just 11 mm (0.43 in.) and vivid high-resolution images create a pleasurable viewing experience.

Increase color consistency with enhanced color calibration

The integrated factory color tuning process has been refined for white balancing and color difference compensation, resulting in improved color temperature matching. The Samsung Color Expert software with built-in ACM chipset is also enhanced for ease of use and performance and offers three options: gamma calibration, local uniformity and white balance. The calibration speed is higher and the user interface (UI) is augmented for more precise color management. Light reflection, absorption and scatter are significantly reduced with the help of the Ultra Clear Panel. As a result of Ultra Clear Panel technology, images are brighter and sharper, which ultimately improves content visibility.



Figure 2. Improved video wall color calibration for color uniformity

Create dynamic video wall configurations without resolution loss or additional equipment

Maintain image ratios when changing orientation

UED Series displays offer pivoting capability and image rotation software that can change image orientation from portrait to landscape for greater display flexibility. For convenience when rotating images, two ratio options are available: original ratio or auto full-sizing ratio. Users do not need to rotate a picture in the software to make it appear correctly in a different orientation.



Figure 3. Portrait to landscape image rotation enhances usability with no loss of resolution

Daisy chain multiple displays without the need for additional equipment

The UED Series displays offer High-bandwidth Digital Content Protection (HDCP) daisy chain capabilities. By supporting HDCP daisy chaining, UED models can display HDCP content such as LiveTV™ or Blu-ray Disc™ content without a HDCP distributor or an external PC. The HDCP daisy chain function helps reduce the cost of deploying multiple displays throughout an organization.

For playing the content on video wall displays easily, the displays support extremely simple USB drive way through DP loop in out. No need additional PC and network setting for playing the simple content.

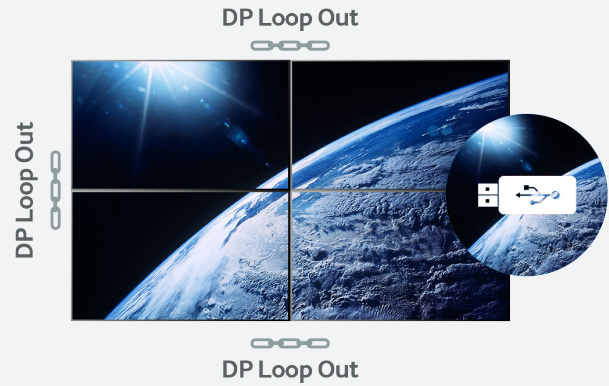


Figure 4. Extreme simple standalone Video Wall with Quad Core SSSP

Start playing media content immediately with the embedded MagicInfo S player

With MagicInfo S Player, users can play movie and image files on the videowall without any source device.

Content can be conveniently scheduled directly on the SMART Signage or remotely over the network, helping companies save money and resources on content management tasks. With this convenience, users can quickly change contents based on changing promotions and consumer habits. For direct content management, including local scheduling, users can operate the remote controllers as an input device. Direct content management also supports internal or USB drive Auto Play and local scheduling. Small shops can use this function to customize when content is played.

Supported content :

- Video Resolution
 - 1920x1080 @ 24/30Hz
 - 1280x720 @ 24/30/60Hz
 - (HEVC & 3D content not supported)
- Image Format (Max Resolution)
 - JPEG (15360x8640)
 - PNG (4096x4096)
 - BMP (4096x4096)

Technical Guide for better Synchronization in MagicInfo VideoWall Content

MagicInfo Player I

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Recommended Video Format (Required H/W : SBB (Quad Core or higher)

File Format	Resolution	FPS	Bit rate	Bit rate Mode	Codec
WMV	FHD	30 fps	10M	Constant	No Codec Needed
MPEG2 (MPEG-TS)	FHD	30 fps	20~25M	Constant	Elecard Codec
MPEG2 AVC	FHD	30 fps	25~30M	Constant	LAV Codec

• Network Environment

- Gigabit Ethernet Layer 2 Switching Hub
- IGMP V2 snooping Support
- LAN Cabling (Maximum Length 100 meters)=> above UTP Cat. 5e (UTP or STP Cat.6 recommended)
- 2Port Up-Link (optional) => Consider expansion in future.
- Router (optional) - If necessary, could add any options such as premium server connection.

MagicInfo Player S

Recommended Video Format (Based on Golf-S)

Container	Video Codec	Resolution	Frame rate (fps)
AVI MP4	H.264 BP/MP/HP	1920x1080	30
	MPEG4 SP/ASP		
	Window Media Video v9(VC1)		
	MPEG2		
Bit rate (Mbps)	Bit rate Mode	Audio Codec	Etc
30	Constant	AC3 LPCM ADPCM(IMA, MS) AAC HE-AAC WMA DD+ MPEG(MP3) DTS (Core , LBR) G.711(A-Law, μ-Law)	Container must have the index table.

• LFDs have same picture mode.

• Network Environment

- Gigabit Ethernet Layer 2 Switching Hub
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- 2Port Up-Link (optional) => Consider expansion in future.
- Router (optional) - If necessary, could add any options such as premium server connection.

• Use the same LFD model or the same SBBA

-If the hardware specification is different to each other, it may not be able to synchronize in the content loading time.(After the contents are loaded, it will synchronize well)

Samsung UED Series video wall displays

UED

46" /55"



- | | | |
|---|-----------------------|------------------------|
| 1. RS-232C IN | 5. AUDIO OUT | 10. HDMI IN |
| 2. RS-232C OUT | 6. SD CARD | 11. RGB IN |
| 3. IR / AMBIENT SENSOR IN | 7. USB | 12. DP OUT |
| 4. RGB / DVI / HDMI / AV / COMPONENT / AUDIO IN | 8. DVI / MAGICINFO IN | 13. COMPONENT IN / OUT |
| | 9. DP IN | 14. RJ45 |

Samsung UED Series video wall displays

Specifications

		UE46D	UE55D	
Panel	Diagonal size	46"	55"	
	Type	120 Hz E-LED BLU		
	Resolution	1,920 x 1,080 (16:9)		
	Pixel pitch (mm/in.)	0.153 x 0.461 (0.006 x 0.018)	0.210 x 0.630 (0.008 x 0.024)	
	Active display area (mm/in.)	1,018.08 x 572.67 (40.08 x 22.54)	1,209.6 x 680.4 (47.6 x 26.7)	
	Brightness (Typ.)	450 nit		
	Contrast ratio	5,000:1		
	Viewing angle (H/V)	178:178		
	Response time (G-to-G)	8 ms		
	Display colors	16.7M		
	Color gamut	72%		
	Display	Dynamic C/R	100,000 : 1 (AV Mode)	
H-Scanning frequency		30 - 81 kHz		
V-Scanning frequency		48 - 75 Hz		
Maximum pixel frequency		148.5 MHz		
Sound	Speaker type	Built-in speaker (10 W x 2 ch)		
Connectivity	Input	RGB	Analog D-SUB, DVI-D, DisplayPort 1.2	
		Video	HDMI, Component (CVBS Common)	
		Audio	Stereo mini jack	
	Output	RGB	DP 1.2 (Loop-out)	
		Video	-	
		Audio	Stereo mini jack	
		Power Out	N/A	
	External control	RS-232C (in/out) thru stereo jack, RJ45		
	External control	N/A		
	Power	Type	Internal	
Power supply		AC 100 - 240 V~ (+/- 10 %), 50/60 Hz		
Power consumption		Max (W/h)	132	154
		Typical (W/h)	115	130
		BTU (Max)	450.12	525.14
		Sleep mode	Less than 0.5 W	
		Off mode	Less than 0.5 W	

Samsung UED Series video wall displays

Specifications

		UE46D	UE55D
Dimension (mm/in.)	Set	1,030.9 x 585.4 x 29.9 (40.5 x 23.0 x 1.1) [Max: 31.3 (1.2)]	1,222.4 x 693.2 x 29.9 (48.1 x 27.2 x 1.1) [Max: 31.3 (1.2)]
	Package	1,110.0 x 688.0 x 130.0 (43.7 x 26.2 x 5.1)	1,340.0 x 800.0 x 145.0 (52.7 x 31.4 x 5.7)
Weight (kg/lb)	Set	10 (22)	13.3 (29.3)
	Package	13 (28.6)	17.8 (39.2)
Mechanical specs	VESA mount	400 x 400 (15.7 x 15.7)	
	Protection glass	No	
	Stand type	Foot Stand (Optional)	
	Media player option type	Embedded, SBB-C (Attachable)	
	Bezel width (mm/in.)	5.5 / 0.21	
	Recommended usage hours	16 hrs/day	
	Operating temperature	0°C - 40°C (32°F - 104°F)	
Humidity	10 - 80%		
Key	LED slim video wall		
Special	H/W	Wi-Fi Module Embedded, SD Card Slot, Super Clear Coating, Temperature Sensor, Pivot Display, Clock Battery (80 hrs Clock Keeping), Built-in Speaker (10 W x 2 ch)	
	S/W	Magic Clone (to USB), Auto Source Switching & Recovery, Lamp Error Detection, RS232C/RJ45 MDC, Plug and Play (DDC2B), PIP/PBP, Image Rotation, Button Lock, DP 1.2 Digital Daisy Chain (HDCP Support), Smart Scheduling, Smart F/W update, Built-in MagicInfo Player S2, Video Wall (10 x 10), Firmware Update by Network, LFD New Home Screen, PC-less VideoWall, Predefined Template for Vertical Usage, Multi Channel, Mobile Control, Event Schedule, Backup Player	
Feature	Processor	Cortex®-A9 1 GHz Quad Core CPU	
	On-chip cache memory	L1 (I/D) : 32 KB / 32 KB L2 (Unified) : 1 MB	
	Clock speed	1 GHz CPU Quad	
	Main memory interface	1.5 GB Dual 48-bit DDR3-933 (1,866 MHz)	
	Internal player (Embedded H/W)	2D & 3D graphics engine - Up to 1,920 x 1,080. 32 bpp - Supports OpenGL ES®	
	Storage (FDM)	8 GB (1.2 GB occupied by O/S, 6.8 GB available)	
	Multimedia	Video Decoder : MPEG-1/2, H.264/AVC (Dual) / VC-1, JPEG, PNG, VP8 Audio DSP (Decoder) : AC3 (DD), MPEG, DTS and etc.	
IO ports	USB 2.0		
Operating system	Linux®		

Samsung UED Series video wall displays

Specifications

		UE46D	UE55D
Certification	Safety	cUL (USA+Canada) : UL60950 TUV (Germany) : EN60950 CB (Europe) : IEC60950/EN60950 EK (Korea) : K60950 CCC (China) : GB4943.1 PSB (Singapore) : IEC60950 GOST (Russia) : IEC60950, EN55022 SIQ (Slovenia) : IEC60950, EN55022 PCBC (Poland) : IEC60950, EN55022 NOM (Mexico) : NOM-001-SCFI-1993 IRAM (Argentina) : IRAM SASO (Saudi Arabia) : IEC60950 BIS (India) : IS13252	
	EMC	FCC (USA) FCC Part 15, Subpart B class A CE (Europe) EN55022, EN55024 VCCI (Japan) V-3 (CISPR22) KCC (Korea) : KN22, KN24 BSMI (Taiwan) : CNS13438 (CISPR22) C-Tick (Australia) : AS/NZS3548 (CISPR22) CCC (China) : GB 9254-2008, GB 17625.1-2003	
	Environment	ENERGY STAR® 6.0 (USA)	
Accessories	Included	Quick Setup Guide, Warranty Card, DP cable, Power Cord, Remote Controller, Batteries	
	Optional	Stand	STN-L4055AD, STN-L4655E
	Optional	Mount	WMN4270SD WMN250MD WMN4675MD (for Video wall W/M)
	Optional	Specialty	CML450D (ceiling mount)
Media player	CPU		
	N/B		
	S/B		
	GPU		
	FDM/HDD		
	Memory	SBB-C	
	Ethernet		
	Connectivity	USB	
	Output		
	Others		

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For more information

For more information about Samsung UED Series video wall displays, visit www.samsung.com/business or www.samsung.com/displaysolutions

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

www.samsung.com

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