

Samsung large-sized LED displays (ME, MD, ED Series)

Superb picture quality and touchscreen options with energy-efficient 65-inch, 75-inch and 95-inch



Discover a flexible, cost-efficient alternative to standard projectors.

Upgrade presentations with LED LFDs that unite projector, screen and whiteboard functions

Businesses, professionals and educational institutions that use conventional projectors and screens are looking for a better, clearer way to present content. They want digital alternatives to traditional projectors, which present several obstacles to 21st century communication.

Because surrounding light dims the brightness of projected images, presentations using traditional projectors can be viewed best only in darkened rooms, which makes note-taking difficult. Projected images lose focus when the presenter touches the screen or changes the content source. Viewers and presenters also must contend with distractions from shadows, dazzling, dust, machine heat and fan noise.

Operating projectors can also be costly and inefficient:

- **Cumbersome installation.** Installing projectors and screens out of the way in ceilings requires specialized skills.
- **Unreliable operation.** The need to change projector lamps frequently, sometimes in the middle of a presentation, adds to costs and decreases efficiency.
- **Limited interactivity.** To make presentations interactive, presenters may also need to incorporate a whiteboard.
- **Lack of flexibility.** After the initial purchase and setup, users may find it difficult and expensive to change the configuration of a projector, screen and whiteboard.



Figure 1. Samsung LED LFDs provide high-performance messaging.

Deliver an immersive information experience with contemporary ambience

Large format displays (LFDs) are proliferating as a preferred way to communicate messages and create a seamless viewing experience. However, cold cathode fluorescent lamp (CCFL) LFDs and conventional video walls can present communication challenges:

- CCFL displays are typically heavy and thick, making them difficult to move and install.
- Conventional LFDs can require separate signal video distributors, additional media players and other devices that increase cables and room clutter.
- Installing multiple LFDs to improve the viewing experience increases expense and installation difficulties.
- Many conventional LFDs offer a monotonous design with thick bezels that distract viewers from the overall message and detract from a sophisticated business atmosphere.

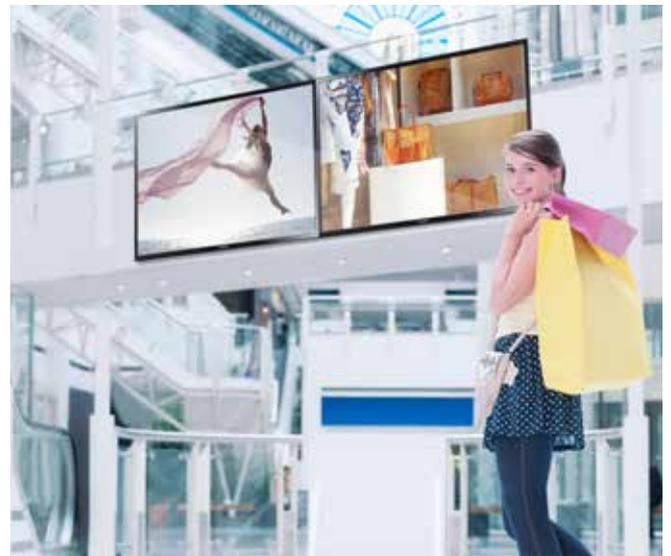


Figure 2. Eye-catching large-sized LFDs capture attention in retail settings.

Bright, clear images help capture audience attention.

The large sized Samsung ME, MD and ED Series 65-inch, 75-inch and 95-inch LFDs provide a superior alternative to traditional projectors and CCFL displays. These LED LFDs offer:

- **Large, clear, crisp displays.** Because LED LFDs provide the same amount of brightness regardless of surrounding light, viewers can see text, images and videos even in brightly lit rooms.
- **Improved energy use.** Samsung LED lamps require less electricity than conventional LFD technology, which increases energy efficiency.
- **Lower-temperature operation.** Samsung LED LFDs emit less heat than conventional LFDs, decreasing the need for costly air conditioning and reducing wear on the equipment.
- **Slim design for low-cost installation.** Thinner and lighter than conventional LFDs, these displays can be handled and installed without special tools even in tight places, reducing installation costs.
- **Flexible mounting options.** The slim displays are designed for easy mounting wherever they are needed, on walls or using movable stands, providing a more efficient use of space.
- **Built-in connectivity.** The large sized Samsung ME and MD Series LED LFDs include RJ45 and RS-232C connections that can be used simultaneously, avoiding the need for additional signal devices.
- **Samsung MagicInfo™ S included with ME and MD Series.** Digital signage software with internal memory and an internal media player eliminates the need for an external PC.
- **Optional Plug-in Module (PIM).** The cableless PIM PC solution transfers power and signals internally to enable content customization.
- **Optional touchscreen overlay.** Presenters can transform screens into interactive whiteboards with drawing and writing capabilities using the touchscreen overlay.
- **Wireless connection.** Newer models of ME and MD Series LFDs support WiFi and WiDi standards, which eliminate cumbersome cables such as LAN, RGB and HDMI, yet keeping all functionalities.

Virtually all types of content, including videos, display better on LED screens.

Sharpen messages and pictures with advanced Samsung LED LFD models

The large sized Samsung ME, MD and ED Series LED LFDs feature several innovations that optimize the impact of presenters' messages with brighter, clearer images.

Backlighting

LED BLU (backlight unit) situated directly behind or on the edges of the panel provides better picture quality, broader color contrast and added depth to blacks.

Enhanced readability

The ultra clear panel delivers reduced light scatter and reflection and provides enhanced contrast ratio.

Super-bright displays

Nits that range from 320 to 550 enable easier reading, even in well-lit areas.



Figure 3. The glare-proof surface provides sharper images.

Samsung LED LFDs are designed to be eco-friendly and easy to handle.

Pioneering technology provides two options for crisp, clear backlighting

Samsung manufactures two types of LED LFDs based on two distinct types of advanced backlighting technology:

- **Edge-type technology.** ME Series 75-inch and 95-inch LFDs have LED BLUs (backlight units) arranged around the edges of the screen, creating a thin profile.
- **Direct-type technology.** MD Series 65-inch, ED Series 65-inch and 75-inch LFDs array slim direct-type LED BLUs across the entire back of the display panel.



Figure 4. LED BLU technology improves picture quality

Conserve energy with lower power use and cooler operating temperatures

Samsung LED LFDs offer several energy-reducing advantages over conventional projectors and CCFL displays. LED LFD technology:

- Requires less electricity to operate because of lower wattage needs
- Emits less carbon dioxide (CO₂)
- Radiates less heat, reducing energy costs by up to 35 percent according to Samsung internal testing
- Eliminates bothersome fan noise

The large sized ME, MD and ED LFDs also feature Auto Brightness Sensors. These sensors detect the intensity of ambient light and adjust the light emitted by LED BLUs to save energy without dimming the presentation.

Operating at lower temperatures also helps increase the screens' durability.

Less heat from panel

Less heat means lower room temperature so that cooling costs are reduced also.

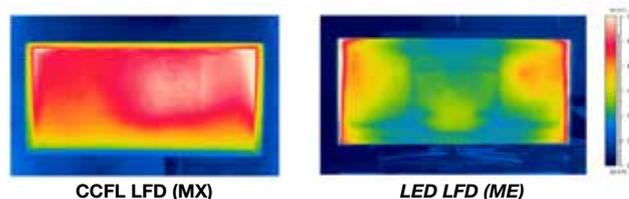


Figure 5. LED LFDs emit less heat than CCFL LFDs.

An optional PIM provides cableless access to media sources.

Simplify installation with slim, lightweight models

Unlike traditional projectors and screens, LED LFDs can be installed readily with no special equipment.

The large sized ME, MD and ED Series LFDs are easier to handle than CCFL LFDs. LED LFDs weigh significantly less than CCFL LFDs—as little as 25.1 kg (55.3 lb).

The technology behind both the edge-type ME Series and slim direct-type MD and ED Series also reduces the depth of the displays.

The LFDs include a pivot display that enables both portrait and landscape orientations and movable stands for flexible installation options.

Simplify installation with slim, lightweight models

Bezel widths on ME, MD and ED Series LFDs are narrower than those on traditional LFDs. In the ME Series, for example, bezels are as narrow as 12.3 mm (0.48 in.).

Narrow bezels reduce distractions for viewers and add sophistication to overall messaging.

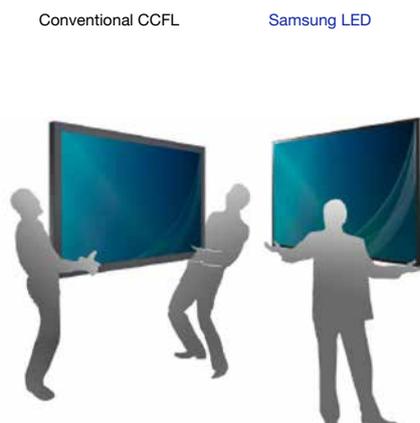


Figure 6. LED LFDs are easier to handle than CCFL LFDs.

Enhance content display with built-in connectivity

Samsung LED LFD displays offer powerful connectivity, with built-in RJ45 and RS-232C connections. Unlike many conventional LFDs, ME and MD Series displays permit both network connections to be used simultaneously.

Using Digital Visual Interface (DVI) loop out, a single display image can be shared with nearby displays. The newer MD and ME Series models support this loop out feature through Digital Port (DP) 1.2. This innate connectivity eliminates the need to purchase separate video signal distributors for each display, reducing equipment costs.

These LED LFDs also have powerful built-in stereo speakers that enhance the impact of messages.

Optional PIM provides content customization features without adding bulk

The cableless PIM PC solution transfers power and signals internally and supports devices that are compatible with Intel® Open Pluggable Specification (OPS). The module eliminates the need for cables and reduces clutter while retaining a slim design.

Users can choose from among three PIM models:

- Dual core, 2 GB of RAM, with Microsoft® Windows® Embedded Standard 7 (WES7), designed for signage with the included MagicInfo™ i Premium software
- Quad core, 4 GB of RAM, with WES7, designed for signage with the included MagicInfo™ i Premium software
- Quad core, 4 GB of RAM, 128 GB solid state drive (SSD) with Windows 7 Professional installed, designed for e-Board usage with the included MagicWB (Interactive White Board) 2.0 Basic software

Viewers respond to the ability to write and draw on the touchscreen.



Figure 7. Optional PIM replaces multiple corded devices.

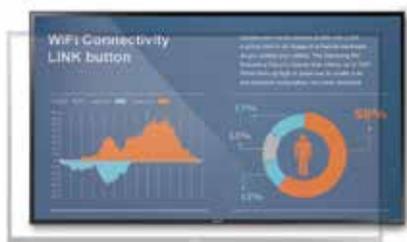
Boost versatility with Samsung MagicInfo™ S for MD and ME Series LED LFDs

MD and ME Series LED LFDs include Samsung MagicInfo™ S digital signage software, an all-in-one display solution with internal memory and an internal media player. These capabilities eliminate the need for an external PC. Using Samsung MagicInfo™ software, administrators can manage, organize and schedule content on multiple displays through a web-based interface.

MagicInfo™ S software connects to the MagicInfo™ Premium Server to control display functions without a Multi-Display Control (MDC) program. Content can be automatically played through the LFD internal memory or with a USB thumb drive Plug-and-Play (PNP) feature.

• Touchscreen overlay

Add interactive whiteboard functionality



• Multi touch

The touch technology applied allows presenter to draw multiple objects simultaneously

The application can display many types of content, from Microsoft PowerPoint® slides to Blu-ray Disc™ videos. The display can be split to show multiple messages from various sources.

Add interactive whiteboard functions with optional touchscreen

The large sized ME, MD and ED Series LED LFDs can be transformed into e-Boards by installing an optional touchscreen overlay.

Special antiglare film covers the surface of the overlay for a smooth writing surface and a real handwriting feel. The touchscreen overlay includes two Touch Pens and Samsung MagicIB (Interactive White Board) software. The touchscreen overlay features a pen tray that provides one upstream and two downstream USB ports.

The pens and touchscreen overlay enable smooth writing and drawing on the screen. The touch accessory overlay provides a multi-point touch experience on top of the LFDs without the need to install a separate whiteboard in the same room. Presenters can easily and intuitively share ideas on a blank surface as well as on top of the displayed content.

Touchscreen installation is designed to be simple. The user places the overlay over the screen, pushes down the holders and turns a few screws.

• Smooth writing surface

Special film covers the surface of the overlay for a real handwriting feel



• Antiglare film



Figure 8. Optional touch overlay adds interactive whiteboard capability to large LFDs

Attractive, effective, versatile screens bring presentations into the 21st century.

Samsung LED LFDs present messages more clearly and flexibly than conventional projectors or CCFL displays

The advanced technology that supports Samsung ME, MD and ED Series 65-inch, 75-inch and 95-inch LED LFDs offers several advantages over conventional projectors and CCFL displays:

- LED BLU screens display a wide range of messages with stereo audio and a sharp, clear picture, even in lighted rooms.
- The optional touchscreen overlay with Touch Pens and Samsung MagicIWB (Interactive White Board) software can transform an LED LFD into an interactive whiteboard.
- Viewers can concentrate on presentations better without being distracted by fan noise, dust, machine heat, shadows or changes in focus.
- Organizations can lower energy costs by up to 35 percent.
- Samsung LED LFDs are easier and less expensive to install, move and operate.
- ME and MD Series include embedded MagicInfo™ S software, which eliminates the need for an external PC, and the optional PIM, which improves content customization and connectivity.

Audiences can absorb content better with interactivity options and free of distractions such as noise, dust, machine heat and shadows.

Features and benefits

Features	Benefits
Backlighting and a ultra clear panel	Brighter, clearer pictures, text and video
Low wattage and cooler operation	Decrease in energy costs of up to 35 percent
Slim, lightweight design	Simplified installation
Built-in RJ45 and RS-232C connections (ME and MD series)	Lowered equipment costs
Optional PIM	Internal transfer of power and signals that reduces cable clutter
Optional interactive touchscreen overlay	Ability to draw and write on screens
Wireless connection (ME and MD Series)	Less cable clutter

Samsung ME, MD and ED Series

Specifications

Model		MD65C	ME75C	ME95C	
Panel	Diagonal size	65 in.	75 in.	95 in.	
	Type	60Hz LED BLU	240 Hz LED BLU	120 Hz LED BLU	
	Resolution	1,920 x 1,080 (16:9)			
	Pixel pitch (H/V)	0.248(H) x 0.744(V)	0.2865(H) x 0.8595(V)	0.364(H) x 1.092(V)	
	Active display area (H/V)	1428.48(H) x 803.52(V)	1,650.24 mm (H) x 928.26 mm (V) (64.97 in. x 36.55 in.)	2096.64(H) x 1179.36(V)	
	Brightness (typical.)	450 cd/m ²	550 cd/m ²	600 cd/m ²	
	Contrast ratio	4,000:1	5,000:1	5,000:1	
	Viewing angle (H/V)	178/178			
	Response time (G-to-G)	6.5 ms	8 ms	8 ms	
	Display colors	10bit Dithering - 1.07Billion		10 bit Dithering - 1.07 Billion	
	Color gamut	70%	72%	72%	
	Display	Dynamic C/R	10,000:1 (AV Mode)		
H-scanning frequency		30 – 81 kHz			
V-scanning frequency		48 – 75 HZ			
Maximum pixel frequency		148.5 MHz			
Connectivity	Input	RGB	Analog D-sub, DVI-D, DisplayPort® 1.2		
		Video	Component (CVBS common), HDMI1, HDMI2	HDMI1, HDMI2, HDMI3 Component (CVBS Common)	
		Audio	Stereo mini jack		
	Output	RGB	DP1.2 (Loop-out)		
		Audio	Stereo mini jack		
	External control	RS-232C (in/out) through stereo jack, RJ45			
	External sensor	IR, ambient light			
Power	Type	Internal			
	Power supply	AC 100 – 240 V (+/- 10 %), 50/60 Hz			
	Power consumption	Max (W/h)	253 W	319 W	495
		Typical (W/h)	230 W	290 W	290
		BTU (Max)	862.73 W	1087.79 W	1687.95
		Sleep mode	Less than 1 W	Less than 0.5 W	
Off mode	Less than 1 W	Less than 0.5 W			
Mechanical specifications	Dimensions	Set	1467.4 mm x 848.0 mm x 56.2 mm	1678.2 mm x 958.7 mm x 48.6 mm	2127.2 mm x 1210.0 mm x 45.8 mm
		Package	1625 mm x 995 mm x 237 mm	1863 mm x 1173 mm x 473 mm	2265 mm x 1405 mm x 462 mm
	Weight	Set	27.4 kg	45.5 kg	66.5 kg
		Package	40.3 kg	65.6 kg	121.4
	VESA mount	400 mm x 400 mm (15.75 in. x 15.75 in.)		900 mm x 900 mm	
	Protection Glass	N/A			
	Stand type	Foot stand (optional)			
	Media player option type	Embedded, SBB-C/PIM-B (Attachable)	Embedded, SBB-C/PIM-B (Attachable)	PIM-B (Attachable)	
Bezel width	18.0mm (Bottom 23.5mm)	12.5mm (Bottom 15.0mm)	12.3 mm		

Samsung ME, MD and ED Series

Specifications, continued

Model		MD65C	ME75C	ME95C	
Operation	Operation temperature	0°C – 40°C (32°F – 104°F)			
	Humidity	10 – 80%			
Feature	Key	Slim and light LFD with built-in MagicInfo™ S		Large & Slim LFD with Built-in MagicInfo Lite	
	Internal player (embedded hardware)	Processor	Cortex-A9 1GHz Dual Core CPU	ARM Cortex-A8 single core CPU with NEON DSP	Cortex-A9 1GHz Dual Core CPU
		On-chip cache memory	L1 (I/D): 32 KB / 32 KB; L2 (Unified): 512 KB		
		Clock speed	1GHz CPU Dual		
		Main memory interface	1GB Dual 32bit DDR3-667 (1333MHz)		
		Graphics	2-D and 3-D graphics engine - Up to 1,920 x 1,080, 32 bpp - Supports OpenGL® ES		
		Storage (FDM)	4 GB (1.2 GB occupied by O/S, 2.8 GB available)	8GB (1.2GB Occupied by O/S, 6.8GB Available,)	
		Multimedia	Video decoder - MPEG-1/2, H.264/AVC (dual) - VC-1, JPEG, PNG, Audio DSP (decoder) - AC3 (DD), MPEG, DTS and more		
		IO ports	USB 2.0		
		Operating system	Linux®		
Accessories	Input	Quick Setup Guide, warranty card, application CD, D-sub cable, Power Cord, Remote Controller, Batteries	Quick Setup Guide, warranty card, application CD, power cord, remote controller, batteries, D-sub cable	Quick Setup Guide, Warranty Card, Application CD, D-Sub cable, Power Cord, Remote Controller, Batteries	
	Optional	Stand	STN-L4055AD	STN-L75D	(In Box)
		Mount	WMN4675MD (for Video Wall W/M)	WMN4675MD	WMN9500SD
		Specialty	CML450D (Ceiling Mount)	N/A	
Media player	CPU	SBB-C, PIM (Optional)		PIM (Optional)	
	N/B				
	S/B				
	GPU				
	FDM/HDD				
	Memory				
	Ethernet				
	Connectivity				USB
					Output
Others					

Samsung ME, MD and ED Series

Specifications (optional MD65C and ME75C touchscreen overlay)

Model		CY-TE65CC	CY-TM75
General information	Product concept	Touchscreen overlay	
	Series	MD65C	ME75B / ME75C
	Diagonal size	65 in.	75 in.
Mechanical specs	Dimensions	Set	1,501.0 mm x 882.0 mm x 62.6 mm (59.09 in. x 34.7 in. x 2.47 in.)
	Weight	Set	14.9 kg (32.85 lb)
	Glass thickness	3.2 mm (0.126 in.)	
	Glass film	AG (front), PET (rear)	AG (front), PET (rear)
	Glass reflection rate	≤10%	
	Glass haze	≤15%	
	Frame material	Aluminum extrusion	
	Bezel width	30.0 mm (1.18 in.)	42.7 mm (1.68 in.)
Touch	Touch technology	IR	IR
	Number of simultaneous touches	2 drawing for e-Board	6 point
Accessories	Included	Software	MagicIWB (Interactive White Board) 2.0 Basic (e-Board software)
		Hardware	Pen tray (including USB hub with 1-up, 2-down), pen

Samsung ME and ED Series

Specifications

Model		ED65C	ED75C	
Panel	Diagonal size	65 in.	75 in.	
	Type	60 Hz LED BLU	120 Hz LED BLU	
	Resolution	1,920 × 1,080 (16:9)		
	Pixel pitch (H/V)	0.248 mm (H) x 0.744 mm (V) (0.009 in. x 0.029 in.)	0.287 mm (H) x 0.860 mm (V) (0.011 in. x 0.034 in.)	
	Active display area (H/V)	1,428.48 mm (H) x 803.52 mm (V) (56.24 in. x 31.64 in.)	1,650.24 mm (H) x 928.26 mm (V) (64.97 in. x 36.55 in.)	
	Brightness (typical)	320 nit		
	Contrast ratio	4,000:1		
	Viewing angle (H/V)	178:178		
	Response time (G-to-G)	6.5 ms	4 ms	
	Display colors	10-bit dithering, 1.07 billion	10-bit dithering, 1.07 billion	
	Color gamut	70%		
	Connectivity	Input	RGB	Analog D-sub
Video			HDMI	
Audio			Stereo mini jack	
Optional		Audio	Stereo mini jack	
External control		RS-232C (in/out) through stereo jack		
Power	Type	Internal		
	Power supply	AC 100 - 240 V (+/- 10 %), 50/60 Hz		
	Power consumption	Max (W/h)	290	360
		Typical (W/h)	180	247
		Sleep mode	Less than 1 W	
Off mode	Less than 1 W			
Mechanical specifications	Dimension	Set	1467.4 x 848.0 x 64.9	1675.0 x 959.1 x 64.8
	Weight	Set	26.8	28.8
	VESA mount	400 mm x 400 mm (15.75 in. x 15.75 in.)		
	Stand type	Foot stand (optional)		
	Media player option type	PIM		
	Bezel width	18.0 mm(Bottom 23.5 mm)		10.9 mm(Bottom 16.9 mm)
Operation	Operating temperature	0°C – 40°C (32°F – 104°F)		
	Humidity	10 – 80%		
Feature	Key	LED LFD		
	Special	Built-in speaker (10 W + 10 W), PIP/PBP, narrow bezel, light weight, RS-232C In/Out, 1 D-sub and 1 HDMI		
Accessories	Included	Quick Setup Guide, warranty card, D-sub cable, power cord, remote controller, batteries		
	Optional	Stand	STN-L4055AD	STN-L75E
		Mount	WMN4675MD(for Video wall W/M)	
		Specialty	CML450D (ceiling mount)	

Legal and additional information

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For more information

For more information about the Samsung ME, MD and ED Series large-sized LED displays, visit www.samsunglfd.com.



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