Professional and Interactive display range

SHARP
Be Original.

'*To transform the way organisations engage with information through connected technologies*'

Contents

Overview of our professional and interactive display range

From commercial displays for digital signage, through to interactive displays for a true Pen-on-Paper® experience, we have a visual solution for every need.

Our professional display solutions and video walls are ideal for any environment where clear communication of information is essential.

Starting with 40", these large format digital displays will get your message across in crowded, public and busy locations such as shopping malls and transport hubs, whereas our interactive displays allow for effortless collaboration, communication and sharing in corporate settings. such as the boardroom or meeting rooms, classrooms and smaller huddle spaces.

Their easy-to-use and highly responsive touch performance ensure that users are confident and can focus on their primary task. The beautifully developed applications tools are brilliant for any environment and ensure seamless integration with existing software and hardware.

Whatever your application, need or environment, you'll find a display to suit in our range of visual solutions.

Windows collaboration display

Walk in, plug in and work together - a smarter way to work

The world's first certified **Windows collaboration display** from Sharp, is certified for Skype for Business and is a next generation 4K 70" interactive display that enables better space utilisation and more productive collaboration in meetings, boardrooms, training rooms, technical reviews and almost anywhere else. As well as using Sharp's award-winning technology, together with a built-in microphone, high quality camera and IoT sensor hub, it works seamlessly with the best Microsoft 365 collaboration tools. Furthermore, it's all backed by the cloud to deliver outstanding ease of use and enable the continual analysis of meeting room conditions and usage.

Key benefits | Windows collaboration display

- Crystal clear information with a 70" 4K Ultra HD (3840 x 2160) display.
- Superb audio and visual performance with Skype for Business certification.
- Effortless unified communication with Microsoft Teams with integrated microphone, speakers and high quality camera.
- Enhanced collaboration when using Microsoft 365 and Microsoft Teams at meeting room scale.
- A natural 'Pen-on-Paper' experience with 10-point PCAP touch with direct optical bonding technology.
- Fast, precise control using a passive pen with 2mm tip.
- Fast "Plug and play" set-up through a single USB-C connector.
- Smart building management using the data from the IoT sensor hub and the optional services (such as Sharp WorkSpaces*) with the Microsoft Azure Digital Twins platform.
- Easy device screen sharing with in-built Wireless Casting and Touch Back control.

*Available mid 2020.

Specifications

Model		Windows collaboration display - PN-CD701
Installation		Landscape
LCD Panel		70-inch-class (69 ½-inch [176.6 cm] diagonal) UV²A*[1] LCD
	Max. Resolution	3,840 x 2,160 pixels
	Max. Display Colours	1.06 billion colours
	Pixel Pitch (H x V)	0.401 x 0.401 mm
	Brightness*[2]	350 cd/m²
	Contrast Ratio	4,000 : 1
	Viewing Angle (H/V)	176°/176° (CR ≥10)
	Active Screen Area (W x H)	1,538.9 x 865.6 mm
	Response Time	6 ms (grey to grey, avg.)
	Backlight	W-LED, edge lit
Touchscreen	Touch Technology	Projected Capacitive (PCAP) touch
	Direct Optically Bonded	Yes
	Palm reject	Yes
	PC Connection Port	USB (2.0) Type B x1, USB Type C x2
	Power Supply	Supplied from main unit
	Multi-Touch	10 points
	Protection Glass	Thickness: 1.9 mm*[3] Shock resistance: 130 cm*[4]
Pen	Passive Touch Pen	Standard with the Windows collaboration display
Wireless Casting	Wireless communication method	2.4 GHz, IEEE801.11 b/g/n; 5 GHz, IEEE801.11 a/n
	Supported devices	Windows and Android
Computer Input	Video	HDMI x 1, USB Type C (DP Alt Mode) x2
	Plug & Play	Yes
	Power Management	Yes
Input/Output terminals*[5]	Top	USB (3.0) Type A x2 (1 for camera) SPDIF-In x1 (for camera) USB (3.0) Type A x2 LAN port (External Gb Ethernet) x1
	Side	LAN port (External Gb Ethernet) x1 Audio line-out (3.5mm-diameter mini stereo jack) x1 LAN port (Internal Gb Ethernet) x1 USB (2.0, Internal storage expansion) Type A x1 USB Type C (DP Alt Mode) output x1
Speaker Output	Built-in	12 W + 12 W
Power Supply		100V – 240V AC, 50/60 Hz
Power Consumption		370W max
Environmental Conditions	Operating Temperature	5˚C to 35˚C
	Operating Humidity	20% to 80% RH (no condensation)
Dimensions (W x D x H) (display only)		1.623.6 x 90 x 976.4 mm
Weight		65kg
Main Accessories		AC power cord, set-up manual, USB Type C (DP Alt Mode) cable (8.0 m), passive touch pen, HDMI cable, USB touch-back cable
Unified Communications	Output connector	USB (3.0) Type B
	Camera resolution	4K sensor with Full-HD @ 30 fps
	Camera field of view	120˚
	Microphone	Array microphone x 4
	Sound collecting distance	4-6m
IoT Sensor Hub		
AI Camera	Output Connector	USB (2.0) Type A
	Resolution	1920 x 1080 @30 fps
	Colour space	YUY2, MJPG
	Field of view	74.8˚
Motion sensor	Sensor type	Microwave
	Detection area	140˚ (Horizontal) / 70˚ (Vertical) 0dB level
Light sensor	Selectable LUX ranges	128/256/512/1024/2048
	Processing	50/60Hz flicker noise and IR rejection
Air quality sensor	Gas types	eCO2, TVOC
Temperature humidity sensor	Temperature range	-40°C to +100°C
	RH range	0% - 100%

*[1] UV²A stands for Ultraviolet-induced Multi-domain Vertical Alignment, a photo-alignment technology that ensures uniform alignment of liquid crystal molecules. *[2] 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. *[3] Including AG film on the front and AR film on the back. *[4] Approximate distance at which the glass panel can withstand the impact of a 500-gram iron ball dropped on its center. *[5] Use a commercially available connection cable for PC and other video connections.

Sharp WorkSpaces

Intelligently improve meeting room usage and conditions

Sharp WorkSpaces* is a subscription service that makes best use of data from the IoT Sensor hub on the Windows collaboration display. It automatically detects meeting room usage, monitors ambient conditions and helps optimise the use of space once connected to the analytics of a smart building management system.

It continually measures the temperature and relative humidity levels as well as the light and air quality. They can be automatically adjusted and optimised** to suit the number of people and the type of activities taking place, while also reducing costs by avoiding any unnecessary heating or cooling.

Using data intelligence captured by room occupancy sensors, Sharp WorkSpaces can actively monitor when meeting rooms are being used and estimate*** how many people are in each. Once connected to in-house systems, such as a meeting room booking system, you can easily check which rooms are booked or when they become free. In addition, you can prevent "phantom" meetings and also allocate the most suitable rooms to use depending on the number of attendees.
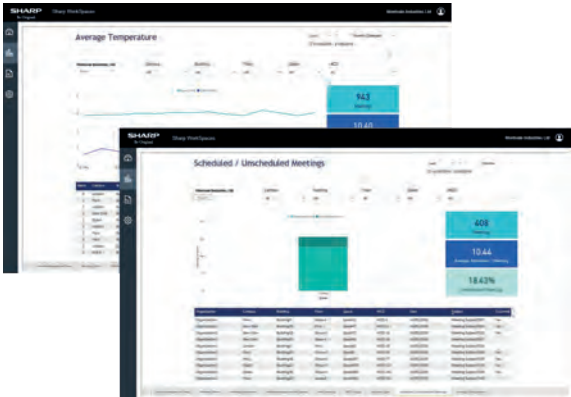
Sharp WorkSpaces runs on Microsoft's Azure cloud service, which is highly scalable with professional enterprise-level performance and includes highly secure data encryption. However, if you prefer, we are working to support other cloud platforms or other premise-based solutions using custom-built software. And if you ever need any support it's easily available via the Sharp Hotline.

Key benefits | Sharp WorkSpaces

- Delivers real-time analysis of the environmental conditions in meeting and training rooms
- Enhances the productivity of group work by creating a comfortable working environment
- Minimises the cost of heating and cooling by avoiding unnecessary usage
- Optimises the availability and usage of meeting rooms and collaborative spaces
- Improves long-term facilities management by analysing the type and frequency of meetings
- Works seamlessly with the Windows collaboration display, so it is really easy to set-up, provision and use
- Provides a flexible and cost-effective Software as a Service (SaaS) solution, including a no-charge 90-day trial licence with the purchase of each Windows collaboration display unit
- The choice of a 1-Year license (L20PNSESWS1YRCT) or 1-Month subscription (L20PNSESWS1MO)

*Available mid 2020. ** This can happen if the Windows collaboration display sensor data is connected to a smart building system, so custom integration may be required. *** The people counting feature is a future development.

BIG PAD Interactive displays

Contents

BIG PAD

BIG PAD is our hero range of interactive displays, with the power to transform meetings and lessons. The Pen-on-Paper® natural user experience makes writing on the display feel as though you're using a real pen and paper, and promotes

Pen-on-Paper

a collaborative working environment. The range includes affordable versions for campus environments and small and medium-sized offices and extends to the award-winning displays with the smoothest projected capacitive (PCAP) touch technology for transformative collaborative meetings.

PN-80TH5/70TH5

The BIG PAD to bring collaboration and presentation to life

Sharp's **TH5** range is the ultimate premium 4K interactive display for corporate office meetings, architectural construction, engineering design, medical review and demanding specialised collaborative working environments. Building on Sharp's unique pioneering interactive display legacy, these BIG PADs represent Sharp's latest innovative insight and unparalleled experience in providing a genuine 4K Reading and Writing with 'Pen-On-Paper' user experience. Offering state-of-the-art smooth projected capacitive (PCAP) touch technology, Sharp's flagship 4K BIG PAD interactive display is once again setting the industry standard for collaborative teamwork.

Key benefits | PN-80TH5/70TH5

- 4K BIG PAD for demanding corporate, office, education and specialised applications
- 80" and 70" screen sizes with 3840 x 2160 pixels
- 'Pen-On-Paper' user experience with highly responsive PCAP 30-point touch
- True 4K Reading and Writing user experience with integrated Palm Reject
- Brilliant eye-catching image content with Direct Optical Bonding
- Intuitive writing, drawing and annotation with Sharp Pen software
- Latest BYOD wireless Interconnectivity with Mini-OPS Slot or SHARP Display Connect
- Powerful data organisation and collaboration with Sharp Touch Viewer application
- Multi-Board for highly effective multi-display, multi-user and multi-touch applications
- 24/7 operation

Specifications

Model		PN-80TH5	PN-70TH5
Installation		Landscape/Portrait	Landscape/Portrait/Face-up
LCD Panel		80-inch-class (204.4 cm diagonal) UV²A*1 LCD	70-inch-class (176.6 cm diagonal) UV²A*1 LCD
	Max. Resolution	3,840 x 2,160 pixels	
	Max. Display Colours	1.06 billion colours	
	Pixel Pitch (H x V)	0.462 x 0.462 mm	0.401 x 0.401 mm
	Brightness*²	300 cd/m²	
	Contrast Ratio	4,000 : 1	
	Viewing Angle (H/V)	176°/176° (CR ≥10)	
	Active Screen Area (W x H)	1,771.2 x 996.3 mm	1,538.9 x 865.6 mm
	Response Time	6 ms (grey to grey, avg.)	
	Backlight	LED, full array	LED, edge lit
Touchscreen	Touch Technology	Projected Capacitive (PCAP) touch	
	PC Connection Port	USB 2.0 (type B) x 2	
	Power Supply	Supplied from main unit	
	Multi-Touch	30 points	
	Protection Glass	Thickness: 1.9 mm*³ Shock resistance: 130 cm*⁴	
Touch Pen	Communication	Wireless communication method	
	Function Button	Yes	
Computer Input	Video	Analogue RGB (0.7 Vp-p) [75], DisplayPort™ 1.2a	
	Synchronisation	Horizontal/vertical separation (TTL: positive/negative), Sync on green*⁵, Composite sync (TTL: positive/negative) *⁵	
	Plug & Play	VESA DDC2B	
	Power Management	VESA DPMS	
Video Colour System		TSC (3.58 MHz) / NTSC (4.43 MHz) / PAL / PAL60 / SECAM	
Input Terminals*⁵		PC analogue: Mini D-sub 15-pin x 1*⁶, HDMI (HDCP and 1080p compatible, PC/AV signal compatible) x 3, 3.5 mm-diameter mini stereo jack x 1, Video x 1*⁶, Component video x 1*⁶, DisplayPort™ (HDCP compatible, PC signal compatible) x 2, RS-232C x 1*⁷*⁸	
Output Terminals*⁵		3.5 mm-diameter mini stereo jack x 1, DisplayPort™ (HDCP compatible) x 1	
Input/Output Terminals		LAN port (10Base-T/100Base-TX) x 1	
USB Hub Function		USB 2.0 (Type A) x 2	
Expansion Slot		13 V, 2.4 A (power supplied when expanding the functions with an optional part)	
Speaker Output	Built-in	10 W + 10 W	
Mounting		VESA (4 points), 600 x 400 mm pitch, M6 screw	VESA (4 points), 400 x 400 mm pitch, M6 screw
Power Supply		100V – 240V AC, 50/60 Hz	
Power Consumption		325 W	215 W
Environmental Conditions	Operating Temperature	5˚C to 35˚C	
	Operating Humidity	20% to 80% RH (no condensation)	
Dimensions (W x D x H) (display only)		1,863 x 98 x 1,090 mm	1,612.5 x 92.5 x 941.4 mm
Weight		73 kg	57 kg
Main Accessories		AC power cord, remote control unit, remote control unit battery (AAA size) x 2, set-up manual, cable clamp (insertion type) x 4, cable clamp x 3, USB cable, USB extension cable, RS-232C conversion cable, eraser, pen tray, touch pen x 2 (PN-80TH5), touch pen x 1 (PN-70TH5), touch pen adapter, touch pen adapter screw, touch pen battery (AAA size), pen tip x 2, speaker cover x 2, camera mount, camera screw, speaker cover attachment screw/camera mount screw x 6, CD-ROM, SHARP Display Connect license, vertical sticker, blank sticker	

Warning: The PN-80TH5 should not be mounted flat nor used as a touch table type installation. Please consult an authorised SHARP dealer before considering any type of flat installation and find out about the mandatory flat mounting instructions. Flat installation - when the monitor is tilted more than 20 degrees upward from the perpendicular in relation to a level surface.

*1 UV²A stands for Ultraviolet-induced Multi-domain Vertical Alignment, a photo-alignment technology that ensures uniform alignment of liquid crystal molecules. *² 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. *³ Including AG film on the front. *⁴ Approximate distance at which the glass panel can withstand the impact of a 500-gram iron ball dropped on its centre. *⁵ D-sub input terminal only. *⁶ When connecting with an analogue mini D-sub 15-pin jack, max. resolution is 1,920 x 1,200 pixels. *⁷ Analogue PC, video, and component video are switchable (on bottom interface); use the menu to select. Video and component video connections require conversion cable via mini D-sub 15-pin jack. *⁸ When using the monitor laying flat on a surface (when the monitor is tilted more than 20 degrees upward from the perpendicular in relation to a level surface) the ambient temperature must be within the range of 5°C to 30°C. Temperature conditions may change when using the monitor together with the optional equipment. In such cases, check the temperature conditions specified by the optional equipment. *⁹ Check the requirements of the computer and other devices to be connected, and make sure that all requirements are satisfied.

PN-85TH1/75TH1/65TH1

The BIG PAD for the boardroom or classroom

Sharp's **TH1** range is designed for smooth and effortless collaboration in a wide range of office meeting, boardroom and training room environments. Using the latest InGlass™ touch technology they offer a highly responsive and natural feeling Pen-on-Paper experience, with smooth, accurate and responsive annotation. An integrated Android PC* enables effortless wireless collaboration with other devices and also includes a whiteboard application for fast smart board functionality. And using the Touch Back feature allows presenters to remotely control their PC or wirelessly connected device directly from the BIG PAD.

Key benefits | PN-85TH1/75TH1/65TH1

- Outstanding image clarity with a choice of 85", 75" and 65" 4K Ultra HD (3840 x 2160) displays
- A natural 'Pen-on-Paper' experience using the latest InGlass™ touch technology
- Fast, precise and intuitive control with the latest Sharp Pen software
- 20-point multi-touch and gesture support enabling effortless interaction
- Enhanced multimedia playback with 10W + 10W front speakers
- Easy collaboration and device sharing with built-in wireless connectivity and Touch Back control
- Add extra third-party functionality through a Mini-OPS slot
- Flexible landscape, portrait or tilted installation with an optional stand or wall mount
- Continuous 16/7 operation

*The Android PC can be deactivated to meet any IT security demands.

Specifications

Model	PN-85TH1	PN-75TH1	PN-65TH1
Installation	Landscape / Portrait / Backward tilt (0 to 20, 45 degrees)[*1]		
	85-inch-class (214.8 cm diagonal) TFT LCD	75-inch-class (189.3 cm diagonal) TFT LCD	65-inch-class (163.9 cm diagonal) TFT LCD

		PN-85TH1	PN-75TH1	PN-65TH1
LCD Panel	Max. Resolution	3,840 × 2,160 pixels		
	Max. Display Colours	1.07 billion colours		
	Pixel Pitch (H x V)	0.488 × 0.488 mm	0.430 mm × 0.430 mm	0.372 x 0.372 mm
	Brightness[*1]	350 cd/m²		
	Contrast Ratio	5,000:1		
	Viewing Angle (H/V)	178°/178° (CR ≥10)		
	Active Screen Area (W x H)	1872 × 1053 mm	1650.2 × 928.3 mm	1428.5 × 803.5 mm
	Response Time	9.5 ms (grey to grey, avg.)		
	Backlight	LED, direct lit		
Touchscreen	Touch Technology	InGlass™		
	PC connection port	USB (2.0 compliant) (Type B) × 2		
	Power supply	Supplied from main unit		
	Multi-Touch	20 points		
	Protection glass	Thickness: Approx. 4 mm Shock resistance: 130 cm		
Computer Input	Video	Analogue RGB (0.7 Vp-p) [75Ω], HDMI™, DisplayPort™		
	Synchronisation	Horizontal/vertical separation (TTL: positive/negative)		
	Plug & Play	VESA DDC2B		
	Power Management	Supported		
Input terminals[*3]		PC analogue: Mini D-sub 15-pin × 1, HDMI (HDCP2.2 compatible, HDR10 supported) × 2, 3.5 mm-diameter mini stereo jack × 1, DisplayPort (HDCP compatible) × 1, RS-232 × 1		
Output terminals[*3]		3.5 mm-diameter mini stereo jack × 1, DisplayPort (HDCP compatible) × 1[*4]		
Controller	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[*5]) × 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)		
USB hub function		USB port (2.0-compliant) × 2		
Expansion slot		12 V, 2.5 A (power supplied when expanding the functions with an optional part)		
Speaker output	Built-in	10 W + 10 W		
	External	10 W + 10 W (6 Ω)		
Mounting		4 points, 600 × 400 mm pitch, M6 screw	4 points, 600 × 400 mm pitch, M6 screw	4 points, 400 × 400 mm pitch, M6 screw
Power Supply[*6]		100V – 240 V AC, 50/60 Hz		
Power Consumption		310 W	330 W	270 W
Environmental Conditions	Operating Temperature	5˚C to 35˚C		
	Operating Humidity	20% to 80% RH (no condensation)		
Dimensions (W x D x H) (display only)		1,951 × 99 × 1,150 mm	1,724 × 98 × 1,020 mm	1,501 x 98 x 894 mm
Weight		77 kg	61 kg	48 kg
Main accessories		AC power cord, remote control unit, remote control unit battery (AAA size) × 2, set-up manual, speaker cover × 2, vertical sticker, blank sticker, cable clamp × 5, camera mount, USB cable, eraser, pen tray, SHARP Pen Software (CD-ROM), touch pen (PN-85TH1 × 2, PN-75TH1/65TH1 × 1), SHARP Display Connect license, Wireless LAN antenna × 2, USB flash drive/microSD card cover, USB flash drive/ microSD card cover fixing screw (HD		

*1 There are restrictions on the tiltable angles and other installation conditions. For details, please consult with your local authorised Sharp dealer or representative. *2 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. *3 Use a commercially available connection cable for PC and other video connections. *4 Use a commercially available DisplayPort-certified cable. Some video equipment may not be supported. *5 exFAT is not supported. *6 The AC power cord is an inlet type. The cable is bundled (3 pins). *7 When the monitor is tilted more than 20 degrees upward from the perpendicular in relation to a level surface, the ambient temperature must be within the range of 5°C to 30°C. *8 Check the requirements of the computer and other devices to be connected, and make sure that all requirements are satisfied.

PN-86HC1/75HC1/70HC1E

The BIG PAD for teaching and training

Sharp's **HC1** range of displays enables ultra clear '4K Reading' of detailed 4K screen data and makes presenting really easy with an intuitive 'Pen-on-Paper' user experience. It also has the tools you need for effortless productivity, such as an integrated System on Chip (SoC) PC with launcher, whiteboard, overlay and wireless functionality. Whether teaching and training, working in a meeting room or reviewing detailed documents it is great for enabling more effective learning, promoting idea sharing and encouraging interactivity.

Key benefits | PN-86HC1/75HC1/70HC1E

- Ultra clear information with a choice of 86", 75" and 70" 4K Ultra HD (3840 x 2160) displays
- Provides a natural 'Pen-on-Paper' experience using a passive pen stylus or your finger
- Fast, accurate and responsive touchscreen with 125Hz touch sampling and gesture support
- Effortless connectivity using a wide range of options, including USB, HDMI and wireless
- Easy access to integrated whiteboard app through an integrated SoC Controller
- Easily add third-party functionality through a built-in OPS slot
- Intuitive control with full bezel button controls and on screen touch menu

Specifications

Model		PN-86HC1	PN-75HC1	PN-70HC1E
Installation		Landscape		
		86-inch-class (217.4 cm)	75-inch-class (189.3 cm)	70-inch-class (176.6 cm)
LCD Panel	Max. Resolution	3,840 x 2,160 pixels		
	Max. Display Colours	1.07 billion colours		
	Pixel Pitch (H x V)	0.4935x0.4935 mm	0.4296x0.4296 mm	0.40075x0.40075 mm
	Brightness[*1]	400 cd/m^2	350 cd/m^2	
	Contrast Ratio	1,200:1	4,000:1	
	Viewing Angle (H/V)	178°/178° (CR ≥10)	176°/176° (CR ≥10)	
	Active Screen Area (W x H)	1895 x 1066 mm	1649.7 x 927.9mm	1539 x 866 mm
	Response Time	8 ms (grey to grey, avg.)		
	Backlight	LED, direct lit		
Touchscreen	Touch Technology	IR (infrared blocking detection method)		
	Multi-Touch	20-Points		10-Points
	PC Connection Port	USB 2.0		
	Protection Glass	Thickness: Approx. 4.0 mm Shock resistance: 130 cm[*3]		
Touch Pen	Function Button	N/A (passive pen)		
Computer Input	Video	Analogue RGB (0.7 Vp-p) [75Ω], HDMI		
	Synchronisation	Horizontal/vertical separation (TTL: positive/negative)		
	Plug & Play	VESA DDC2B		
Video Colour System		NTSC (3.58 MHz)/NTSC (4.43 MHz)/PAL/PAL60 /SECAM		
Input Terminals[*4]	Front	HDMI (HDCP2.2 compatible, HDR10 supported) × 1		
	Rear	PC analogue: Mini D-sub 15-pin × 1, HDMI (HDCP2.2 compatible, HDR10 supported) × 2, 3.5 mm-diameter mini stereo jack × 1, AV mini jack × 1, Component mini jack × 1, RS-232C × 1		PC analogue: Mini D-sub 15-pin × 2, HDMI (HDCP2.2 compatible, HDR10 supported) × 2, 3.5 mm-diameter mini stereo jack × 2, AV RCA × 1[*5], Component RCA × 1[*5], Audio RCA × 1, RS-232C × 1
Output Terminals[*4]		3.5 mm-diameter mini stereo jack × 1, SPDIF × 1		PC analogue: Mini D-sub 15-pin × 1, 3.5 mm-diameter mini stereo jack × 1, SPDIF × 1
Expansion Slot		19 V, 4.74 A (power supplied when expanding the functions with an optional part)		
Speaker Output		10 W + 10 W		
Mounting		4 points, 700 x 400 mm pitch, M8 screw	4 points, 600 x 400 mm pitch, M8 screw 4	4 points, 600 x 400 mm pitch, M6 screw
Power Supply[*6]		100V – 240V AC, 50/60 Hz		
Power Consumption[*7]		530 W	460 W	400 W
Environmental Conditions	Operating Temperature[*8]	5˚C to 35˚C		
	Operating Humidity[*9]	20% to 80% RH (no condensation)		
Dimensions (W x D x H) (display only)		1988 × 113 × 1175 mm	1735 × 105 × 1036 mm	1629 x 99 x 990 mm
Weight		80 kg	61 kg	54 kg
Main Accessories		AC power cord, remote control unit, remote control unit battery (AAA size) x 2, set-up manual, blank sticker, cable clamp x 3, USB cable, pen tray, SHARP Pen software (CD-ROM), touch pen x 2, wireless adapter		

[*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] Excluding the touch sensor part around the LCD panel. [*3] Approximate distance at which the glass panel can withstand the impact of a 500-gram iron ball dropped on its centre. [*4] Use a commercially available connection cable for PC and other video connections. [*5] Composite video and component cannot be used simultaneously. [*6] The AC power cord is an inlet type. The cable is bundled (3 pins). [*7] When an option is installed on the expansion slot. When not installed: PN-86HC1: 420 W, PN-75HC1: 360 W, PN-70HC1E: 295 W [*8] Temperature conditions may change when using the monitor together with the optional equipment. In such cases, please check the temperature conditions specified by the optional equipment. [*9] Check the requirements of the computer and other devices to be connected, and make sure that all requirements are satisfied.

PN-50TC1/40TC1

The BIG PAD for huddle spaces

Sharp's **TC1** range makes meetings and communications smoother and more productive. Reinforcing the line-up, these BIG PADs offer a fresh approach to boosting the dynamism of business and educational organisations. The 'Pen-On-Paper' natural user experience promotes collaborative work, ideal in compact huddle meeting spaces where small workgroups of two to six people meet in the growing majority of modern meetings. Making the most of huddle spaces can transform communications and accelerate business to a whole new level.

Key benefits | PN-50TC1/40TC1

- Interactive display for small huddle meeting areas
- 'Pen-On-Paper' natural user experience; it really is as though you're writing with a real pen and paper
- 50" and 40" TFT LCD
- Smooth glass surface for best in class tactile comfort
- 10-point PCAP capacitive touch for confident and intuitive interactivity
- HDMI and DisplayPort connectors
- Flat bezel design for a smart tablet-like look
- Mini OPS extension slot for even more integrated application flexibility and performance
- SHARP Pen software including new sheet extension function
- Multi-device BYOD collaboration with SHARP Display Connect

Specifications

Model		PN-50TC1	PN-40TC1
Installation		Landscape / Portrait / Face-up	
LCD Panel		50-inch-class widescreen (49 $^1/_2$ inch [125.7 cm] diagonal) TFT LCD	40-inch-class widescreen (39 $^1/_2$ inch [100.3 cm] diagonal) TFT LCD
	Max. Resolution	1,920 × 1,080 pixels	
	Max. Display Colours	16.77 million colours	
	Pixel Pitch (H x V)	0.571 x 0.571 mm	0.457 x 0.449 mm
	Brightness*1	400 cd/m²	300 cd/m²
	Contrast Ratio	5,000 : 1	
	Viewing Angle (H/V)	178°/178° (CR ≥10)	
	Active Screen Area (W x H)	1,095.8 x 616.4 mm (43 $^1/_8$" x 24 $^1/_4$")	878.1 x 485.3 mm (34 $^9/_{16}$" x 19 $^1/_8$")
	Response Time	9.5 ms (grey to grey, avg.)	
	Backlight	LED, edge lit	
Touchscreen	Touch Technology	Capacitive touch	
	PC Connection Port	USB (2.0 compliant) (Type B) x 1	
	Power Supply	Supplied from main unit	
	Multi-Touch	10 points	
	Protection Glass	Thickness: 3.2 mm*2 Shock resistance: 130 cm*3	Thickness: 2.5 mm*2 Shock resistance: 130 cm*3
Computer Input	Video	Analogue RGB (0.7 Vp-p) [75Ω], HDMI, DisplayPort	
	Synchronisation	Horizontal/vertical separation (TTL: positive/negative)	
	Plug & Play	VESA DDC2B	
	Power Management	VESA DPMS	
Input Terminals*4		PC analogue: Mini D-sub 15-pin x 1, HDMI x 2 (HDCP and 1080p compatible, PC/AV signal compatible), DisplayPort (HDCP compatible, PC signal compatible) x 1, 3.5 mm-diameter mini stereo jack x 1, RS-232C x 1	
Output Terminals*4		3.5 mm-diameter mini stereo jack x 1	
Input/Output Terminals*4		LAN port (10Base-T/100Base-TX) x 1	
USB Hub Function		USB 2.0 (Type A) x 2	
Expansion Slot		12 V, 2.5 A (power supplied when expanding the functions with an optional board)	
Speaker Output		10 W + 10 W	
Mounting		VESA (4 points), 400 x 200mm, M6 screw	VESA (4 points), 200 x 200mm, M6 screw
Power Supply		100V – 240V AC, 50/60 Hz*5	
Power Consumption		105 W	89W
Environmental Conditions	Operating Temperature*6	5°C to 35°C	
	Operating Humidity	20% to 80% RH (no condensation)	
Dimensions (W x D x H) (display only)		1,151 x 68.5 x 686 mm	939 x 65 x 546 mm
Weight		28 kg	17.5 kg
Main Accessories		AC power cord, remote control unit, battery (AAA size) x 2, set-up manual, cable clamp x 3, camera mount, USB cable*6, logo sticker, pen tray, touch pen, CD-ROM, portrait installation operation label, desktop stand, SHARP Display Connect license x 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. Figures refer to the brightness of the LCD panel component. The brightness of the product itself may be less than this. *2 Including film. *3 Approximate distance at which the glass panel can withstand the impact of a 500-gram iron ball dropped on its centre. *4 Use a commercially available connection cable for PC and other video connections. *5 The AC power cord is an inlet type. The cable is bundled (3 pins). *6 For face-up installation is 5°C to 30°C. *7 To use the touch panel, connect the bundled USB cable to the computer. If connected via a USB hub, the PC may not recognise the PN-50TC1/40TC1 correctly and operation may be unstable.

Early Learning Table
The BIG PAD that makes learning fun

The Sharp BIG PAD **Early Learning Table*** offers a fun and intuitively easy way for children to play, learn and interact with each other using a variety of pre-installed games, puzzles and learning apps. Our (PN-40TC1) 40" BIG PAD interactive display is built into the wooden trim of a completely mobile and tiltable table. So it is an ideal learning tool for a wide range of educational environments, such as nurseries, pre-schools, kindergartens, and creches. Or it can even be used to entertain children in the public areas of retail stores, restaurants, play areas and waiting rooms**.

Key benefits | Early Learning Table

- A natural 'Pen-on-Paper' experience with 10-point PCAP touch technology
- Works for up to 11 hours using a built-in rechargeable battery pack
- Access a wide range of educational content and sensory apps with an integrated Android PC
- Easily stream music, cartoons or films from the Internet using built-in wireless connectivity
- Quickly attach other devices, like speakers or a printer, using Bluetooth connectivity

*Not available in all markets - please contact your Sharp representative for more information.

** Adult supervision is required.

Specifications

Model		Early Learning Table
General	Portability	Castor wheels with lock system support (radius 75mm) Handle for moving
	Screen orientation	Face-up/Tilt
	Dimension	Display (Verticality): W 1,121mm x D 728mm x H 953mm Display (Horizontal): W 1,121mm x D 728mm x H 640mm
	Weight	88.5kg
	Speaker Output	10W + 10W
Environmental Conditions	Operating Temperature*4	0˚C to 40˚C
	Operating Humidity	10% to 90% RH (non-condensing)
LCD Panel	PN-40TC1	40-inch-class widescreen (39 $\frac{1}{2}$-inch [100.3 cm] diagonal) TFT LCD
	Max. Resolution	1,920 x 1,080 pixels
	Max. Display Colours	16.77 million colours
	Pixel Pitch (H x V)	0.457 x 0.449 mm
	Max. Brightness (average)*1	300 cd/m^2
	Contrast Ratio	5,000 : 1
	Viewing Angle (H/V)	178°/178° (CR ≥10)
	Active Screen Area (W x H)	878.1 x 485.3 mm (34 $\frac{9}{16}$" x 19 $\frac{1}{8}$")
	Response Time	9.5 ms (grey to grey, avg.)
	Backlight	LED, edge lit
Touchscreen	Touch Technology	Projected Capacitive touch (PCAP)
	PC Connection Port	USB (2.0 compliant) (Type B) x 1
	Multi Touch	10 points
	Protection Glass	Thickness: 2.5 mm*2 Shock resistance: 130 cm*3
Battery	Model	Powerhero WPSE-800
	Rated capacity	800VA
	Interface	LED graphic
	Voltage	140-275 Vac
	Frequency	45-65 Hz
	Output Voltage	220VAC ±3% for inverter; 190V-245V for avr
	Frequency	50/60 Hz ± 0.3Hz, subject to the main
	Wave form	Pure sine wave
	Wave distortion	≤ 3%
	Protection	Overload/ high temperature/ output high voltage. Output low voltage/ battery low voltage/ short circuit/ over-charge/ over- discharge/ reversed polarity (optional)
PC Android System	OS	Android
	CPU	ARM Cortex Octa Core
	Memory	2GB RAM
	Storage	16GB
	Wireless	Bluetooth; Dual Band 2.4GHz/5GHz WiFi, IEEE 802.11 b/g/n/ac
	Miracast	Yes
	LAN	RJ45
	Power	5V, 2.3A

*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. Figures refer to the brightness of the LCD panel component. The brightness of the product itself may be less than this. *2 Including film. *3 Approximate distance at which the glass panel can withstand the impact of a 500-gram iron ball dropped on its centre. *4 For face-up installation is 0˚C to 40˚C.

Multi-Board software

Multi-touch, multi-user, multi-display experience with BIG PADs PN-80TH5/70TH5

Sharp's **Multi-Board** driver solution allows an existing standard Multi-Board setup of either two or three BIG PADs to take full advantage of multi-user, multi-touch software applications. With a fully interactive display wall that's up to 5.3 metres long, the **Multi-Board** driver offers an easy to setup and easy to use interactive performance that's the only one of its kind available today.

Key benefits | Multi-Board Software

- Easy to setup and to configure a powerful BIG PAD interactive wall solution
- Pen-on-Paper natural user experience; it really is as though you're writing with a real pen and paper
- Supports either 2x or 3x BIG PAD interactive displays
- Supports simultaneous multi-user, multi-display and 10-point multi-touch
- Advanced software driver for smooth and highly responsive capacitive (PCAP) touch performance
- Enhanced productivity, data sharing and collaboration for fast decision making
- Enhanced learning effect with improved presentation of data intensive material

Specifications

Minimum PC specification to run Multi-Board

Model	Multi-Board software
Operating System	Professional 64
Memory (RAM)	16 GB
Processor	Intel® Core™ i7 processor
Graphics Card	2x or 3x DisplayPort outputs Chipset must support "Mosaic" or "Collage" function

SHARP Display Connect
Work smarter with SHARP Display Connect

SHARP Display Connect supports effective and multifaceted communication. On screen content - including handwritten notes and drawings made in real time - can be viewed simultaneously on the BIG PAD and mobile devices[*1] such as PCs, tablets, and smartphones, and the 'Pen-on-Paper' natural user experience makes it feel as though you're using a real pen on paper. **SHARP Display Connect** facilitates interactive presentations, lively discussions, and paperless meetings in both business and educational settings.

Key benefits | SHARP Display Connect

- **SHARP Display Connect** enables the following interactive functions on BIG PAD and mobile devices connected via wireless LAN:
  - Sharing of on screen content
  - Transfer of files
  - Interactive on screen writing and drawing
  - Remote control of the BIG PAD from mobile devices
- Up to 50 mobile devices[*2] can be connected simultaneously
- Files can be exchanged between mobile devices even if they are not connected to the BIG PAD
- Users can capture on screen images and save them on their mobile devices to make personally annotated memos
- SHARP Display Connect also connects two BIG PADs on the same local area network to enable larger scale interactive collaboration

Specifications

Categories		Data	Notes
Tablets and smartphones		App is available for download with compatible devices only	• Install appropriate applications for each file format such as Microsoft Office and Adobe Reader.
Recommended minimum PC requirements for running Sharp Display Connect with BIG PAD	OS	Windows® 7 / Windows 8, 8.1 and 10	• Install appropriate applications for each file format such as Microsoft Office and Adobe Reader. • Install SHARP Pen software version 2.5.2.6 or later to enable exclusive functions with SHARP Display Connect. • SHARP Display Connect requires a PC connected to a Sharp BIG PAD by USB.
	CPU	Celeron 1.6GHz / AMD Sempron 1.6GHz or faster (Recommended: Core2 Duo 2.8GHz / AMD Athlon II X2 2.8GHz or faster)	
	Memory	2GB	
	Hard disk (available free space)	100 MB	
	USB	1.1 or later	
	Screen resolution (video output)	1920 x 1080 minimum resolution	
Simultaneous device connections		50	
Network		WLAN required	

*[1] OS requirements: PCs: Windows® 7, Windows 8/8.1; Tablets: Windows 7, Windows 8/8.1, Android, iOS; Smartphones: Android, iOS. *[2] Connecting 20 or more mobile devices requires at least two LAN access points. Software requires appropriate network and device configuration to run correctly.

8K Ultra-HD

Contents

8K Ultra-HD

Our high precision professional 8K display is the ultimate display for image detail. Whether you're presenting to an audience or working on designs, you need crisp displays to bring your ideas sharply to life.

8M-C80AX1E

A new standard in image precision

Sharp's **8M-C80AX1E** 80" LCD display is at the cutting edge of professional display capabilities. Its ultra clear 8K (7680 x 4320 pixels) resolution delivers stunning image precision with unsurpassed detail and greater legibility even in fine text. It also incorporates a range of leading edge technologies designed to deliver superior realism and colour accuracy. And a built in USB Media Player enables easy set-up or standalone use without the cost and complexity of additional equipment. So, whether you're presenting eye-catching images or working on complex designs, you can quickly bring everything to life.

Key benefits | 8M-C80AX1E

- Stunning image precision with an 8K (7680 x 4320 pixels) display – 4x the resolution of 4K
- More realistic and immersive viewing with the 800 cd/m^2 brightness and HDR (High Dynamic Range)
- Peak brightness of 4.000 cd/m^2
- Exceptional clarity with a Local Dimming backlight system that extends the visible contrast ratio
- Enhanced colour accuracy with a 10-Bit extended colour range that creates up to 1.07 billion colour possibilities in every pixel
- USB Media Player for instant playback of 4K video and 8K static images without any additional equipment

Specifications

Model		8M-C80AX1E
General	Native Resolution (Pixels)	7860 x 4320
	Diagonal Size (inches/cm)	80 / 203.2
	Aspect Ratio	16:9
	Viewing angle	176°
	Backlight	Direct white LED
	Display Colours	10 Bit
	Colorimetry 7860x4320	ITU709 / ITU-R BT.2020
	CIE1976 xy Cover Ratio vs ITU-R BT.2020	82%
	HDR: PQ / HLG	✓ / ✓
	Brightness (cd/m^2)[*1]	800 (Peak brightness 4000)
	Static contrast ratio	3000:1
	Response Time (grey to grey avg) ms	8
	Speaker output power in W	2 x 20 + 30 Subwoofer
	8K Input	4 x HDMI (HDCP, 2160p)
	Display Control LAN / RS232	Yes / Yes
	Operating time (daily hours / weekly days)	16/7
	Ambient temperature	0 – 40°C
	Heat dissipation (BTU/h) MAX	2474
	Operating power consumption in W	725
	Standby power consumption in W (W)	0.5
Media Player	USB player for 8K still image	JPEG (jpg) (DCF2.0-compliant)2
	USB player for 4K video	m2ts, mp4, 3gp
Weights and Measures	Product Dimensions without Stand (W/H/D) mm	1810 x 115 x 1055
	Product Weight without Stand (Kg)	52
	Mounting position	Landscape
	VESA mounting (mm)	400 x 400

[*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.

4K Ultra-HD

Contents

4K Ultra-HD

Our range of ultra high definition 4K displays are aimed at
bringing the finer detail to life without sacrificing size. Designed
for specialised applications such as way-finding, CAD/CAM,
simulation and retail signage - the range has evolved to include a
new wide gamut capability for a deeper range of colour.

PN-HW861/HW751/HW651/HW551/HW501/HW431

Slim and lightweight professional displays

Sharp's **PN-HW** range of professional displays offer a wide range of screen sizes, from 43" to 86". With a slim and lightweight design and choice of installation methods, including standalone operation, they are the ideal choice for both retail and corporate organisations. Their 4K Ultra HD resolution brings content bursting into life with superbly realistic detail and depth – and can display even the most complex information with exceptional clarity. So whether it's for premium retail signage, executive boardrooms or specialist applications, such as CAD, there is a display to meet your needs.

Key benefits | PN-HW861/HW751/HW651/HW551/HW501/HW431

- Exceptionally clear text & images with true 4K Ultra HD resolution (3840 x 2160)
- Ultra realistic and vivid colours using innovative LED backlighting
- Non-stop, high performance during normal business hours with 16/7 operation
- Use almost anywhere with a slim and stylish, lightweight design
- Flexible installation in either portrait or landscape
- 'Plug and play' content using the built-in USB media player
- Added audio impact with 10W +10W built-in speakers
- Simple, centralised control through your own system with a choice of LAN, RS-232C and 3x HDMI interfaces

Specifications

Model		PN-HW861	PN-HW751	PN-HW651
Installation		Landscape / Portrait		
LCD Panel		86" Class [85 5/8 inch (217.426cm) diagonal] TFT LCD	75" Class [74 1/2 inch (189.273 cm) diagonal] TFT LCD	65" Class [64 1/2 inch (163.896 cm) diagonal] TFT LCD
	Max. Resolution	3,840 x 2,160 pixels		
	Max. Display Colours	1.07 billion colors		
	Pixel Pitch (H x V)	0.4935 mm (H) × 0.4935 mm (V)	0.429 mm (H) × 0.429 mm (V)	0.372 mm (H) × 0.372 mm (V)
	Max Brightness*1	400cd/m²		350cd/m²
	Contrast Ratio	1200 : 1		4000 : 1
	Viewing Angle (H/V)	178°/178° (CR ≥10)		
	Active Screen Area (W x H)	1.895.04 x 1.065.96 mm	1.647.36 x 926.64 mm	1.428.48 x 803.52 mm
	Response Time	8ms (grey to grey, avg.)		
	Backlight	LED, edge lit		LED, full array
Input Terminals		1x Analog Mini D-Sub 15 Pin, 3x HDMI (HDMI2.0, HDCP2.2, HDMI CEC)		
	Audio	3.5mm mini stereo jack x 1		
	Serial (RS-232C)	D-sub 9 pin x 1		
	LAN Terminal	10Base-T/100Base-TX x1		
	USB Port	USB 2.0 compliant (For Media Player) x 1		
Output Terminals	Audio	RCA pin (L/R) x 1		
Plug & Play		VESA DDC2B		
Power Management		VESA DPMS		
Speakers		10W + 10W		
Power Requirement		AC 100-240V, 50/60 Hz		
Mounting (4 points)		600 mm x 400mm pitch, M6 screw		400 mm x 400mm pitch, M6 screw
Environmental Conditions	Operating Temperature	(0°C to 40°C)		
	Operating Humidity	20% to 80% (no condensation)		
Power Consumption (input signal waiting mode / standby mode)		330 W (0.7W / 0.5W)	255 W (0.7W / 0.5W)	205 W (0.7W / 0.5W)
Dimensions		1.928 x 76 x 1.099 mm	1.680 x 65.5 x 959 mm	1.458 x 82 x 835 mm
Weight		64 kg	55 kg	27.5 kg
Main Accessories		AC power cord, remote control unit, battery (AAA size x 2), CD-ROM, set-up manual, cable clamp x 2, logo sticker, USB flash drive cover, USB flash drive cover fixing screw x 2		

*1 Brightness depends on input mode and other picture settings.

Specifications

Model		PN-HW551	PN-HW501	PN-HW431
Installation		Landscape / Portrait		
LCD Panel		55" Class [54 ⁵/₈ inch (138.783cm) diagonal] TFT LCD	50" Class [49 ¹/₂ inch (125.730cm) diagonal] TFT LCD	43" Class [42 ¹/₂ inch (107.986cm) diagonal] TFT LCD
	Max. Resolution	3,840 x 2,160 pixels		
	Max. Display Colours	1.07 billion colors		
	Pixel Pitch (H x V)	0.315 mm (H) × 0.315 mm (V)	0.2854 mm (H) × 0.2854 mm (V)	0.2451 mm (H) × 0.2451 mm (V)
	Brightness*¹	350cd/m²		
	Contrast Ratio	4000 : 1		
	Viewing Angle (H/V)	178°/178° (CR ≥10)		
	Active Screen Area (W x H)	1.209.6 x 680.4 mm	1.095.84 x 616.41 mm	941.18 x 529.41 mm
	Response Time	8ms (grey to grey, avg.)		
	Backlight	LED, full array		
Input Terminals		1x Analog Mini D-Sub 15 Pin, 3x HDMI (HDMI2.0, HDCP2.2, HDMI CEC)		
	Audio	3.5mm mini stereo jack x 1		
	Serial (RS-232C)	D-sub 9 pin x 1		
	LAN Terminal	10Base-T/100Base-TX x1		
	USB Port	USB 2.0 compliant (For Media Player) x 1		
Output Terminals	Audio	RCA pin (L/R) x 1		
Plug & Play		VESA DDC2B		
Power Management		VESA DPMS		
Speakers		10W + 10W		
Power Requirement		AC 100-240V, 50/60 Hz		
Mounting (4 points)		400 mm x 200mm pitch, M6 screw		200 mm x 200mm pitch, M6 screw
Environmental Conditions	Operating Temperature	(0°C to 40°C)		
	Operating Humidity	20% to 80% (no condensation)		
Power Consumption (input signal waiting mode / standby mode)		150 W (0.7W / 0.5W)	130 W (0.7W / 0.5W)	115 W (0.7W / 0.5W)
Dimensions		1.239 x 62 x 711.5 mm	1.124 x 69 x 646.5 mm	968 x 61 x 559 mm
Weight		16 kg	13 kg	9 kg
Main Accessories		AC power cord, remote control unit, battery (AAA size x 2), CD-ROM, set-up manual, cable clamp x 2, logo sticker, USB flash drive cover, USB flash drive cover fixing screw x 2		

*¹ Brightness depends on input mode and other picture settings.

Bicycle Sharing— Anytime, Anywhere

- We have started a bicycle sharing service in Luland City.
- The bicycles can be used for sightseeing or daily use.
- You can rent a bicycle at any bicycle sharing shop in the city and return it to any place affiliated with this service— stations, tourist bureaus, hotels, etc.

Sign up for the free membership (required) and you can reserve a bicycle from your smartphone.

Enjoy your ride

PN-HB851/HB751/HB651/HM851/HM751/HM651

Bigger, smarter displays that ensure your messaging always stands-out

With an exceptionally clear 4K resolution, wireless connectivity and integrated System on Chip (SoC) intelligence this range of **PN-HB/PN-HM** smart large format displays combines outstanding performance and flexibility, with sizes ranging from 65" to 85". Their powerful stand-alone operation and ability to run many different partner applications makes them ideal for a wide variety of applications, such as signage and meeting rooms. In particular, the 16/7 operation of the **PN-HB** is great for shopping centres or large corporate offices, while the **PN-HM** can display critical information all day, every day in environments such as transportation hubs or service station restaurants.

Key benefits | PN-HB851/HB751/HB651/HM851/HM751/HM651

- Ultra clear information with a large format 4K Ultra HD (3840 x 2160) display
- Wireless connectivity with integrated Wi-Fi and Bluetooth
- Powerful and flexible stand-alone operation with an embedded Android SoC
- Flexible performance upgrade with Mini OPS extension slot
- Portrait, landscape format orientation and face-up installation
- Slim bezel design with audio speakers
- Pre-installed applications on the Android SoC
- Ready for Sharp Open Architecture Platform and SHARP Content Distributor

Specifications

Model		PN-HB851	PN-HB751	PN-HB651
Installation		Landscape / Portrait / Face-up		
		85-inch-class (84 9/16-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
LCD Panel	LED Backlight	Direct		
	Native Resolution, Pixel	3840 x 2160		
	Max. Display Colour	10,7 billion		
	Colour Processing	10 Bit		
	Brightness in cdm^{2*1}	350		
	Static Contrast	5.000:1		
	Viewing Angle (H/V) (CR ≥10)	178°/178°		
	Operating Time	16/7		
	Response Speed in ms	9.5		
	Pixel Pitch in mm	0.488 x 0.488	0.43 x 0.43	0.372 x 0.372
Slot	Mini OPS Slot	1		
Input	Analog Input PV (VGA)	1		
	HDMI2.0; HDMI CEC; HDCP2.2; HDR10	2		
	Display Port 1.2 Input	1		
	Audio Input 3,5 mm mini Jack	1		
	RS232C Input Sub-D	1		
Output	Display Port Out (Loop)	1		
	Audio Out 3,5 mm moni Jack	1		
	Serial RS232C Sub-D 9 Pin	1		
Android SoC	SD/SDHC memory card slot	1		
	USB 2.0 Type A	3		
	LAN	1		
	System on Chip (SoC)	Dual Core (Arm Cortex -A72) processor		
	Memory	4GB		
	Storage	32GB		
	Built-in Wireless	WiFi 802.11ac & Bluetooth (integrated)		
	OS	Android 7.1		
Power Consumption		370 W	320 W	260 W
Stand-By Power		0.5		
Ambient Temperature Landscape/Portait		0°C - 40°C		
Ambient Temperature Face-Up		0°C - 30°C		
Metal Cabinet		yes		
VESA Mounting		600 x 400	600 x 400	400 x 400
Bezel Width in mm Top/Side/Bottom		13/11/11		
Dimensions (W x D x H)		1902 x 1083 x 89 mm	1676 x 954 x 88 mm	1455 x 830 x 88 mm
Weight		45 kg	37 kg	29 kg

*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.

Specifications

Model		PN-HM851	PN-HM751	PN-HM651
Installation		Landscape / Portrait / Face-up		
		85-inch-class (84 9/16-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
LCD Panel	LED Backlight	Direct		
	Native Resolution, Pixel	3840 x 2160		
	Max. Display Colour	10,7 billion		
	Colour Processing	10 Bit		
	Brightness in cdm^2	500		
	Static Contrast	5.000:1		
	Viewing Angle (H/V) (CR ≥10)	178°/178°		
	Operating Time	24.7		
	Response Speed in ms	9.5		
	Pixel Pitch in mm	0.488 x 0.488	0.43 x 0.43	0.372 x 0.372
Slot	Mini OPS Slot	1		
Input	Analog Input PV (VGA)	1		
	HDMI2.0; HDMI CEC; HDCP2.2; HDR10	2		
	Display Port 1.2 Input	1		
	Audio Input 3,5 mm mini Jack	1		
	RS232C Input Sub-D	1		
Output	Display Port Out (Loop)	1		
	Audio Out 3,5 mm moni Jack	1		
	Serial RS232C Sub-D 9 Pin	1		
Android SoC	SD/SDHC memory card slot	1		
	USB 2.0 Type A	3		
	LAN	1		
	SoC System on Chip, CPU	Rockchip RK3399		
	Memory	4GB		
	Storage	32GB		
	Built-in Wireless	WiFi 802.11ac and Bluetooth		
	OS	Android 7.1		
Power Consumption		370 W	320 W	260 W
Stand-By Power		0.5		
Ambient Temperature Landscape/Portait		0°C - 40°C		
Ambient Temperature Face-Up		0°C - 30°C		
Metal Cabinet		yes		
VESA Mounting		600 x 400	600 x 400	400 x 400
Bezel Width in mm Top/Side/Bottom		13/11/11		
Dimensions (W x D x H)		1902 x 1083 x 89 mm	1676 x 954 x 88 mm	1455 x 830 x 88 mm
Weight		45 kg	37 kg	29 kg

Holiday style

Video Wall

Contents

Video Wall

Our PN-V range of video wall displays is dedicated to bringing high-impact visual solutions into many retail and mission-critical application. With a video wall product range including a high brightness 700cd/m^2 capability, and with 24/7 quality, the Sharp PN-V displays can be seen in many shopping malls, airports and command & control centres.

PN-V701

The world's largest LCD video wall display

Sharp's **PN-V701** ensures video wall image content reaches even larger audiences. These high impact 70" video wall panels are ideal for luxury retailers or brands who want to have the very best in image quality and almost seamless display design.

Key benefits | PN-V701

- Largest high impact 70" Sharp video wall display
- Robust and ultra slim bezel for minimum display interruption
- 700 cd/m^2 max brightness
- UV^{2}A Sharp LCD technology for best 24/7 operation
- 1920 x 1080 resolution
- Signal interfaces: Display Port 1.2 (in + out) - 2 x HDMI
- DisplayPort in/out with 4K signal loop through
- HDBaseT Mini OPS option
- "Out of the box" calibrated with Sharp advanced UCCT technology
- Sharp recalibration software for fast colour maintenance of the video wall using an FLIR camera

Specifications

Model	PN-V701
Installation	Landscape/Portrait

LCD Panel		70-inch widescreen (176.6cm diagonal) LCD with UV²A technology
	Max. Resolution	1,920 × 1,080 pixels
	Max. Display Colours	1.06 billion colours
	Pixel Pitch (H x V)	0.401 x 0.401 mm
	Brightness*[1]	700 cd/m²
	Contrast Ratio	4,000 : 1
	Viewing Angle (H/V)	176°/176° (CR ≥10)
	Active Screen Area (W x H)	1,538.9 x 865.6mm
	Response Time	8 ms (grey to grey, avg.)
	Backlight	LED, full array
Input	DisplayPort	YES Ver.1.2 (1)
	DVI-D	YES (1)
	PC Analog (Mini D-sub 15-pin)	YES (1)(RGB/Component/Video)
	Component Video	YES (Via Mini D-sub 15 pin)
	HDMI	YES (2) - HDCP compatible
	RS-232C	YES (1)
	Audio (3.5 stereo mini jack)	YES (1)
	Control Kit Jack	YES (1)
Output	DisplayPort	YES Ver.1.2 (1)
	RS-232C	YES (1)
	Audio (3.5 stereo mini jack)	YES (1)
Input/Output	LAN	10BASE-T/100BASE-TX (×1)
Power Consumption		380W
Environmental Conditions	Operating Temperature	0°C to 40°C
	Operating Humidity	20% to 80% RH (no condensation)
Dimensions (W x D x H) (display only)		1,543.7 x 122 x 870.4 mm
Weight		37.0 kg

Professional displays

Contents

Professional displays

Our portfolio of professional displays have been developed over many years and reflects a deep understanding of the technical and commercial demands of professional applications. With sizes ranging from 40 inch all the way to 90 inches, the Sharp professional display portfolio is used in many retail signage, way-finding, boardroom, reception areas and where mission critical reliability is paramount.

PN-B501/B401/M501/M401

Create eye-catching visual messaging in almost any environment

The innovative **PN-B** and **PN-M** range of smart large format displays are suitable for commercial office buildings and retail stores to public spaces and transport hubs.

This range of displays provide the most flexible installations and embedded computer intelligence. They can be easily used in various applications such as signage and meeting rooms, that require installation combinations and powerful stand-alone operation. These solutions are supported by a strong eco-system of partner applications running on an Android based System on Chip (SoC).

The **PN-B501/B401** operate 16/7 – ideal for shopping centres or large corporate offices that can accommodate some downtime – while the **PN-M501/M401** offer 24/7 operation, perfect for transportation hubs or service station restaurants that need to provide mission critical information to customers all day, every day.

Key benefits | PN-B501/B401/M501/M401

- Powerful and flexible stand-alone operation with embedded Android SoC
- Flexible performance upgrade with Mini OPS extension slot
- Portrait, landscape format orientation and unique, face-up, face-down installation
- Slim bezel design with speakers 7W + 7W
- Sharp E-Signage S player pre-installed on Android SoC
- Sharp Open Architecture Platform

Specifications

Model		PN-B501	PN-B401	PN-M501	PN-M401
Installation		Landscape / Portrait / Face-up /Face-down/Tilted/Hanging			
		50" Class [49 $1/_2$ inch (125.73cm) diagonal] TFT LCD	40" Class [39 $1/_2$ inch (100 .33cm) diagonal] TFT LCD	50" Class [49 $1/_2$ inch (125.73cm) diagonal] TFT LCD	40" Class [39 $1/_2$ inch (100.33cm) diagonal] TFT LCD
LCD Panel	Backlight	LED, edge lit			
	Max. Resolution	1,920 x 1,080 pixels			
	Max. Display Colours	16.77 million colours			
	Pixel Pitch (H x V)	0.5708 x 0.5708 mm	0.45735 x 0.4494 mm	0.5708 x 0.5708 mm	0.45735 x 0.4494 mm
	Brightness[*1] (average)	300cd		450cd	
	Contrast Ratio[*1]	5,000 : 1			
	Viewing Angle (H/V)	178°/178° (CR ≥10)			
	Active Screen Area (W x H)	1,095.84 x 616.41 mm	878.112 x 485.352 mm	1,095.84 x 616.41 mm	878.112 x 485.352 mm
Computer Input	Video	Analog RGB (0.7 Vp-p) [75 Ω], HDMI			
	Synchronisation	Horizontal/vertical separation (TTL: positive/negative), Composite sync (TTL: positive/negative)[*2]			
	Plug & Play	VESA DDC2B			
	Power Management	VESA DPMS, DVI DMPM		VESA DPMS	
Input Terminals	Video	DisplayPort x 1, Mini D-sub 15-pin x 1, HDMI (PC/AV signal compatible) x 2			
	Audio	3.5mm mini stereo jack x 1			
	Serial (RS-232C)	D-sub 9 pin x 1			
Output Terminals	Video	DisplayPort x 1			
	Audio	3.5mm mini stereo jack x 1			
	Serial (RS-232C)	D-sub 9 pin x 1			
Android SoC	OS	Android 4.4			
	CPU	Quad Core (Arm Cortex-A17 processor)			
	Memory	2GB			
	Storage	8GB			
	Memory Card Slot	SD card slot (SD/SDHC) x 1			
	USB Port	USB 2.0 compliant x 3			
	LAN Port	10BASE-T/100BASE-TX/1000BASE-T			
Other	Expension Slot	12V, 2.5 A (power supplied when expanding the functions with an optional part)			
	Speaker	7W + 7W			
	Power Requirement	AC 100 - 240 V, 1.4 A, 50/60 Hz	AC 100 - 240 V, 1.1 A, 50/60 Hz	AC 100 - 240 V, 50/60 Hz	
	Mounting	VESA (4 points), 400 mm x 200mm (13 ¾" x 7 ⅞") pitch, M6 screw			
Environmental Conditions	Operating Temperature[*3]	0°C to 40°C			
	Operating Humidity	20% to 80% RH (no condensation)			
Power Consumption (Input signal waiting mode / standby mode)		120 W (19 W / 12 W)	92 W (19 W / 12 W)	TBD	TBD
Dimensions		1,123 x 68 x 647 mm	902 x 66 x 513 mm	1,123 x 68 x 647 mm	902 x 66 x 513 mm
Weight		22 kg	15 kg	22 kg	15 kg
Main Accessories		AC power cord, remote control unit, battery (AAA size x 2), CD-ROM, set-up manual, cable clamp x 2, USB flash drive/ SD card cover, USB flash drive/SD card cover screw, logo sticker			

PN-R903A

Breath taking quality and superb brightness bring images to life on this ultra large 90" LCD

Sharp's **PN-R903A** boasts an ultra-large 90" display that towers above other professional LCD displays in size, quality, and impact. With its full-HD resolution, brilliant image quality, and streamlined profile, this premium professional LCD display was designed to lead the large-format digital signage market. The 700 cd/m^2 high brightness ensures the **PN-R903A** will deliver unrivalled impact in any environment.

Key benefits | PN-R903A

- 90" (228.7 cm) diagonal screen size
- 700 cd/m^2
- 1920 x 1080 resolution
- UV^{2}A technology
- Contrast 4.000:1
- LED, full array
- 24/7 operation

Specifications

Model		PN-R903A
Installation		Landscape/Portrait
LCD Panel		90-inch widescreen (228.7 cm diagonal) UV²A LCD
	Max. Resolution	1,920 x 1,080 pixels
	Max. Display Colours	1.06 billion colours
	Pixel Pitch (H x V)	1.038 x 1.038 mm
	Brightness	700 cd/m²
	Contrast Ratio	4,000 : 1
	Viewing Angle (H/V)	176°/176° (CR ≥10)
	Active Screen Area (W x H)	1,993.0 x 1,121.0 mm
	Response Time	6 ms (grey to grey, avg.)
	Backlight	LED, full array
Computer Input	Video	Analogue RGB (0.7 Vp-p) [75], Digital (conforms to DVI 1.0 standards), DisplayPort 1.1
	Synchronisation	Horizontal/vertical separation (TTL: positive/negative), Sync on green, Composite sync (TTL: positive/negative)
	Plug & Play	VESA DDC2B
	Power Management	VESA DPMS, DVI DMPM
Video Colour System		NTSC (3.58 MHz, 4.43 MHz), PAL, PAL60, SECAM
Input Terminals		DisplayPort x 1, DVI-I x 1, Mini D-sub 15-pin x 1, HDMI x 2 (HDCP compatible), RS-232C x 1, 3.5 mm-diameter mini stereo jack x 2
Output Terminals		DisplayPort x 1 (supports video signals only), DVI-D x 1 (HDCP compatible), RS-232C x 1, 3.5 mm-diameter mini stereo jack x 1
Input/Output Terminals		LAN x 1
Built-in Speakers		10 W + 10 W
Power Supply		100V – 240V AC, 50/60 Hz
Power Consumption		660 W
Environmental Conditions	Operating Temperature	0°C to 40°C
	Operating Humidity	20% to 80% RH (no condensation)
Dimensions (W x D x H) (display only)		2,055 x 122 x 1,197 mm
Weight		75 kg

PN-R706/R606

Heavy duty large format displays with outstanding brightness

Sharp's **PN-R** range of large format displays are available in a variety of sizes: 70" and 60" and also includes the 55", 49" and 42". Thanks to the near-complete edge-to-edge visual canvas, and high bright 700cd/m² that runs throughout the range, images are brought to life like never before, making the **PN-R** range the perfect choice for heavy duty 24/7 application and demanding installations.

To add maximum impact to your chosen location, PN-R displays will support an incredible range of installation options. Not only can they be installed in portrait and landscape, but also face-up, face-down*, and tilted forward or backward by 90 degrees. These additional installation options are available across the range.

Key benefits | PN-R706/R606

- New generation heavy duty displays with Mini OPS extension slot
- 70" and 60" diagonal screen size
- 700 cd/m²
- 24/7 signage applications
- 1920 x 1080 resolution
- DisplayPort (Daisy Chain) + HDMI + VGA
- Slim bezel design
- Portrait, landscape format orientation and unique, face-up installation

* Not PN-R606/706.

Specifications

Model		PN-R706	PN-R606
Installation		Landscape / Portrait / Face-up	
		70 -inch widescreen (176.6 cm diagonal) UV²A LCD	60 -inch widescreen (152.5 cm diagonal) UV²A LCD
LCD Panel	Max. Resolution	1,920 x 1,080 pixels	
	Max. Display Colours	1.06 billion colours	
	Pixel Pitch (H x V)	0.802 x 0.802 mm	0.692 x 0.692 mm
	Brightness	700 cd/m²	
	Contrast Ratio	4,000 : 1	
	Viewing Angle (H/V)	176°/176° (CR ≥10)	
	Active Screen Area (W x H)	1,538.9 x 865.6 mm	1,329.1 x 747.6 mm
	Response Time	6 ms (grey to grey, avg.)	
	Backlight	LED, edge lit	
Computer Input	Video	Analogue RGB (0.7 Vp-p) [75], Digital (conforms to DVI 1.0 standards), DisplayPort 1.1	
	Synchronisation	Horizontal/vertical separation (TTL: positive/negative), Sync on green, Composite sync (TTL: positive/negative)	
	Plug & Play	VESA DDC2B	
	Power Management	VESA DPMS, DVI DMPM	
Video Colour System		NTSC (3.58 MHz, 4.43 MHz), PAL, PAL60, SECAM	
Input Terminals		DisplayPort x 1, DVI-I x 1, Mini D-sub 15-pin x 1, HDMI x 2 (HDCP compatible), RS-232C x 1, 3.5 mm-diameter mini stereo jack x 2	
Output Terminals		DisplayPort x 1 (supports video signals only), DVI-D x 1 (HDCP compatible), RS-232C x 1, 3.5 mm-diameter mini stereo jack x 1	
Input/Output Terminals		LAN x 1	
Built-in Speakers		10 W + 10 W	
Power Supply		100V – 240V AC, 50/60 Hz	
Power Consumption		270 W	200 W
Environmental Conditions	Operating Temperature	0°C to 40°C	
	Operating Humidity	20% to 80% RH (no condensation)	
Dimensions (W x D x H) (display only)		1,578 x 39.4 x 916 mm	1,378 x 39.4 x 794 mm
Weight		43 kg	32 kg

PN-R556/R496/R426

The heavy duty range for high impact demanding professional signage

Sharp's **PN-R** range of large format displays are available in a variety of sizes: 55", 49" and 42". Thanks to the near-complete edge-to-edge visual canvas, and high bright 700cd/m^2 that runs throughout the range, images are brought to life like never before, making the PN-R range the perfect choice for heavy duty and demanding installations.

To add maximum impact to your chosen location, **PN-R** displays will support an incredible range of installation options. Not only can they be installed in portrait and landscape, but also face-up, face-down and tilted forward or backward by 90 degrees. These additional installation options are available across the range.

Made for professional, around the clock, 24/7, demanding signage use, with a sleek and stylish design that won't detract from the focus of your message, the PN-R range of high-end, dependable displays have been built with the highest quality materials and are designed to fit beautifully into any installation and digital signage requirement.

Key benefits | PN-R556/R496/R426

- Latest generation of heavy duty displays with Mini OPS extension slot, with new PC and HDBaseT modules
- 55", 49", 42" diagonal screen size
- 700 cd/m^2
- 24/7
- 1920 x 1080 resolution
- DisplayPort (Daisy Chain) + HDMI + VGA
- Slim bezel design
- Portrait, landscape format orientation and unique, face-up, face-down installation

Specifications

Model		PN-R556	PN-R496	PN-R426
Installation		Landscape / Portrait / Face-up / Face-down		
LCD Panel		55-inch widescreen (138.78cm diagonal) TFT LCD	49-inch widescreen (123.20cm diagonal) TFT LCD	42-inch widescreen (106.47cm diagonal) TFT LCD
	Max. Resolution	1,920 x 1,080 pixels		
	Max. Display Colours	1.07 billion colours		
	Pixel Pitch (H x V)	0.630 x 0.630 mm	0.559 x 0.559 mm	0.483 x 0.483 mm
	Brightness*[1]	700 cd/m²		
	Contrast Ratio	1,300 : 1		
	Viewing Angle (H/V)	178°/178° (CR ≥10)		
	Active Screen Area (W x H)	1,209.6 x 680.4 mm	1,073.8 x 604.0 mm	927.94 x 521.96 mm
	Response Time	8 ms (grey to grey, avg.)		
	Backlight	LED, edge lit		
Computer Input	Video	Analogue RGB (0.7 Vp-p) [75Ω], Digital (DVI 1.0 standard–compliant), DisplayPort 1.2, HDMI		
	Synchronisation	Horizontal/vertical separation (TTL: positive/negative), Sync on green*[2], Composite sync (TTL: positive/negative)*[2]		
	Plug & Play	VESA DDC2B		
	Power Management	VESA DPMS, DVI DMPM		
Input Terminals*[3]		DisplayPort x 1, DVI-D 24-pin (HDCP compatible) x 1, Mini D-sub 15-pin x 1, HDMI (PC/AV signal compatible) x 2, RS-232C x 1, 3.5 mm-diameter mini stereo jack x 1		
Output Terminals*[3]		DisplayPort x 1, 3.5 mm-diameter mini stereo jack x 1, RS-232C x 1		
Input/Output Terminals*[3]		LAN: 10Base-T/100Base-TX x 1		
Power Supply Terminal		5 V, 2 A (5V, 500 mA when the expansion slot is used) (USB type-A connector)		
Expansion Slot		12V, 2.4 A (power supplied when expanding the functions with an optional part)		
Built-in Speakers		10 W + 10 W		
Mounting		VESA (4 points), 400 mm pitch, M6 screw		VESA (4 points), 200 mm pitch, M6 screw
Power Consumption		175 W	155 W	135 W
Environmental Conditions	Operating Temperature*[4]	0°C to 40°C		
	Operating Humidity	20% to 80% RH (no condensation)		
Dimensions (W x D x H) (display only)		1,231 x 57 x 702 mm	1,095 x 57 x 626 mm	949 x 57 x 543.5 mm
Weight		25 kg	19.5 kg	15.5 kg
Main Accessories		AC power cord, remote control unit, battery (AAA size x 2), CD-ROM, set-up manual, cable clamp x 2, ceiling mounting bracket x 4, ceiling mounting bracket fixing screw x 4, logo sticker		

*[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] D-sub input terminal only. *[3] Use a commercially available connection cable for PC and other video connections. *[4] When using the monitor laying flat on a surface (when the monitor is tilted 20 degrees or more 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 condition may change when using the monitor together with the optional equipment recommended by Sharp. In such cases, please check the temperature condition specified by the optional equipment.

PN-Y556P/Y496P/Y436P

Easy to use signage displays that place you in control

Easy to use, great to look at, and available in a choice of sizes to suit all of your needs – that's the PN-YP range of professional digital signage displays. From a compact 43" all the way up to 55", the **PN-Y556P/Y496P/Y436P** affordable and robust 24/7 HD displays with 450 cd/m2 brightness, give you all you need to communicate, easily.

Key benefits | PN-Y556P/Y496P/Y436P

- Heavy duty Sharp display range with embedded USB player and secure SD card slot
- 55", 49", 43" display sizes
- 450 cd/m^2
- 24/7 operation
- 1920 x 1080 resolution
- HDMI + DVI (Daisy Chain) + VGA
- Automatic default to USB player - the screen never goes blank
- Portrait, landscape format orientation and unique, face-up, face-down installation

Specifications

Model		PN-Y556P	PN-Y496P	PN-Y436P
		55-inch (138.8cm) diagonal] TFT LCD	49-inch (123.2cm) diagonal] TFT LCD	43-inch (107.98cm) diagonal] TFT LCD
LCD Panel	Max. Resolution	1,920 x 1,080 pixels		
	Max. Display Colours	16.77 million colours		
	Pixel Pitch (H x V)	0.630 x 0.630 mm	0.559 x 0.559 mm	0.490 x 0.490mm
	Brightness (average)	450 cd/m^2		
	Contrast Ratio	1,100 : 1		
	Viewing Angle (H/V)	178°/178° (CR ≥10)		
	Active Screen Area (W x H)	1209.6 x 680.4cm	1039.7 x 584.8cm	941.184 x 529.416cm
Computer Input	Video	Digital (DVI 1.0 standard-compliant), Analog RGB (0.7 Vp-p) [75 Ω]		
	Video colour system	NTSC (3.58MHz)/NTSC (4.43MHz)/PAL/PAL-60/SECAM		
	Synchronisation	Horizontal/vertical separation (TTL: positive/negative)		
	Plug & Play	VESA DDC2B		
	Power Management	VESA DPMS, DVI DMPM		
Input Terminals		HDMI x 1, Mini D-sub 15 pin, 3 rows x 1, DVI-D 24 pin (HDCP compatible) x 1, 3.5 mm mini stereo jack x 2, D-sub 9 pin x 1		
Output Terminals		DVI-D 24 pin (HDCP compatible) x 1, 3.5 mm mini stereo jack x 1, D-sub 9 pin x 1		
USB Port		USB flash drive (Type A)		
Built-in Speakers		7 W + 7 W		
USB Power Supply		5V, 2A (USB TYPE A connector)		
SD card slot		SD memory card (SD memory card/SDHC memory card)		
LAN terminal		(LAN control without ON/OFF)		
Power Consumption		105W		
Power Requirement		AC 100 - 240 V, 50/60 Hz		
Environmental Conditions	Operating Temperature*[1]	0°C to 40°C		
	Operating Humidity	20% to 80% RH (no condensation)		
Dimensions (W x D x H) (display only)		1233 x 46 x 710cm	1097 x 46 x 634cm	965 x 46 x 559cm
Weight		18 kg	15 kg	10.5 kg

*[1] Temperature condition may change when using the monitor together with the optional equipment recommended by SHARP. In such cases, please check the temperature condition specified by the optional equipment. If you will use the monitor in a flat installation (tilted more than 20° (upward or downward), please use at an ambient temperature between 0°C and 30°C.

Accessories

Contents

Accessories

Easy to use solutions - Sharp's Mini-OPS

Sharp offers a smaller modern OPS (Open Pluggable Specifications) format to the market for feature extension of our next generation displays. The **Mini-OPS** format builds on the existing OPS Format and expands the range of OPS devices for professional displays. Featuring the latest Intel 6th generation processors, the Mini-OPS format is future-proof and allows for faster ROI, reduced energy costs and its fanless architecture offers more reliability with zero operating noise. The 2 Mini-OPS models are compatible with most of Sharp's product range, see details in individual product pages.

Mini-OPS PC Module (PN-ZB03PC)

- For reliable, cable less, integrated computing power
- Satisfies the vast variety of modern signage user requirements with a latest 6th Generation Intel Celeron Processor power - reducing total energy cost, running cost, and increased ROI
- A minimised amount of moving parts, with no operating noise this fanless architecture is designed for reliability - reduced dust inside the display and preserve the electronics for long term durability
- High speed pluggable connectors: supports high speed content transmission, such as stunning 4K contents

PN-ZB03PC

Mini-OPS Wireless Module (PN-ZB03W)

- For advanced collaboration and interactive multi-screen sharing
- Allows quick and easy BYOD screen share from a Notebook PC (WIN/Mac) or mobiles device (iOS/Android™)
- Integrated BYOD screen sharing, quick and easy sharing of ideas without cable clutter
- Instant wireless bi-directional touch remote control between host and BYOD devices, for total dynamic collaboration
- Split screen display of up to 4 devices onto the host display
- "1 to 4" content cloning on up to 4 host displays

PN-ZB03W

Mini-OPS HDBaseT Receiver (PN-ZB03H)

- Easy and neat solution for long distance signal cabling
- Connects any HDMI/DVI device like PC, BD player, etc. to a display
- Cable connection up to 100 Meter distance
- Transmission of video, audio, LAN and RS-232C signals, and additionally, USB signal
- Latest Spec HDBaseT 2.0 standard

PN-ZB03H

Peerless mobile stand/Wall mount

Complete mounting solutions

The **Peerless flat panel mobile stand** offers the most complete mobile solution for today's interactive display system. Designed exclusively for Sharp displays, durable 4" swivel casters provide easy manoeuvrability over various flooring surfaces and through doorways. Two locking casters ensure complete stability wherever the trolley is placed. In addition, the continuous tilt and height adjustment assures the display will be positioned at the ideal viewing angle for the viewing audience.

L20PNSR780MEU

Key benefits | Peerless stand

- Designed exclusively for Sharp interactive displays
- Integrated cable management protects, contains and conceals cables for a clean, professional installation
- Manoeuvres easily on four 4" (102mm) swivel casters, two locking
- Display can be located anywhere along the column for perfect viewing height up to 1526 mm
- Wide wheel base provides convenient access to the BIG PAD

The **Peerless universal flat wall mount** series offers versatile installation features and mounting options. Horizontal and vertical adjustment abilities allow for post installation levelling and side-to-side positioning, making it easier than ever to find the perfect display position.

L20PNWALL90EU

The low-profile design offers the sleek, aesthetically pleasing look to fit into any décor. Security screws provided in the mounting system deter tampering and theft. The open wall plate design offers total wall access, increasing the electrical and cable management options.

The display can simply be installed with adaptors hooking onto the wall plate for an overall quick, simple, and secure installation.

Key benefits | Peerless wall mount

- Fits display sizes from 55" to 90"
- Includes all necessary wall and display attachment hardware
- Supports VESA mounting 200mm, 400mm and 600mm
- Low-profile design holds display only 30mm
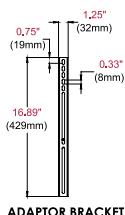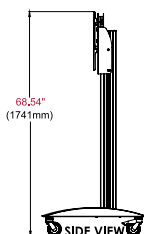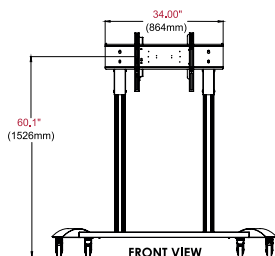
Specifications

Model	Peerless stand
Dimensions (W x H x D)	1639 x 1741 x 745mm
Product weight	45kg
Load capacity	82kg
Finish	Powder Coat
Available colours	Black
Package size (W x H x D)	1212 x 978 x 276mm
Package ship weight	51.6kg

Model	Peerless wall mount
Display Size (inches)	55 - 90
Max >Load (Kg)	102
Dimensions (W x H x D)	675 x 626 x 46mm
Colour	Matte Black

Wireless USB adapter - PN-ZW01

Plugs discreetly in the rear display cabinet

The **PN-ZW01** wireless USB module has been exclusively developed for Sharp's smart large format display line-ups PN-B and PN-M range. The module slots into the USB connection in the rear of the display, and connects automatically to the embedded Android system to provide full wireless network capability.

The wireless USB module is the perfect choice for signage applications, where cabled network support is not practical or desirable. The wireless adapter allows for straightforward wireless distribution of image and video content to the display, or allows for easy remote management and control of the display operation.

Key benefits | Wireless USB adapter - PN-ZW01

- Wireless USB module - designed and developed for sharp PN-B and PN-M range
- Easy, fast, 'Plug and play' installation
- Reliable and long-life performance with all wireless networking benefits
- Supports wireless content distribution
- Support wireless monitor control and management

PN-ZW01

Active Pens: PN-ZL06, PN-ZL03A, PN-ZL02A, PN-ZL01A

With powerful and ergonomic performance, the **PN-ZL** range of advanced active pens gives even more satisfaction and confidence to any user engaging the Pen-on-Paper touch experience. The pens sit snugly in the hand, providing comfort and ease of use all the time. The active pen gives the presenter or trainer quick and intuitive access to annotation options or pre-set configurations via the smart micro-switches built into the pen. The active pen can also make use of more expressive writing and annotation possibilities through its pressure sensitive capability.

The PN-ZL06 and PN-ZL03A active pens are compatible with the BIG PAD projected capacitive (PCAP) Multi-touch technology, and the BIG PAD Infrared Multi-touch technology is supported by the PN-ZL02A. The active pen option PN-ZL01A bundles the PN-ZL02A pen with the wireless transceiver USB adapter.

Key benefits | Active Pens

- Saves time and increases productivity with built in smart micro-switches
- Enhances the Pen-on-Paper natural user experience
- Supporting both PCAP and Infrared Multi-touch technology
- Optimal performance with Sharp Pen software

PN-ZL06   PN-ZL01A   PN-ZL03A

Specifications

Model	PN-ZL06	PN-ZL03A	PN-ZL02A	PN-ZL01A
Wireless Standard	Bluetooth 2.4GHz, IEEE802.15.4			
Operating Voltage (DCV)	1.5 (1x AAA Battery)			
CE	✔			
Number of Micro Switches	4	3		
Pressure Sensitive	✔			
Supported Touch Technology	Capacitive	Capacitive	Infrared	Infrared
Number of Supported Pens	Adapter supports up to 8 active pens simultaneously			
Tip size	2mm	3.5mm		

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SHARP

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