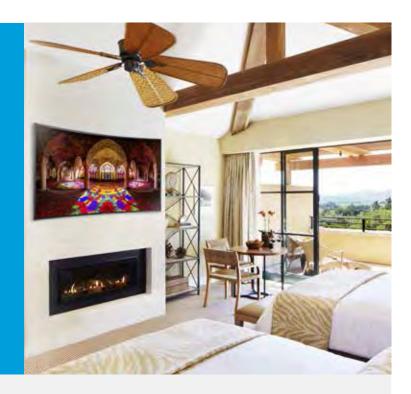
Samsung UHD Hospitality Display

-HD690U

Exceptional UHD SMART hospitality display for the premier hotel environment



Emerging popularity of UHD in hospitality environments

With the continuous growth of the consumer UHD market and the emergence of UHD content providers across the globe, UHD is becoming increasingly popular among hospitality businesses. This industry-wide acceptance is expected to increase, with UHD becoming a standard room entertainment environment in the foreseeable future. Considering the timeframe typically required by properties to replace hospitality TVs, this is the ideal moment to begin equipping guest room entertainment environments with UHD displays. As with any business enhancement, hospitality providers must consider both replacement and operating expenses when exchanging existing TVs with UHD TVs.



Figure 1. UHD Hospitality Displays upscale hotel atmosphere while delivering immersive viewing experience

Catch the UHD trend with stunningly clear, easily managed displays that deliver rich content for the upscale hotel

With Samsung UHD TVs, premium and luxury hotel guests experience amazing picture quality and clarity, along with interactive enriched content that is tailored to make their stay memorable. Whether they're connecting wirelessly to a myriad of entertainment options or enjoying personal images and audio, guests' comfort and convenience are elevated to new levels. A remarkably immersive viewing experience through the HD890W SMART Hospitality Display curved screen provides guests with an unrivalled premium hotel stay. Meanwhile, hotel managers appreciate the efficiency of easy management and content differentiation provided by these superior UHD displays.

'Samsung UHD Hospitality Displays delivers premium and luxury experience with amazing picture quality and enriched interactive content.'





Elevate premium hotel guest rooms to the new UHD standard

Provide exceptionally vivid and detailed images with UHD Upscaling Technology

Samsung UHD TVs deliver Full-HD (FHD) content with an embedded 4-step UHD Upscaling process to provide viewers with exceptionally detailed images and ultimate picture quality. Viewers enjoy consistent UHD-like clarity, even when they're watching content with FHD and lower resolution. UHD Dimming precisely scans an extraordinary number of zones across an entire image and adjusts brightness to deliver deeper darks and brighter whites. This feature virtually eliminates the "halo" effect and image distortion, so viewers enjoy a crystal-clear picture. Precision Black Local Dimming produces sharper contrast and darker black hues by dimming the LEDs behind the darkest area of the picture while leaving the brighter elements fully illuminated. With Wide Color Enhancer Plus, viewers witness a wider spectrum of colors on the TV screen, with enriched colors even for older, non-HD content.



Figure 2. Viewers can enjoy UHD-like clarity through Upscaling Technology

Combine rich content, interactivity and manageability

LYNKTM SINC provides hotel guests with a luxurious and entertaining stay built around their schedules or purpose of visit, while ensuring interactivity through an IP-based solution similar to consumer SMART TVs. The solution offers a new grid-type template for delivery of richer content to guests. In addition, LYNK SINC serves all provided content through coaxial cables and IP networks, along with two-way interaction through the solution's linkage to a PMS server.

Easily customizable by hotel managers, the solution delivers centralized management of hundreds of hotel displays with controls ranging from TV status monitoring and controlling to guest grouping for differentiated content delivery.

LYNK SINC's new function, IPTV Standalone Solution, is available without SINC content through a free license. Through this function, hotel personnel can control content by editing the IPTV channel list and cloning the channel list to a USB device and copying it to individual TVs. This way, managers can efficiently offer guests IP TV without having to purchase any additional solution.

The guest experience is enhanced with access to services and information, such as local event and tourist information, and available discounts. Useful hotel information such as room service or spa menus can be accessed through customizable widgets, as well as free, automatically updated weather information so guests can plan outdoor activities. LYNK SINC enables hotels to provide up-to-date flight information so guests can coordinate checkout times with flight departures and supports personalized, real-time guest messaging. All of these professional capabilities are provided simply over an IP network without the need for STBs, minimizing maintenance complexity and eliminating the cumbersome presence of STBs in the property's hotel rooms.



Figure 3. LYNK SINC solution diagram





Deliver interactivity and rich content to guests with easily managed and customizable solutions

Easily manage hospitality TVs centrally and remotely with LYNK™ REACH, a flexible and low-cost coaxial infrastructure solution

Designed exclusively for hospitality businesses to help them manage content and control displays over current RF cables, LYNKTM REACH delivers remote, central and cost-efficient management of in-room displays. LYNK REACH is specialized software provided with LYNK REACH Server for hospitality environments. The software solution provides a simplified UI and editing tool that organizes and displays content, such as hotel information, images and logos, using existing infrastructures. LYNK REACH offers hoteliers advanced advertising functionalities and Channel Bank Management for Pay TV Services. In addition, LYNK REACH improves usability by enabling hotel managers to monitor room status, recent deployment and activity and with a simple, easy and intuitive user interface (UI) through Project Creator.

and VoD content. Because H.Browser is based on Internet programming languages such as HTML5 and Java Script®, SIs can easily develop and quickly deploy robust, customized hotel solutions.



Figure 5. H.Browser diagram



Figure 4. REACH solution diagram

Offer the ultimate guest experience with a customizable IP-based hospitality display management solution

As branded hospitality chains delegate hotel entertainment infrastructure maintenance to partners, they need a powerful solution to support the easy development, straightforward deployment and simplified maintenance of partners' solutions. H.Browser delivers the superior in-room entertainment and customized content management services that today's hotel guests expect, along with interactive web services, without need for hotels to purchase, install and maintain additional hardware such as VoD set-top boxes (STBs). As an IP-based open platform, H. Browser enables Systems Integrators (SIs) to provide fully customizable web browser solutions that deliver premium interactive services and features for both free

Integrate guests' smart devices into in-room entertainment

Bluetooth Music Player provides a cozy, home-like atmosphere by enabling guests to listen to their mobile device audio through an easy connection The Bluetooth Music Player feature eliminates the need for hotels to purchase additional costly audio docking stations that can easily be broken or stolen.

Offer flexible entertainment through convenient wireless connectivity

Samsung UHD hospitality displays transform the guest experience by providing an in-room, multi-device entertainment hub with myriad viewing, sharing and connectivity features.

Smart View

Smart View is an easy TV-mobile interaction feature that enables guests to watch TV channels on a broad range of mobile devices. Smart View TV-to-mobile interaction includes





Increase guests' comfort with simplified personal audio playing through the TV

Live Channel Mirroring for all channels using a Samsung GALAXY® device and free-to-air channels (only) using an iPhone®. Mobile-to-TV interaction pushes content such as photos, videos and music files through an intuitive interface available on the mobile device to the TV for easy selection and viewing. Mobile-to-TV interaction is not restrictive of the mobile device platform used. Guests can enjoy their mobile content on the larger in-room TV.

Screen Mirroring

Screen Mirroring enables guests to share the screen of a mobile device on the TV. This sharing capability includes the screen configuration in addition to content. This means that the TV displays exactly what displays on the mobile device, with no content restrictions.

Digital Living Network Alliance® (DLNA)

Digital Living Network Alliance (DLNA) technology enables guests to play personal content through a wireless connection on their in-room TVs. Content includes movies, photos and music.

Soft AP

Soft AP provides a software access point (AP) or hotspot. Up to four devices can connect wirelessly to the AP. Hotel managers can change the signal level and channel of the Soft



Figure 6. Quad Core enables powerful TV performance

AP to suit the connectivity environment of different rooms.

Deliver quicker and higher TV performance with Quad Core and Instant On

With a Quad Core processor, guests can experience smoother navigation and faster access to smart features for enhanced TV viewing and operation. With Instant On, the TV boots in only 2 seconds to reduce waiting time.

Enhance content protection with a pure software DRM solution

Samsung LYNK DRM technology provides hoteliers with a protected and cost-effective alternative to traditional hardware-based content protection systems. The solution allows encrypted content to pass safely and to display on hotel TVs.

A software-only implementation, LYNK DRM technology reduces the need for additional equipment and provides quicker recovery for Conditional Access System (CAS) problems. To help ensure reliability of the system, coverage extends to the enlargement of head-end equipment for cable operators.





Safeguard content with a software-based, reliable and economical DRM solution

Enhance guest comfort with an intuitive and sensitive remote controller

Samsung 890 Series SMART Hospitality Display remote controllers feature an oval design that fits more comfortably in the user's hand with a motion sensor and four direction keys for faster, easier navigation, a touchpad for easy and intuitive flicking and scrolling, and hot keys for single-click access to frequently used features.

*The referenced remote controller (TM1480) is offered only for high-end 890 Series SMART Hospitality Display models.

Optimize device and resource management to minimize TCO

Samsung UHD Hospitality Displays provide centralized management from a control room. The displays' convenient and efficient management features reduce staff maintenance visits. Because the displays are connected to the hotel's network infrastructure, management can monitor each inroom TV and instantaneously deploy content grouping policies and EPG from a control room. The simplified configuration with only the display delivers the convenience of a set-top box (STB) configuration without the complexity, cost or hassle.

Feature and Benefit

Model	Feature and Benefit
HD690U	- Ultra-HD resolution for enhanced TV viewing
	 Bluetooth Music Player for straightforward and enjoyable personal audio playing
	- Management solution (REACH, SINC, H.Browser) for economic and simplified content and display management





HD690U



- Ultra-HD resolution for enhanced TV viewing
- Bluetooth Music Player for straightforward and enjoyable personal audio playing
- Management solution (REACH, SINC, H.Browser) for economic and simplified content and display management

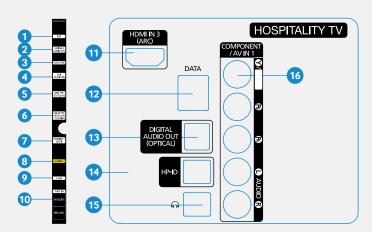
Basic Feature			Hospitality Solution		Convenience Feature		Security		Clock Option			
Screen Size	Resolution	Design	Processor	Home Menu	Lynk™ Reach	Lynk™ SINC	Bluetooth Player	Embedded Wi-Fi	Lynk™ DRM	Security Mode	External Clock Compatibility	Software Clock
40" 48" 55"	UHD	Slim	Quad Core	New Home Menu	0	0	0	0	0		0	0

40"/48"/55"



- HG40ED690UB
- HG48ED690UB
- HG55ED690UB

Connectors



- 1. RJP(Remote Jackpack)
- 2. VARIABLE AUDIO OUT
- VOLUME CONTROL
- 4. DVI AUDIO IN
- E LICI
- 6. USB/CLONING
- 7. HDMIIN 1

- 8. HDMIIN 2
- 9. ETHERNET (LAN)
- 10. ANTENNA IN (SATELLITE, AIR/CABLE)
- 11. HDMIIN 3
- 12. DATA
- 13. DIGITAL AUDIO OUT (OPTICAL)
- 14. HEADPHONE-ID
- 15. HEADPHONE
- 16. COMPONENT/AV IN 1





Specifications

		40HD690U	48HD690U	55HD690U	
		HG40ED690UB	HG48ED690UB	HG55ED690UB	
Dieplay	Backlight	LED	LED	LED	
	Inch	40	48	55	
Display	HD/FHD/UHD	UHD	UHD	UHD	
	Resolution	3,840 x 2,160	3,840 x 2,160	3,840 x 2,160	
Video	Picture Engine	UHD Up-Scaling	UHD Up-Scaling	UHD Up-Scaling	
	Micro Dimming	UHD Dimming	UHD Dimming	UHD Dimming	
	Wide Color Enhancer (Plus)	Yes	Yes	Yes	
	Auto Motion Plus	Yes	Yes	Yes	
	Film Mode	Yes	Yes	Yes	
	Dolby Digital Plus	MS11	MS11	MS11	
	Virtual Surround	DTS Studio Sound	DTS Studio Sound	DTS Studio Sound	
	DTS Codec	DTS Premium sound 5.1	DTS Premium sound 5.1	DTS Premium sound 5.1	
Audio	3D Sound	N/A	N/A	N/A	
	Sound Output (RMS)	20W(L:10W, R:10W)	20W(L:10W, R:10W)	20W(L:10W, R:10W)	
	Speaker Type	2CH(Down Firing + Base Reflex)	2CH(Down Firing + Base Reflex)	2CH(Down Firing + Base Reflex)	
	Woofer	N/A	N/A	N/A	
	Smart Hub	Smart	Smart	Smart	
	Apps	Yes	Yes	Yes	
	Web Browser	Yes	Yes	Yes	
	Mobile to TV - Mirroring, DLNA	Yes	Yes	Yes	
	Samsung Smart View	Yes	Yes	Yes	
	Voice Control	Yes	Yes	Yes	
	Samsung 3D	N/A	N/A	N/A	
	3D Converter	N/A	N/A	N/A	
	Digital Clean View	Yes	Yes	Yes	
	Auto Channel Search	Yes	Yes	Yes	
	Auto Power Off	Yes	Yes	Yes	
Feature	BD Wise Plus	N/A	N/A	N/A	
reature	Caption (Subtitle)	Yes	Yes	Yes	
	Channel List USB-Clone	Yes	Yes	Yes	
	ConnectShare™ (HDD)	Yes	Yes	Yes	
	ConnectShare™ (USB 2.0)	Yes	Yes	Yes	
	Sports Mode	Basic	Basic	Basic	
	EPG	Yes	Yes	Yes	
	Game Mode	Yes	Yes	Yes	
	OSD Language	27 European Languages	27 European Languages	27 European Languages	
	Picture-In-Picture	Yes	Yes	Yes	
	BT HID Built-in	Yes	Yes	Yes	
	USB HID Support	Yes	Yes	Yes	
	Teletext (TTX)	Yes	Yes	Yes	





Specifications

		40HD690U	48HD690U	55HD690U	
		HG40ED690UB	HG48ED690UB	HG55ED690UB	
	Samsung LYNK™ SINC Compatibility	Yes	Yes	Yes	
	H.Browser Compatibility	Yes	Yes	Yes	
	Samsung LYNK™ REACH	Yes	Yes	Yes	
	Samsung LYNK™ REACH Server Compatibility	Yes	Yes	Yes	
	Hospitality Home Menu	Yes	Yes	Yes	
	Bluetooth Music Player (Mobile > TV)	Yes	Yes	Yes	
	Hospitality Plug&Play (Easy Set-up)	Yes	Yes	Yes	
	Auto Source Mode	Yes	Yes	Yes	
	Power On Mode	Yes	Yes	Yes	
	Hotel Channel List	Yes	Yes	Yes	
	Channel Setup On/Off	Yes	Yes	Yes	
	Mixed Channel List (ATSC, DVB-T/T2/C/S2, Analog)	Yes	Yes	Yes	
	My Channel	Yes	Yes	Yes	
	Energy Saving Mode(BLU control)	Yes	Yes	Yes	
	Logo Display with Time Out Setting (BMP/Movie)	Yes	Yes	Yes	
	Welcome Message	Yes	Yes	Yes	
	RJ12 / IR Pass Through	Yes	Yes	Yes	
	External Clock Compatibility	No	No	No	
	Clock Back Up Supply	Yes	Yes	Yes	
lospitality eature	External Clock Dimming Control	No	No	No	
cature	Software Clock	Yes	Yes	Yes	
	Multi Code Remote control	Yes	Yes	Yes	
	Screwed Battery Cover	Yes	Yes	Yes	
	Sound Bar Compatibility	Yes	Yes	Yes	
	Music Mode (Input: PC/AV/ Component/HDMI)	Yes	Yes	Yes	
	Music Mode Backlight on/off	Yes	Yes	Yes	
	TTX Clock Update (Analogue)	Yes	Yes	Yes	
	USB Cloning	Yes	Yes	Yes	
	Smoovie Compatibility	Yes	Yes	Yes	
	Soft AP	Yes	Yes	Yes	
	On/Off Timer (Schedule)	Yes	Yes	Yes	
	Wake-up Timer (Alarm)	Yes	Yes	Yes	
	Samsung LYNK™ DRM	Yes	Yes	Yes	
	Pro:ldiom	No	No	No	
	bLAN	No	No	No	
	Security Mode	No	No	No	
	S/W EPG (Solution EPG)	Yes	Yes	Yes	
	IEC 60601-1	No	No	No	
	Standby LED Color	Red	Red	Red	
	Wake on LAN (WOL)	Yes	Yes	Yes	





Specifications

		24HD690 HG24ED690AB	28HD690 HG28ED690AB	55HD690 HG55ED690EB
	HDMI (Side/Rear)	2/1	2/1	2/1
	USB (Side/Rear)	2/0	2/0	2/0
	Component In (Y/Pb/Pr) (Side/Rear)	0/1	0/1	0/1
	Composite In (AV) (Side/Rear)	1 (Common Use for Component Y)	1 (Common Use for Component Y)	1 (Common Use for Component Y)
	Ethernet (LAN) (Side/Rear)	1/0	1/0	1/0
	Headphone (Side/Rear)	0/1	0/1	0/1
	Audio Out (Mini Jack / LR) (Side/Rear)	No	No	No
	Digital Audio Out (Optical) (Side/Rear)	0/1	0/1	0/1
	PC In (D-sub)(Side./Rear)	No	No	No
	PC/DVI Audio In (Mini Jack)(Side./Rear)	1/0	1/0	1/0
	RF In (Terrestrial/Cable input) (Side/Rear)	1/0	1/0	1/0
Input &	RS232C	Yes(Common Use for RJ12)	Yes(Common Use for RJ12)	Yes(Common Use for RJ12)
Output	CI Slot (Side/Rear)	0/1	0/1	0/1
	Scart (Side/Rear)	N/A	N/A	N/A
	Pillow Speaker Jack (Side/Rear)	No	No	No
	Variable Audio Out (Side/Rear)	1/0	1/0	1/0
	Variable Audio Out Volume Control (Side/Rear)	1/0	1/0	1/0
	Video Out (Side/Rear)	No	No	No
	RJ12 (Side/Rear)	0/1	0/1	0/1
	RJP (Remote Jackpack) (Side/Rear)	1/0	1/0	1/0
	Headphone ID (Side/Rear)	0/1	0/1	0/1
	Door-Eye Control (Side/Rear)	No	No	No
	Door-Eye Video In (Side/Rear)	No	No	No
System	DTV Tuner	DVB-T2/C/S2	DVB-T2/C/S2	DVB-T2/C/S2
System	Analog Tuner	Yes	Yes	Yes
	Front Color	Black	Black	Black
Design	Stand Type	Plate T-Shape	Plate T-Shape	Plate T-Shape
	Swivel (Left/Right)	N/A	N/A	N/A
	Set Dimension with Stand (WxHxD) (mm)	917.7 * 582.2 * 241.6	1087.1 * 676.8 * 254.6	1242.6 * 763.4 * 267.5
Dimension	Set Dimension without Stand - Wall Mount Side (WxHxD) (mm)	917.7 * 535.7 * 49.5	1087.1 * 630.9 * 50.2	1242.6 * 718.4 * 50.1
	Set Dimension without Stand - Speaker Side (WxHxD) (mm)	917.7 * 535.7 * 62.6	1087.1 * 630.9 * 63.3	1242.6 * 718.4 * 63.2
147 * 1 *	Set Weight with Stand (kg)	9.4	13.6	17.3
Weight	Set Weight without Stand (kg)	7.7	11.4	15
	Package Weight (kg)	11	15.9	21.4
	Remote Controller Model	TM1240	TM1240	TM1240
	Remote Controller Model	Yes	Yes	Yes
	Battery (for Remote Control)	Yes	Yes	Yes
	Vesa Wall Mount Support	Yes	Yes	Yes
Accessory	Power Cable	Yes	Yes	Yes
	Quick Install Guide	Yes	Yes	Yes
	Data Cable	No	No	No
	Stand Mount Kit	No	No	No
	Security Screws	No	No	No





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For more information

For more information about Samsung UHD Hospitality Displays, visit www.samsung.com/business or www.samsung.com/displaysolution.

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2015-05



