

SHARP

Be Original.

PN-HB851
PN-HB751
PN-HB651
LCD MONITOR

Versatile High-definition Signage with Built-in SoC Controller



4K
3840 × 2160 Pixels

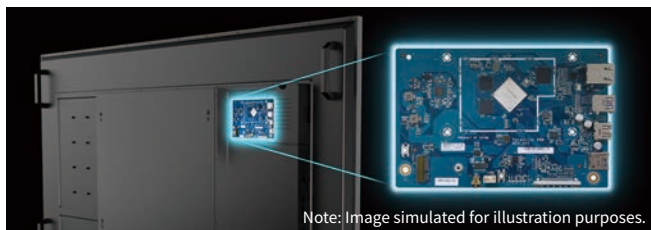


The PN-HB851/HB751/HB651 is a monitor you can trust to get your message out there. What sets it apart is a built-in system-on-a-chip (SoC) controller that allows it to deliver digital signage straight out of the box. Daily operation is a breeze, thanks to on-board content distribution software. Also, SHARP e-Signage S allows you to create and manage professional-grade content. And optional upgrades give the monitor even more flexibility to interact with external devices. It all adds up to a powerful signage solution that's built to engage.

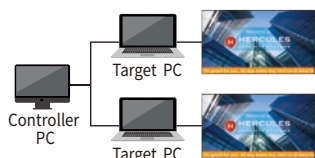
Out-of-the-Box Digital Signage Solution

Built-in SoC (System on a Chip)

The PN-HB851/HB751/HB651 has a powerful integrated SoC controller driven by an Arm® Cortex® hexa-core processor. The SoC comes with 4 GB of memory, 32 GB of storage, and integrated Android™ OS (7.1). These monitors are ready to display signage right out of the box.

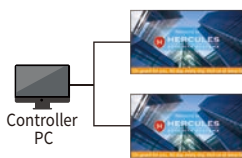


Monitors with no built-in SoC controller



Requires a target PC for each monitor

Monitors with a built-in SoC controller



No target PCs required

Support for H.265/HEVC

PN-HB851/HB751/HB651 monitors support not only H.264/AVC but also H.265/HEVC. The latter is a next-generation high-efficiency video codec that reduces the communication burden during video transmission. Your content takes on a new level of depth and presence, thanks to the sheer scale and precision of these screens.

SHARP Open Architecture Platform

This platform allows third-party software developers to create custom signage applications. This opens up rich possibilities for digital signage in retail, office, and other settings. Certification under Google's Compatibility Test Suite (CTS) assures compatibility with third-party Android apps.

Note: For details, please consult with your local authorised Sharp dealer or representative.

Smart Connectivity

The PN-HB851/HB751/HB651 supports high-speed wireless LAN and features built-in Bluetooth® connectivity. This lets you deliver content—and connect equipment—wirelessly.

Ready for Versatile Signage Support

Autoplay with Media Player

Displaying still images or videos as signage content couldn't be easier. When the monitor is powered on, the built-in media player automatically starts playing content stored in internal storage or on a USB memory device or microSD card. A simple schedule function allows you to pre-register seven patterns for when to start/stop the content playback. In a slideshow, you can add visual effects between the still images. You can also make playlists that combine still images and videos. The PN-HB851/HB751/HB651 lets you enjoy the benefits of simple digital signage without any extra software, special skills, or even a PC.

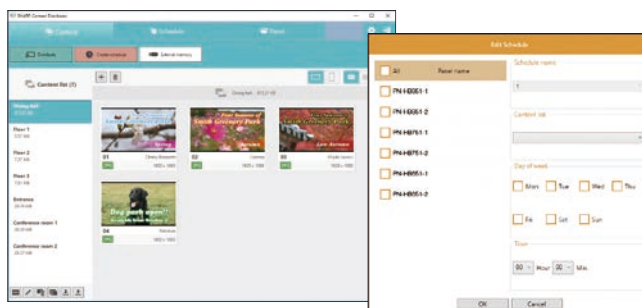
Web-Based Signage

The PN-HB851/HB751/HB651 features a pre-installed HTML5 browser on the SoC as well as built-in support for Bluetooth and a high-speed wireless LAN. This makes it easy to show web content on the monitor as signage content.

Note: Web-based content can be displayed at up to 1080p resolution.

SHARP Content Distributor

This software makes it easy to update the content to be displayed on multiple LCD monitors. Through simple and intuitive PC operation, you can schedule **what** content gets distributed, **when** it gets delivered, and **which** monitors show it. Take advantage of a convenient signage solution that lets you distribute content in a timely manner to multiple monitors.



Intuitive drag-and-drop operation with thumbnail view

Easy editing of distribution schedules

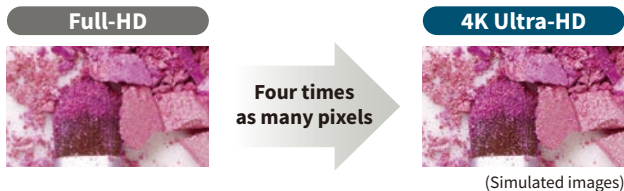
Note: SHARP Content Distributor is available via the downloader on the bundled CD-ROM.

Flexibility and Expandability

Superb 4K LCD Panel

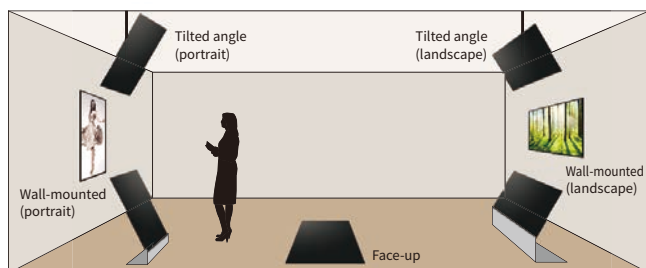
The PN-HB851/HB751/HB651 is specified for 4K Ultra-HD (3,840 × 2,160-pixel) resolution and equipped with a variety of inputs to support 4K60p playback*. These monitors can express all the detail and visual impact of your selected content. A brightness of 350 cd/m² supports them in their digital signage duties.

* 4K playability depends on PC and system configuration.



Flexible Settings

The PN-HB851/HB751/HB651 is designed for easy installation. You can install it in a landscape or portrait orientation or even face up. And you can tilt it too—either backward up to 90 degrees or forward up to 20 degrees. Such flexibility gives you more freedom to meet today's demanding signage needs.



Note: Please consult with your local authorised Sharp dealer or representative regarding tiltable angles and other installation conditions.

16-Hour Daily Operation

The PN-HB851/HB751/HB651 can run 16 hours a day, 7 days a week. Whether in an office, retail, or other location, you'll get ultra-reliable daily performance.

Notes:

1. Rebooting the OS once a day is highly recommended to maintain stable operation.
2. When POWER SAVE MODE is set to OFF, the integrated SoC controller stays on even in standby mode.

SHARP e-Signage S

This versatile signage software provides total support for creating, scheduling, distributing, and managing a wide range of signage programs on Sharp LCD monitors in a variety of locations. You can make and edit signage programs easily through simple drag-and-drop operation. As well as laying out diverse content, you can create display schedules and monitor the operational status of designated LCD monitors. Sharp offers an array of solution packages to match a variety of signage needs, from a single standalone display to a network of multiple monitors—all without any hassle. The PN-HB851/HB751/HB651 comes bundled with the Standalone Edition of SHARP e-Signage S. It also includes a signage player pre-installed on the integrated Android OS.

	Product name	No. of target PCs (Players)	No. of operators	Distribution network
Standalone Edition	Bundled	1	1	No
Network Edition	PN-SS22	Max. 100	1	Yes
Pro Edition	PN-SS25	Max. 1,000	1	Yes
Web Server Edition	PN-SW25	Max. 1,000	1 to 50	Yes
Player	Pre-installed			

Notes:

1. SHARP e-Signage S content can be displayed at up to 1080p resolution.
2. SHARP e-Signage S (Standalone Edition) is available via the downloader on the bundled CD-ROM.

DisplayPort™ Daisy Chain

Up to four PN-HB851/HB751/HB651 monitors can be set up in a daisy chain configuration by connecting their DisplayPort terminals. This lets you display the same content simultaneously on all screens.

HDBaseT™ Receiver Board (PN-ZB03H) (Option)

HDMI™ video*¹/audio and control signals can be received via a single LAN cable*² from up to 100 metres away. Compatibility with HDBaseT 2.0 allows you to remotely operate a PC from a USB device connected to this board*³.

*1 Video signals up to 4K30p can be transferred.

*2 Category 6 or higher shielded cable (available commercially).

*3 Requires an HDBaseT 2.0-compatible transmitter (available commercially). Not all USB devices are supported.

Wireless Board (PN-ZB03W) (Option)

This allows up to 10 devices—including Mac or Windows® computers, smartphones, and tablets—to be connected simultaneously to the monitor without any cable hassles. Input from four devices can be displayed in a 2 × 2 split screen, with images displayed at up to 1080p resolution. Enabling such wireless collaboration is a great way to enhance productivity in work or educational environments.

Note: Transferred screen images can be displayed at up to 1080p resolution.

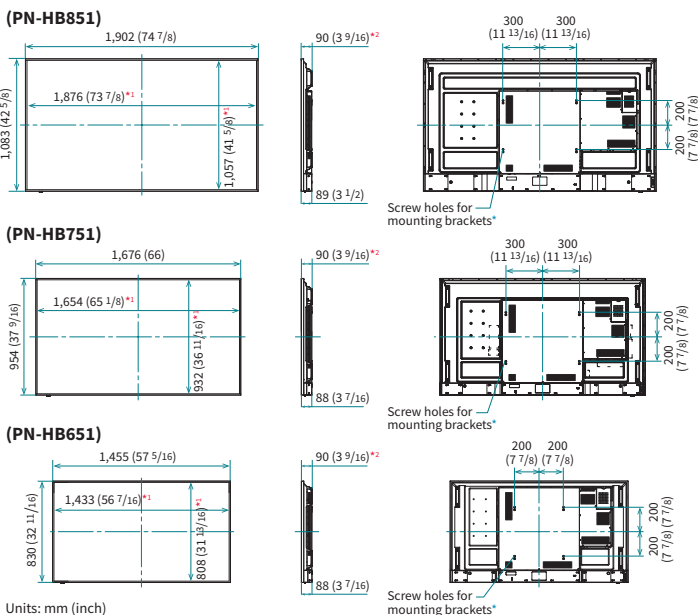


Specifications

Model Name	PN-HB851	PN-HB751	PN-HB651	
Installation	Landscape / Portrait / Face-up			
LCD Panel	85-inch-class (84 7/16-inch [214.78 cm] diagonal) TFT LCD	75-inch-class (74 9/16-inch [189.34 cm] diagonal) TFT LCD	65-inch-class (64 1/2-inch [163.90 cm] diagonal) TFT LCD	
	Max. Resolution	3,840 × 2,160 pixels		
	Max. Display Colours (approx.)	1,070 million colours		
	Pixel Pitch (H × V)	0.488 × 0.488 mm	0.430 × 0.430 mm	0.372 × 0.372 mm
	Max. Brightness*1	350 cd/m ²		
	Contrast Ratio	5,000 : 1		
	Viewing Angle (H/V)	178°/178° (CR ≥ 10)		
	Active Screen Area (W × H)	1,872 × 1,053 mm (73 11/16" × 41 7/16")	1,650.24 × 928.26 mm (65" × 36 9/16")	1,428.48 × 803.52 mm (56 1/4" × 31 5/8")
	Response Time	9.5 ms (grey to grey, avg.)		
	Backlight	LED, direct lit		
Computer Input	Video	Analogue RGB (0.7 Vp-p) [75Ω], DisplayPort 1.2, HDMI		
	Synchronisation	Horizontal/vertical separation (TTL: positive/negative)		
	Plug & Play	VESA DDC2B		
Input Terminals*2	DisplayPort × 1, Mini D-sub 15-pin × 1, HDMI × 2, RS-232C × 1, 3.5 mm-diameter mini stereo jack × 1			
Output Terminals*2	DisplayPort × 1, RS-232C × 1*3, 3.5 mm-diameter mini stereo jack × 1			
Android	OS	Android 7.1		
	CPU	Hexa Core [Arm Cortex-A72 processor (dual core) + Arm Cortex-A53 processor (quad core)]		
	Memory	4 GB		
	Storage	32 GB		
	External Interface	LAN port (10Base-T/100Base-TX/1000Base-T), microSD card slot (microSD/microSDHC/microSDXC*4) × 1, USB port (3.0-compliant) × 2, USB port (2.0-compliant) × 1		
	Wireless LAN	Compliant with IEEE802.11ac/n/a/g/b		
	Bluetooth	Compliant with version 4.1 (A2DP/AVRCP/GATT/GAP/HID/HOGP)		
Expansion Slot	12 V, 2.5 A (power supplied when expanding the functions with an optional part)			
Speaker Output	10 W + 10 W			
Mounting	4 points, 600 × 400 mm pitch, M6 screw	4 points, 400 × 400 mm pitch, M6 screw		
Power Supply	100 V – 240 V AC, 50/60 Hz			
Power Consumption*5	370 W	320 W	260 W	
Environmental Conditions	Operating Temperature*6	0 °C to 40 °C		
	Operating Humidity	20% to 80% RH (no condensation)		
Dimensions (W × D × H) (approx.) (display only)	1,902 × 89 × 1,083 mm (74 7/8" × 3 1/2" × 42 5/8")	1,676 × 88 × 954 mm (66" × 3 7/16" × 37 9/16")	1,455 × 88 × 830 mm (57 5/16" × 3 7/16" × 32 11/16")	
Weight (approx.)*5	48 kg (105.9 lbs)	37 kg (81.6 lbs)	29 kg (64 lbs)	
Main Accessories	AC power cord, remote control unit, battery (AAA size) × 2, CD-ROM, set-up manual, cable clamp (insertion type) × 2, cable clamp (stick-on type) × 3, USB flash drive/microSD card cover, USB flash drive/microSD card cover fixing screw, logo sticker, wireless LAN antenna × 2, RS-232C conversion cable × 1			

*1 Brightness depends on input mode and other picture settings. Brightness level will decrease slightly over the lifetime of the product. Due to the physical limitations of the equipment, it is not possible to maintain a precisely constant level of brightness.
 *2 Use a commercially available connection cable for PC and other video connections. *3 Requires the bundled RS-232C conversion cable. *4 exFAT is not supported. *5 Power consumption and weight may vary from specified levels. *6 When using the monitor lying flat on a surface (or when the monitor is tilted more than 20 degrees upward or downward from the perpendicular in relation to a level surface) the ambient temperature must be within the range of 0°C to 30°C. Temperature conditions may change when using the monitor together with optional equipment. In such cases, check the temperature conditions specified by the optional equipment.

Dimensions

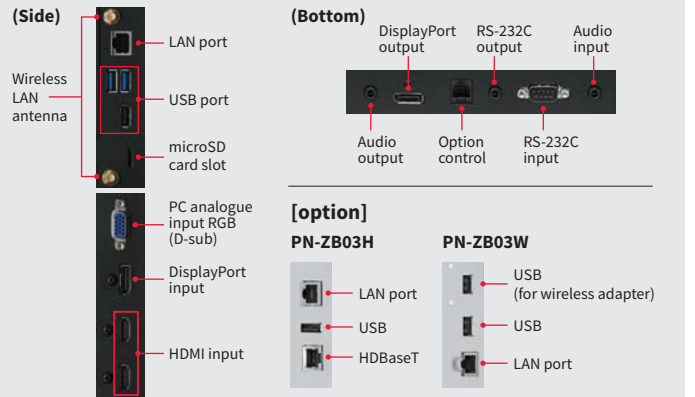


Units: mm (inch)
 *1 Screen dimensions *2 Including detachable handle
 *3 To use the mounting bracket, use M6 screws that are 8 to 10 mm plus the thickness of the bracket.

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Input/Output Terminals

[standard]



Options

PN-ZB03H HDBaseT Receiver Board	PN-ZB03W Wireless Board
Supported standard	HDBaseT 2.0
Max. resolution	4,096 × 2,160 (30 Hz)
Copy protection	HDCP pass-through
Transmission distance	Up to 328 feet / 100 m
Input/output terminals	HDBaseT × 1, LAN × 1 (10Base-T/100Base-TX), USB × 1 (USB 2.0)
Power supply	From the monitor
Max. resolution	1,920 × 1,080 (30 Hz)
Wireless communication method	2.4 GHz, IEEE802.11b/g/n 5 GHz, IEEE802.11a/n
Input/output terminals	LAN × 1 (10Base-T/100Base-TX), USB × 1 (USB 2.0), Wireless adapter × 1 (USB 2.0)
Power supply	From the monitor



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