Samsung DHD Series Premium Signage Displays

Durable, high-brightness displays, built for continuous operation with a powerful embedded solution

Highlights

- **Provide continuous 24/7, premium display operation:** Obtain outstanding, around-the-clock durability for ceaseless business messaging using Samsung's proven display technology that delivers stunning performance.

- **Project an immersive visual experience:** Enjoy sharper, crystal-clear images, even under bright lighting conditions, with 700 nit high brightness.

- **Enjoy powerful media player capabilities without a separate PC:** Deliver state-of-the-art large format display (LFD) innovation, without an additional PC unit, using 2nd Generation Samsung Smart Signage Platform (SSSP) powered by powerful quad-core integration in an embedded media player.

- **Turn the display into a touch interactive display:** Enjoy touch screen capabilities using an optional Touch Overlay.

- **Eliminate clutter with wireless content sharing and display control:** Enable PC-less, clutter-free LFD configuration using 2nd Generation SSSP and a built-in Wi-Fi module, enabling display control directly from a mobile device or laptop.

- **Simplify display management with an enhanced Home screen user interface (UI):** Discover virtually hassle-free display operation with an intuitive, Home screen UI, which offers a Touch Overlay extension with large, touch-friendly menu icons, without the need for a Set-Back Box (SBB) or additional PC.

Deliver continuous, sharp images in virtually any light environment

Broadcasting digital messages to customers whenever and wherever they are needed is becoming of greater importance to many businesses. However, in order to optimize the benefits of digital signage, the displays must meet certain criteria. They must deliver messages with high reliability around the clock, and often in less than ideal lighting conditions. In addition, businesses need a system that is appealing to the viewer, without unnecessary clutter and distractions, to keep them focused on the message. Lastly, these displays must be simple to manage.

Samsung DHD Series Premium Signage Displays meet all these criteria, ensuring the digital signage is optimized for peak performance. By delivering high-brightness, sharp display images in various lighting environments with solid reliability for extended periods of time, businesses are assured their messaging is delivered exactly when and where it is needed. In addition, DHD Series LFDs offer a powerful 2nd Generation SSSP driven by upgraded SoC technology, built-in Wi-Fi, enhanced touch-friendly Home UI and attachable, colored bezel options.

Reach customers 24 hours a day with reliable displays that project crystal-clear, highly legible images for an immersive viewing experience

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Experience the 2nd Generation SSSP, a powerful and advanced embedded content management solution

Rely on Samsung's reputation for superior-quality, durable displays

Demand for LFDs as an effective message delivery system for businesses is rapidly increasing in popularity worldwide with an incredible compounded annual growth rate (CAGR) of 26 percent. As digital signage technology evolves, businesses are always seeking higher-quality, sleeker-looking displays that deliver sharp, vivid images in various lighting conditions. Plus, they require displays that can consistently broadcast content 24 hours a day.

Samsung's proven track record for designing reliable, energy-efficient, high-performance displays now brings businesses the DHD Series Premium Signage Displays. Designed for durability, the displays are built to withstand uninterrupted 24/7 operation. Offering a 700 nit high brightness, these professional displays broadcast crystal-clear images that are highly legible in various lighting conditions.

Figure 1. DHD Series displays clear, highly legible viewing in variety of usage environments

This high brightness level is especially advantageous for fashionable content and information that requires superb readability. With a highly visible, sharp, full high-definition (FHD) image resolution, businesses can provide an immersive viewing experience precisely where customers will see it the most.

Get more power, capacity and capability with 2nd Generation SSSP

DHD Series displays leverage Samsung's new 2nd Generation SSSP with powerful quad-core embedded System-on-Chip (SoC) to boost power and functionality. 2nd Generation SSSP displays double the performance of dual-core displays with twice the processing speed with a 1 GHz quad-core CPU and 1.5 GB double data rate (DDR3) dual 48-bit memory. The DHD Series displays' integrated platform for digital signage eliminates the need for external media players and additional PC units, streamlining the deployment process, saving time and resources. SSSP-enabled DHD Series displays also offer a picture-in-picture (PIP) size over 50 percent of the display, compared to less than 50 percent in dual-core displays.

Manage multiple displays without a PC or SBB

Samsung DHD Series displays require no external PC to operate, 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.

The 2nd Generation SSSP provides the most advanced standalone display management solution available. Innate daisy chain support over just a DisplayPort (DP) cable enables the creation of multiple displays with simplified structures. Plus, the SSSP is equipped with various features that simplify the design and deployment of display content, such as internal auto play and wireless control of displayed content.

The SSSP not only provides the ability to play back content on multiple displays, whether still images or video, but expand, distribute and sync content to each individual display. The internal auto play feature recognizes content from a plugged in USB and automatically initiates content play back over multiple displays. Additional optional features include a PC-less Touch Overlay, which supports a USB keyboard and mouse, multi-channel scheduling, a mobile interaction application and new intuitive Home screen UI.

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Broadcast relevant messages effortlessly with a sleek design and easy-to-use UI

Ensure the message is delivered effortlessly with wireless, remote control

Built-in Wi-Fi and a mobile app enable LFD control and direct playback of content directly from a mobile device or laptop. Wireless content sharing and display management result in flexible and convenient operation of multiple displays from virtually anywhere. Plus, the elimination of needless wires gives the displays a sleek look that is pleasing to the eye, while enhancing any business environment. An attachable color bezel option is also available to meet individual customer's tastes or décor. The displays come standard with a matte black bezel or optional white, wooden or titanium.

Simplify display management with an intuitive Home screen UI.

The DHD Series features a dedicated touch-friendly Home screen design for heightened customer convenience. This intuitive Home UI simplifies setup and display management by enabling direct access to commonly used features with a touch of a finger. Content managers can create personalized content from a choice of templates using the template manager for easy navigation. Then they can play and schedule the content using the included Samsung MagicInfo® software and optional Touch Overlay.

Play back content, activate the Touch Overlay feature, and enable daisy chain and network connections without an external PC or annoying wires for distraction-free messaging.
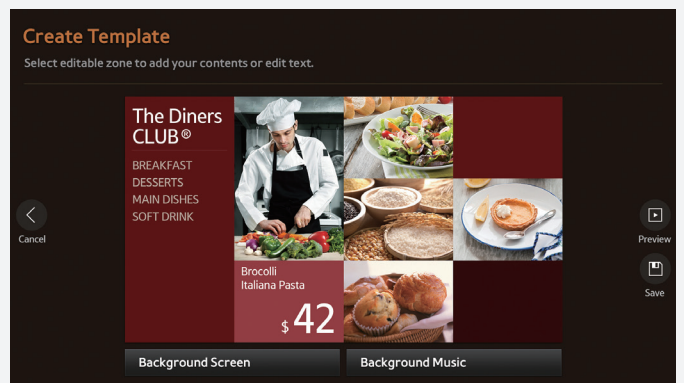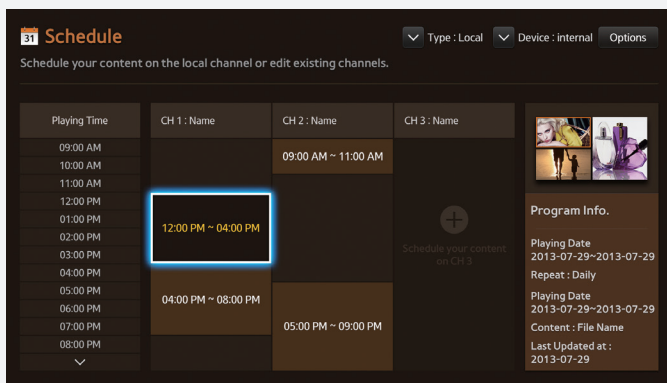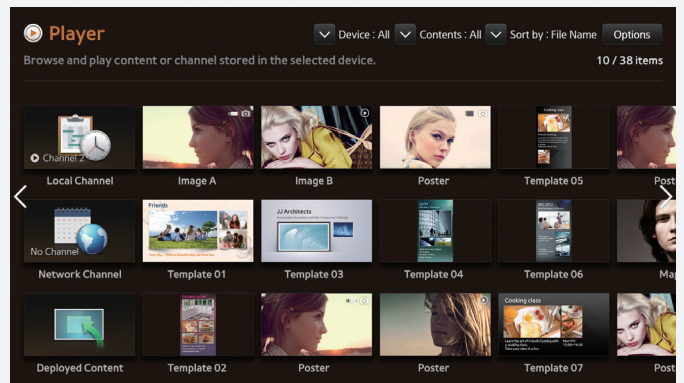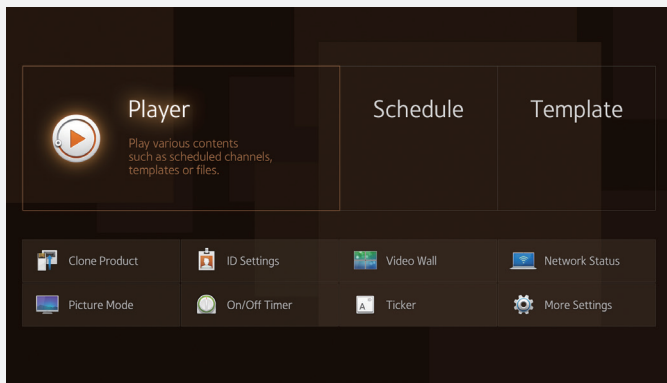
Figure 2. The dedicated Home screen design simplifies display management
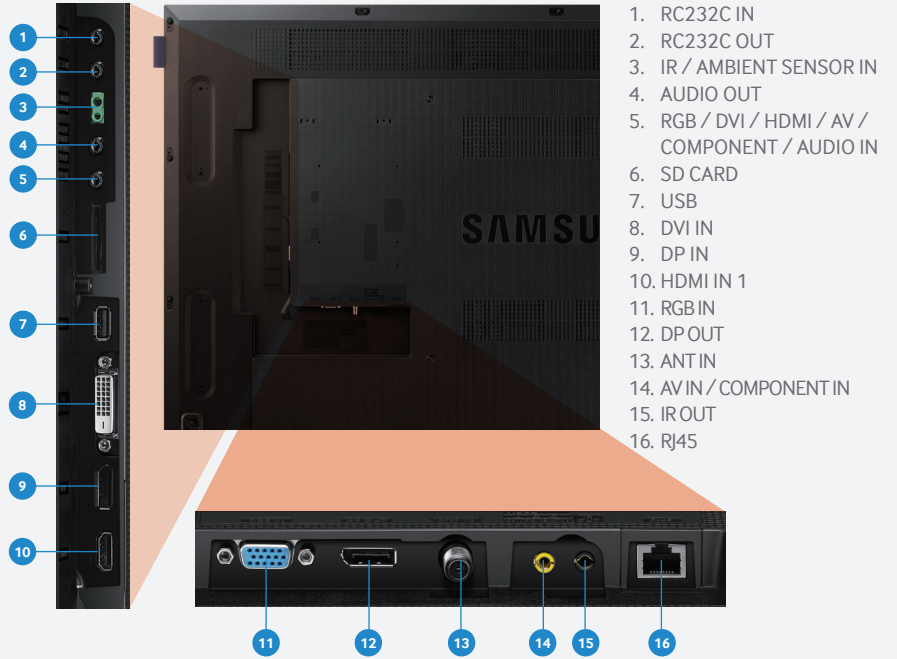
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Samsung DHD Series displays

DHD

40" / 48" / 55"
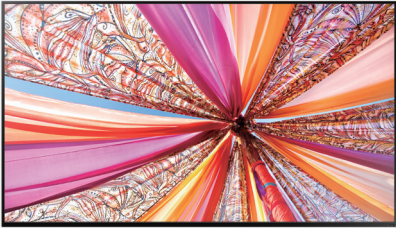
Connectors (North America/Korea)

1. RC232C IN
2. RC232C OUT
3. IR / AMBIENT SENSOR IN
4. AUDIO OUT
5. RGB / DVI / HDMI / AV / COMPONENT / AUDIO IN
6. SD CARD
7. USB
8. DVI IN
9. DP IN
10. HDMI IN 1
11. RGB IN
12. DP OUT
13. ANT IN
14. AV IN / COMPONENT IN
15. IR OUT
16. RJ45

Connectors (Global)

1. RC232C IN
2. RC232C OUT
3. IR / AMBIENT SENSOR IN
4. AUDIO OUT
5. RGB / DVI / HDMI / AV / COMPONENT / AUDIO IN
6. SD CARD
7. USB
8. DVI / MAGICINFO IN
9. DP IN
10. HDMI IN 1
11. RGB IN
12. DP OUT
13. AV IN / COMPONENT IN
14. IR OUT
15. RJ45

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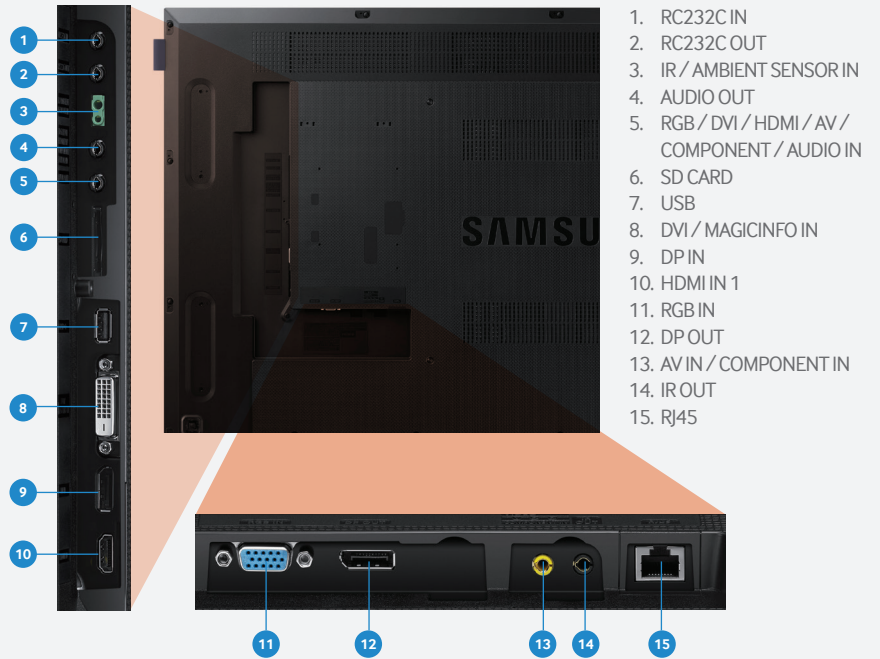
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Samsung DHD Series displays

Specifications

			DH40D	DH48D	DH55D
Panel	Diagonal size		40"	48"	55"
	Type		60 Hz d-LED BLU	60 Hz d-LED BLU	120 Hz d-LED BLU
	Resolution		1,920 x 1,080 (16:9)		
	Pixel pitch (mm/in.)		0.15 x 0.46 0.01 x 0.02	0.18 x 0.55 0.01 x 0.02	0.21 x 0.63 0.01 x 0.02
	Active display area (mm/in.)		885.6 x 498.15 34.87 x 19.61	1,054.08 x 592.92 41.5 x 23.34	1,209.6 x 680.4 47.6 x 26.7
	Brightness (Typ.)		700 nit		
	Contrast ratio (Typ.)		5000:1		
	Viewing angle (H/V)		178:178		
	Response time (G-to-G)		8 ms		
	Display colors		10 bit Dithering -1.07 Billion		
	Color gamut		72%		
Display	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	HDMI®1 Component (CVBS Common)		
		Audio	Stereo mini jack -> Stereo jack		
	Output	RGB	DP 1.2 (Loop-out)		
		Video	N/A		
		Audio	Stereo mini jack -> Stereo jack		
		Power out	N/A		
	External control		RS-232C (In/out) thru stereo jack, RJ45		
	External sensor		IR, Ambient Light		
Power	Type		Internal		
	Power supply		AC 100 - 240 V~ (+/- 10 %), 50/60 Hz		
	Power consumption	Sleep mode	Less than 0.5 W		
		Off mode	Less than 0.5 W		

Samsung DHD Series displays

Specifications

			DH40D	DH48D	DH55D
Mechanical specs	Dimension (mm/in.)	Set	913.2 x 531.3 x 52.4 35.9 x 20.9 x 2.0	1,081.7 x 626 x 52.4 42.5 x 24.6 x 2.0	1,237.2 x 713.5 x 52.4 48.7 x 28.0 x 2.0
	Dimension w/o deco (mm/in.)	Set	906.6 x 524.7 x 49.9 35.6 x 20.6 x 1.9	1,075.1 x 619.4 x 49.9 42.3 x 24.3 x 1.9	1,230.6 x 706.9 x 49.9 48.4 x 27.8 x 1.9
		Package	1,000 x 585 x 126 39.3 x 23.0 x 4.9	1,185 x 715 x 148 46.6 x 28.1 x 5.8	1,348 x 810 x 148 53.0 x 31.9 x 5.8
	Weight (kg/lb)	Set	8.6 / 18.9	12.2 / 26.8	17.1 / 37.6
		Package	10.5 / 23.1	15.7 / 34.6	21.5 / 47.3
	Weight w/o deco (kg/lb)	Set	7.52 / 16.5	11.1 / 24.4	15.4 / 33.9
		Package	9.1 / 20.0	14 / 30.8	19.5 / 42.9
	VESA mount (mm/in.)		200 x 200 7.87 x 7.87	400 x 400 15.75 x 15.75	
	Protection glass		N/A		
	Stand type		Foot stand (Optional)		
	Media player option type		Embbeded, PIM-B (Attachable)		
	Bezel width (mm/in.)		13.3 / 0.52 (Top,Side) 18.8 / 0.74 (Bottom)		
	Bezel width w/o deco (mm/in.)		9.5 / 0.37 (Top,Side) 15.0 / 0.59 (Bottom)		
Operation	Recommended Usage Hours		24hrs/day		
	Operating temperature		0°C - 40°C (32°F - 104°F)		
	Humidity		10 - 80%		
Feature	Key		Slim & light LFD with built-in MagicInfo Lite		
	Special	H/W	Super Clear Coating, Temperature Sensor, Video Wall (15 x 15), Pivot Display, Clock Battery (80hrs Clock Keeping), Built in Speaker, WiFi Module Embedded, SD Card Slot		
		S/W	Magic Clone(to USB), Auto Source Switching & Recovery, RS232C/RJ45 MDC,Plug and Play (DDC2B), PIP/PBP, Image Rotation, Button Lock, DP 1.2 Digital Daisy Chain(Supporting 2x2 UHD Resolution, HDCP Support), Built In MagicInfo Player S2, Firmware Update by Network, LFD New Home Screen, PC-less VideoWall, Predefined Template for Vertical Usage, Multi Channel, Mobile Control, Event Schedule, Backup Player, PC-less Touch, MagicPresenter		
	Internal player (Embedded H/W)	Processor	Cortex-A9 1GHz Quad Core CPU		
		On-chip cache memory	L1 (I/D) : 32KB / 32KB / L2 (Unified) : 1MB		
		Clock Speed	1 GHz CPU dual		
		Main memory interface	1.5GB Dual 48bit DDR3-933 (1866MHz)		
		Graphics	2D & 3D Graphics Engine : Up to 1920x1080. 32bpp / Supports OpenGL ES®		
		Storage (FDM)	8GB (2GB Occupied by O/S, 6GB 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.		
		Host Bus	N/A		
		IO ports	USB 2.0		
		Operating system	Linux®		

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Specifications

			DH40D	DH48D	DH55D
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) :GB13837-2003(CISPR13:2001), GB17625.1-2003(61000-3-2-2001)		
	Environment		ENERGY STAR 6.0 (USA)		
Accessories	Included		Quick Setup Guide, Warranty Card, D-Sub cable, Power Cord, Remote Controller, Batteries, RS232C(IN) adapter, Cover-Jack, Screw (M3L8, 1EA) (M4L8, 4EA)		
	Optional	Stand	STN-L4055AD, STN-L3240E	STN-L4055AD, STN-L4655E	
		Mount	WMN4070SD WMN250MD		
		Specialty	CML400D (Ceiling mount)	CML450D (Ceiling mount)	
Media Player	CPU				
	N/B				
	S/B				
	GPU				
	FDM/HDD		PIM (Optional)		
	Memory				
	Ethernet				
	Connectivity	USB			
		Output			
		Others			

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Legal and additional information

About Samsung

Samsung Electronics Co., Ltd. is a global leader in technology, opening new possibilities for people everywhere. Through relentless innovation and discovery, we are transforming the worlds of TVs, smartphones, tablets, PCs, cameras, home appliances, printers, LTE systems, medical devices, semiconductors and LED solutions. We employ 286,000 people across 80 countries with annual sales of US$216.7 billion. To discover more, please visit www.samsung.com.

For more information

For more information about Samsung DHD Series Premium Signage Displays, visit www.samsung.com/business or

www.samsung.com/displaysolutions

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