Professional and Interactive display range

SHARP
Be Original.

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

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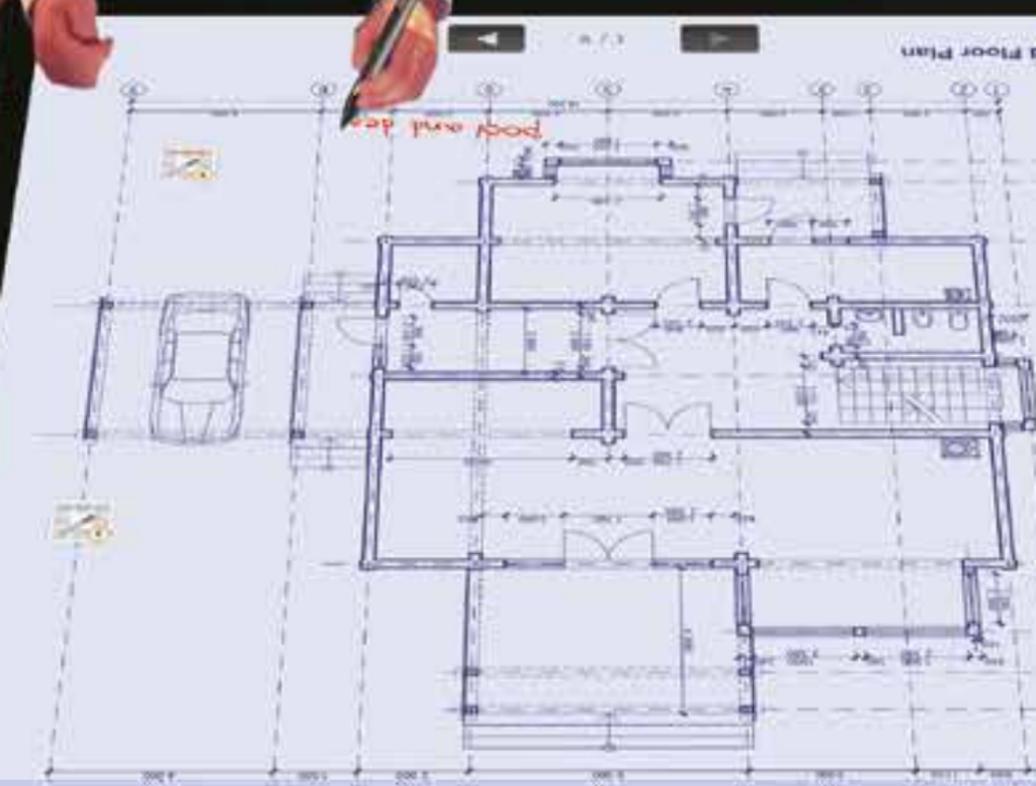
BIG PAD Interactive displays

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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 a collaborative

Pen-on-Paper

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.

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

Sharp's Windows Collaboration Display (WCD) 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 virtually anywhere else. As well as using Sharp's award-winning professional display technology it works seamlessly with the best Microsoft 365 collaboration tools. And a 'plug and play' design means it can be used straightaway. Its in-built sensors also collect real-time data about room usage and ambient conditions and can help create a smart building environment.

Key benefits | Windows Collaboration Display

- Crystal clear information with a 70" 4K Ultra HD (3840 x 2160) display
- Enhanced collaboration when using Microsoft 365 and Microsoft Teams
- A natural 'Pen-on-Paper' experience with 30-point PCAP touch technology
- Fast, precise control using an optional 4-Button Active pen
- Effortless interaction with an integrated microphone and 4K camera
- 'Plug and play' set-up through a single USB-C connector
- Smart building management using an IoT sensor hub and the Microsoft Azure Digital Twins platform
- Easy device sharing with in-built Wireless Casting and the Touch Back control

Specifications

Model		**Windows Collaboration Display**
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 compliant) (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]
Passive Touch Pen	Passive Touch Pen	Yes
	Active Touch Pen	(optional) with wireless communication method and function buttons x4
Wireless Controller	Wireless communication method	2.4 GHz, IEEE802.11 b/g/n; 5 GHz, IEEE802.11 a/n
	LAN Terminal	10Base-T/100Base-TXfunction buttons x4
	USB Port	USB (2.0 compliant) (Type A) x 1 USB (3.0 compliant) (Type A) x 1
Computer Input	Video	HDMI
	Plug & Play	Yes
	Power Management	Yes
Input Terminals		USB-C x 2, HDMI (HDCP, PC/AV signal compatible) x 1, 3.5 mm diameter mini stereo jack x 1
Input/Output Terminals		LAN port (10Base-T/100Base-TX) x 1
Speaker Output	Built-in	10 W + 10 W
	External	10 W + 10 W
Power Supply		100V – 240V AC, 50/60 Hz
Power Consumption		235 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)		1.623.6 x 90 x 976.4 mm
Weight		TBC
Main Accessories		AC power cord, remote control unit, battery (AA size x 2), set-up manual, USB-C cable (8.0 m), passive touch pen
Unified Communications	Camera	4K @ 30fps
	Field of view	120˚
	Microphone	Array microphone x 2
	Sound collecting distance	4-6m
IoT Sensor Hub		
AI Camera	Output Connector	USB 2.0
	Resolution	1920 x 1080 @30 fps
	Colour space	YUY2, MJPG, H.264
	Field of view	130˚
Motion sensor	Sensor type	Microwave
	Detection area	140˚
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.

PN-86HC1/75HC1/70HC1E
The BIG PAD for teaching and training

Sharp's **BIG PAD HC1** range enables ultra clear '4K Reading' of detailed 4K screen data and makes presenting really easy with an intuitive Pen-on-Paper user experience. It has a highly responsive, interactive display that allows group work at the screen and a range of smart collaboration features, including an integrated Android PC with 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 70", 75" and 86" 4K Ultra HD (3840 x 2160) displays
- Provides a natural 'Pen-on-Paper' experience using a passive Stylus/Pen 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
- Extensive teaching tools and online content accessible through an integrated Android PC
- 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	1.06 billion colours		
	Pixel Pitch (H x V)	0.494 x 0.494 mm	0.429 x 0.429 mm	0.401 x 0.401 mm
	Brightness*[1]	400 cd/m²	400 cd/m²	350 cd/m²
	Contrast Ratio	1,200:1	1,200:1	5,000:1
	Viewing Angle (H/V)	176°/176° (CR ≥10)		
	Active Screen Area (W x H)	1895 x 1066 mm	1649 x 930 mm	1539 x 866 mm
	Response Time	8 ms (grey to grey, avg.)	8 ms (grey to grey, avg.)	6.5 ms (grey to grey, avg.)
	Backlight	LED, edge lit	LED, edge lit	LED, direct lit
Touchscreen	Touch Technology	Infrared		
	Multi-Touch	10-Points		
Touch Pen	Function Button	N/A (passive pen)		
Computer Input	Video	Analogue RGB (0.7 Vp-p) [75]		
	Synchronisation	Horizontal/vertical separation (TTL: positive/negative)		
	Plug & Play	VESA DDC2B		
	Power Management	VESA DPMS		
Android SoC		Yes		
Integrated Wireless		Via Android SoC		
Integrated Whiteboard App		Via Android SoC		
Input Terminals		Mini D-sub 15-pin x 1, HDMI x 3		Mini D-sub 15-pin x 2, HDMI x 3
Output Terminals		3.5 mm-diameter mini stereo jack x 1		
Input/Output Terminals		LAN port (10Base-T/100Base-TX) x 1		
Expansion Slot		OPS		
Built-in Speakers		Built-in - 10 W + 10 W		
Power Supply		100V – 240V AC, 50/60 Hz		
Power Consumption		TBD	TBD	TBD
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)		TBD	TBD	1,629 x 99 x 990 mm
Weight		TBD	TBD	TBD 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. Design and specifications are subject to change without prior notice.

PN-85TH1/75TH1/65TH1

The BIG PAD for the boardroom or classroom

Sharp's **PN-85TH1/75TH1/65TH1 4K BIG PAD** 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 Touch technology enables effortless interaction with multiple users
- 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 24/7 operation

Specifications

Model		PN-85TH1	PN-75TH1	PN-65TH1
Installation		Landscape / Portrait		
		85-inch-class (214 cm)	75-inch-class (189.3 cm)	65-inch-class (163.9 cm)
LCD Panel	Max. Resolution	3,840 x 2,160 pixels		
	Max. Display Colours	1.06 billion colours		
	Pixel Pitch (H x V)	0.490 x 0.490 mm	0.429 x 0.429 mm	0.372 x 0.372 mm
	Brightness*[1]	350 cd/m^2		
	Contrast Ratio	1,200:1	1,200:1	4,000:1
	Viewing Angle (H/V)	178°/178° (CR ≥10)		
	Active Screen Area (W x H)	1895 x 1066 mm	1649 x 930 mm	1539 x 866 mm
	Response Time	8 ms (grey to grey, avg.)	8 ms (grey to grey, avg.)	6.5 ms (grey to grey, avg.)
	Backlight	LED, edge lit	LED, edge lit	LED, direct lit
Touchscreen	Touch Technology	InGlass		
	Multi-Touch	20-Points		
Touch Pen	Function Button	Via Optional Active Pen (TBD) (Passive Pen Standard)		
Computer Input	Video	Analogue RGB (0.7 Vp-p) [75Ω]		
	Synchronisation	Horizontal/vertical separation (TTL: positive/negative)		
	Plug & Play	VESA DDC2B		
	Power Management	VESA DPMS		
Android SoC		Yes		
Integrated Wireless		Via Android SoC		
Integrated Whiteboard App		Via Android SoC		
Input Terminals		Mini D-sub 15-pin x 1, HDMI x 2, DisplayPort x 1 3.5 mm-diameter mini stereo jack x 1		
Output Terminals		3.5 mm-diameter mini stereo jack x 1, DisplayPort x 1		
Input/Output Terminals		LAN port (10Base-T/100Base-TX) x 1 RS232C x 1		
Expansion Slot		Mini-OPS		
Built-in Speakers		Built-in - 10 W + 10 W		
Power Supply		100V – 240V AC, 50/60 Hz		
Power Consumption		TBD	TBD	TBD
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)		TBD	TBD	TBD
Weight		TBD	TBD	TBD

*[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.

PN-80TH5/70TH5

Sharp's **BIG PAD 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, the BIG PADs **PN-80TH5/70TH5** 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
- Optional Advanced 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-80TC3A

Responsive, intuitive and seamless collaboration – Sharp's BIG PAD Pro

Sharp's BIG PAD Pro **PN-80TC3A** is the class-leading model for corporate settings and demanding mission-critical collaborative environments. Building on a unique pioneering interactive legacy, the **PN-80TC3A** boasts projected capacitive touch technology (PCAP) representing Sharp's innovative insight and unparalleled experience in providing optimised, dedicated and collaborative touchscreen solutions. Sharp's Pen-on-Paper natural user experience makes writing on a BIG PAD feel close to using a real pen on writing paper. BIG PAD Pro is fast, responsive and intuitive – using one BIG PAD Pro is good. Using two or three BIG PAD Pro's in the powerful Multi-Board configuration is even better!

Key benefits | PN-80TC3A

- BIG PAD Pro for the most demanding corporate environments
- Pen-on-Paper natural user experience; it really is as though you're writing with a real pen and paper
- 80" diagonal screen size
- Smooth and responsive PCAP 10-point touch with 220hz sampling and up to 4 users
- Seamless flat bezel for optimised multi-board configurations
- Smooth glass surface for best in class tactile comfort
- SHARP Pen software including new sheet extension function
- Multi-device BYOD collaboration with SHARP Display Connect
- SHARP Touch Viewing software for easy project file management
- Optional Advanced Multi-Board for highly effective multi-display, multi-user and multi-touch applications
- 24/7 operation

Specifications

Model		**PN-80TC3A**
Installation		Landscape/Portrait
LCD Panel		80-inch widescreen (203.2 cm diagonal) UV²A*[1] LCD
	Max. Resolution	1,920 x 1,080 pixels
	Max. Display Colours	1.06 billion colours
	Pixel Pitch (H x V)	0.923 x 0.923 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
	Response Time	4 ms (grey to grey, avg.)
	Backlight	LED, edge lit
Touchscreen	Touch Technology	Projected Capacitive (PCAP)
	PC Connection Port	USB 2.0 (type B) x 2
	Power Supply	Supplied from main unit
	Multi-Touch	10 points
	Protection Glass	Thickness: 3.8 mm*[3] Shock resistance: 130 cm*[4]
Touch Pen	Function Button	Yes
Computer Input	Video	Analogue RGB (0.7 Vp-p) [75], DisplayPort 1.1a
	Synchronisation	Horizontal/vertical separation (TTL: positive/negative), Sync on green (D-sub 15-pin only), Composite sync (TTL: positive/negative)
	Plug & Play	VESA DDC2B
	Power Management	VESA DPMS
Video Colour System		NTSC (3.58 MHz) / NTSC (4.43 MHz) / PAL / PAL60 / SECAM
Input Terminals*[5]		PC analogue: Mini D-sub 15-pin x 2*[6], HDMI (HDCP and 1080p compatible, PC/AV signal compatible) x 3, 3.5 mm-diameter mini stereo jack x 2, Video x 1*[6], Component video x 1*[6], DisplayPort (HDCP compatible, PC signal compatible) x 1, RS-232C x 1*[7]*[8]
Output Terminals*[5]		3.5 mm-diameter mini stereo jack x 1, DisplayPort (HDCP compatible) x 1
Speaker Output	Built-in	10 W + 10 W
	External	10 W + 10 W (6)
Mounting		VESA (4 points), 600 x 400 mm pitch, M6 screw
Power Supply		100V – 240V AC, 50/60 Hz
Power Consumption		280 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)		1,850 x 96 x 1,072 mm
Weight		77 kg
Main Accessories		AC power cord, remote control unit, battery (AA size) x 2, set-up manual, blank sticker, cable clamps x 7, camera mount, USB cable (3.0 m), USB extension cable (1.8 m), eraser, pen tray, touch pen (with function button) x 2, pen adaptor, touch pen battery (AAA size) x 2, SHARP Display Connect* software CD-ROM, RS-232C conversion cable (3.5 mm-diameter mini stereo jack) x 1

*[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 centre. *[5] Use a commercially available connection cable for PC and other video connections. *[6] 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. *[7] Requires the bundled RS-232C conversion cable. *[8] Only command control.

PN-70TW3A/60TW3A

Sharp's BIG PAD with wireless connectivity

Sharp's **PN-70TW3A/60TW3A** are the industry-leading BIG PAD models to have the easy-to-use, integrated wireless collaboration feature, MirrorOp for Sharp, connecting to mobile devices (iOS, Android, Windows) and mobile PCs. For office meetings, training rooms, the boardroom, classrooms as well as demanding mission-critical collaborative working environments, the **PN-70TW3A/60TW3A** are setting the standard in providing optimised and dedicated collaborative touchscreen solutions. As well as screen sharing from connected devices, the BIG PAD Touch-Back feature allows any presenter to remotely control their PC via touch directly from the BIG PAD.

In addition, the integrated controller, Direct Drawing, gives the **PN-70TW3A/60TW3A** fast smart board functionality without the need for an external PC, while the Pen-on-Paper natural user experience feels close to using a real pen on writing paper.

Key benefits | PN-70TW3A/60TW3A

- Infrared (IR) 10-point touch - 200Hz sampling and up to 4 users
- Pen-on-Paper natural user experience; it really is as though you're writing with a real pen and paper
- Touch-Back wireless PC control directly from BIG PAD Wireless
- Integrated BYOD screen sharing, for quick and easy sharing of ideas without cable clutter
- Integrated Direct Drawing for instant white-boarding
- SHARP Pen software including new sheet extension function
- "1 to 4" content cloning on up to 4 BIG PAD Wireless displays
- Pen digitiser windows driver for intuitive and automatic switching between pen and finger input
- SHARP Touch Viewing software for easy project file management
- Split screen display of up to 4 devices onto the BIG PAD Wireless
- Smooth glass surface for best in class tactile comfort
- 24/7 operation

Specifications

Model		PN-70TW3A	PN-60TW3A
Installation		Landscape	
LCD Panel		70-inch-class (176.6 cm diagonal) UV²A*¹ LCD	60-inch-class (152.5 cm diagonal) UV²A*¹ LCD
	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*²	300 cd/m²	
	Contrast Ratio	3,000 : 1	
	Viewing Angle (H/V)	160°/160° (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	
Touchscreen	Touch Technology	IR (infrared blocking detection method)	
	PC Connection Port	USB (2.0 compliant) (Type B) x 2	
	Power Supply	Supplied from main unit	
	Multi-Touch	10 points	
	Protection Glass	Thickness: 3.4 mm*³ Shock resistance: 130 cm*⁴	Thickness: 3.0 mm*³ Shock resistance: 130 cm*⁴
Touch Pen	Communication	Wireless communication method	
	Function Button	Yes	
Wireless Controller		Wireless communication method (2.4 GHz, IEEE802.11 b/g/n) (5 GHz, IEEE802.11 a/n)	
	LAN Terminal	10Base-T/100Base-TX	
	USB Port	USB (2.0 compliant) (Type A) x 1	
	Wireless Adaptor Port	USB (2.0 compliant) (Type A) x 1	
Computer Input	Video	Analogue RGB (0.7 Vp-p) [75], DisplayPort 1.1a	
	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		NTSC (3.58 MHz) / NTSC (4.43 MHz) / PAL / PAL60 / SECAM	
Input Terminals*⁶		PC analogue: Mini D-sub 15-pin x 1, HDMI™ x 3 (HDCP and 1080p compatible, PC / AV signal compatible), 3.5 mm-diameter mini stereo jack x 1, RCA pin (L/R) x 2, video: RCA pin x 2*⁶, component video: RCA pin x 1*⁶, RS-232C D-sub 9-pin x 1	
Output Terminals*⁶		3.5 mm-diameter mini stereo jack x 1, DisplayPort (HDCP compatible) x 1	
Input/Output Terminals*⁶		LAN port (10Base-T/100Base-TX) x 1	
Speaker Output	Built-in	10 W + 10 W	
	External	10 W + 10 W	
Mounting		VESA (4 points), 400 x 200 mm pitch, M6 screw	
Power Supply		100V – 240V AC, 50/60 Hz	
Power Consumption		235 W	190 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)		1,647 x 94 x 1,010 mm	1,437 x 94 x 890 mm
Weight		61 kg	48 kg
Main Accessories		AC power cord, remote control unit, battery (AA size x 2), set-up manual, blank sticker, cable clamps x 5, camera mount, USB cable (3.0 m), eraser, pen tray, touch pen (with function button), pen adaptor, touch pen battery (AAA size), SHARP Display Connect software CD-ROM, wireless token, wireless adaptor, wireless adaptor cover, RS-232C conversion cable (3.5 mm-diameter mini stereo jack) x 1	

*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 centre. *⁵ D-sub input terminal only. *⁶ Use a commercially available connection cable for PC and other video connections. *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 Requires the bundled RS-232C conversion cable. For command control only.

PN-70TB3/60TB3

Simple, intuitive operation lets you focus on interacting

Sharp's intelligent interactive display **PN-70TB3/60TB3** are designed for smooth and effortless collaboration in a wide range of contexts. Their highly responsive touch pens allow several people to write on the same screen at the same time, and the Pen-on-Paper natural user experience makes it feel as though you are using a real pen on writing paper. SHARP Display Connect software enables multifaceted wireless communication. Whether in the boardroom or the classroom, Sharp changes the way you communicate.

Key benefits | PN-70TB3/60TB3

- 70"/ 60" Class UV^{2}A LCD
- Pen-on-Paper natural user experience; it really is as though you're writing with a real pen and paper
- 10 point touch
- 10W + 10W front speakers
- 1920 x 1080 resolution
- Integrated touchscreen
- Contrast 3,000:1
- SHARP Pen software including new sheet extension function
- Optional stand / Wall mount
- Collaboration via MFP / Tablets
- 24/7 operation

Specifications

Model		PN-70TB3	PN-60TB3
Installation		Landscape	
LCD Panel		70-inch-class (176.6 cm diagonal) UV²A*¹ LCD	60-inch-class (152.5 cm diagonal) UV²A*¹ LCD
	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*¹	300 cd/m²	
	Contrast Ratio	3,000 : 1	
	Viewing Angle (H/V)	160°/160° (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], DisplayPort 1.1	
	Synchronisation	Horizontal/vertical separation (TTL: positive/negative), Sync on green (D-sub 15-pin only), Composite sync (TTL: positive/negative)	
	Plug & Play	VESA DDC2B	
	Power Management	VESA DPMS, DVI DMPM	
Touch Pen	Function Button	N/A (passive pen)	
Video Colour System		NTSC (3.58 MHz, 4.43 MHz), PAL, PAL60, SECAM	
Input Terminals*²		PC analogue: Mini D-sub 15-pin x 2*², HDMI (HDCP and 1080p compatible, PC/AV signal compatible) x 3, 3.5 mm-diameter mini stereo jack x 2, Video x 1*², Component video x 1*²	
Output Terminals*³		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	
Built-in Speakers		Built-in - 10 W + 10 W, External - 10 W + 10 W	
Power Supply		100V – 240V AC, 50/60 Hz	
Power Consumption		250 W	185 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)		1,647 x 94 x 1,010 mm	1,437 x 94 x 890 mm
Weight		61 kg	46 kg

*¹ UV²A stands for Ultraviolet-induced Multi-domain Vertical Alignment, a photo-alignment technology that ensures uniform alignment of liquid crystal molecules. *² 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. *³ For connecting keyboard, mouse, and USB memory device.

PN-80SC5/70SC5/60SC5

BIG PAD for best classroom management

Collaboration and interactivity have never been more important in business meetings, lessons or in operational rooms - the BIG PAD line up **PN-80SC5/70SC5/60SC5** places image quality and best in class touch performance at the heart of its design. Featuring 1920 x 1080 resolution, 350 cd/m² brightness and direct optical bonding, our touchscreen displays deliver a truly engaging and responsive experience for a wide range of professional applications. Our Pen-on-Paper natural user experience makes it feel as though you are using a real pen on writing paper.

Key benefits | PN-80SC5/70SC5/60SC5

- New generation Sharp BIG PAD interactive displays with presentation control features Freeze Frame/Blackout Buttons for more classroom control
- Pen-on-Paper natural user experience; it really is as though you're writing with a real pen and paper
- 80"/ 70"/ 60" UV²A LCD; interactive display
- Imaging with higher contrast picture (Direct Optical Bonding) for increased touch accuracy and removal of parallax error
- 10 Point IR touch for confident and intuitive interactivity
- 16/7 operation
- Smooth glass surface texture for prolonged tactile comfort
- SHARP Pen software including sheet extension function
- SHARP Touch Viewing software for easy project file management
- Multi-device BYOD collaboration with SHARP Display Connect

Specifications

Model		**PN-80SC5**	**PN-70SC5**	**PN-60SC5**
Installation		Landscape		
		80-inch-class (203.2 cm diagonal) UV²A*¹ LCD	70-inch-class (176.6cm diagonal) UV²A*¹ LCD	60-inch-class (152.5cm diagonal) UV²A*¹ LCD
LCD Panel	Max. Resolution	1,920 x 1,080 pixels		
	Max. Display Colours	1.07 billion colours*²		16.77 million
	Pixel Pitch (H x V)	0.923 x 0.923 mm	0.802 x 0.802 mm	0.693 x 0.693 mm
	Brightness*³	350 cd/m²		
	Contrast Ratio	5,000 : 1	4,000 : 1	5,000 : 1
	Viewing Angle (H/V)*⁴	176°/176° (CR ≥10)		
	Active Screen Area (W x H)	1,771.2 x 996.3 mm	1,538.9 x 865.6 mm	1,330.6 x 74.4mm
	Response Time	4 ms (grey to grey, avg.)	8 ms (grey to grey, avg.)	4 ms (grey to grey, avg.)
	Backlight	LED, direct lit	LED, edge lit	
Touchscreen	Touch Technology	IR (infrared blocking detection method)		
	PC Connection Port	USB 2.0		
	Power Supply	Supplied from USB port		
	Multi-Touch	10 points		
	Protection Glass	Thickness: 3.1 mm*⁵ Shock resistance: 130 cm*⁶		
Touch Pen	Function Button	N/A (passive pen)		
Computer Input	Video	Analogue RGB (0.7 Vp-p) [75Ω]		
	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*⁷		PC analogue: Mini D-sub 15-pin x 1, HDMI™ x 3 (HDCP and 1080p compatible, PC / AV signal compatible), 3.5 mm-diameter mini stereo jack x 1, audio: RCA pin (L/R) x 1, video: RCA pin x 1*⁸, component video: RCA pin x 1*⁸, RS-232C D-sub 9-pin x 1		
Output Terminals*⁷		3.5 mm-diameter mini stereo jack x 1		
Speaker Output		10 W + 10 W		
Mounting		VESA (4 points), 600 x 400 mm, M6 screw	VESA (4 points), 400 x 400 mm, M6 screw	VESA (4 points), 400 x 200 mm, M6 screw
Power Supply		100V – 240V AC, 50/60 Hz*⁹		
LAN terminal		10 BASE-T/100 BASE-TX		
Power Consumption		270 W	200 W	135 W
Environmental Conditions	Operating Temperature*¹	5˚C to 35˚C		
	Operating Humidity	20% to 80% RH (no condensation)		
Dimensions (W x D x H) (display only)		1,882 x 127 x 1,139 mm	1,635 x 96 x 998 mm	1,422 x 96 x 877 mm
Weight		79 kg	62 kg	43 kg
Main Accessories		Power cord, remote control unit, battery (AAA size) x 2, set-up manual, cable clamp x 2, cable clamp (for power cord), USB cable*¹⁰, eraser, pen tray, pen tray mounting screw x 5, touch pen, camera mount, camera mount screw x 2, camera screw, CD-ROM, SHARP Display Connect license, stand hole protection cover x 2, blank sticker		

*¹ UV²A stands for Ultraviolet-induced Multi-domain Vertical Alignment, a photo-alignment technology that ensures uniform alignment of liquid crystal molecules. *² Maximum colours of LCD panel. The number of colours that can be displayed simultaneously is 16.77 million arbitrary colours out of 1.07 billion colours. *³ 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. *⁴ Excluding the touch sensor part around the LCD panel. *⁵ Including anti-glare film on the front. *⁶ Approximate distance at which the glass panel can withstand the impact of a 500-gram iron ball dropped on its centre. *⁷ Use a commercially available connection cable for PC and other video connections. *⁸ Video and component video are switchable; use the menu to select. *⁹ The AC power cord is an inlet type. The cable is bundled (3 pins). *¹⁰ Please use only this USB cable and no other. If connected via a USB hub, a PC may not recognise the PN-80SC5/70SC5 correctly and operation may be unstable.

PN-65SC1

The interactive display for education

PN-65SC1 65" interactive display is the ideal choice for collaborative working in classrooms, training rooms and office meetings. Offering the latest in touchscreen technology alongside innovative features for an enhanced user experience, the **PN-65SC1** will bring any lesson or meeting to life.

Key benefits | PN-65SC1

- 10-point multi-touch technology for a highly-responsive natural touch experience
- Pen-on-Paper natural user experience; it really is as though you're writing with a real pen and paper
- Handwriting recognition for enhanced user experience
- One-touch freeze frame to freeze displayed content
- Mini Open Pluggable Specification (Mini OPS) platform for easy performance enhancement
- SHARP Touch Viewing software opens files direct from the display without waiting for applications to start
- SHARP Display Connect software supports wireless communication between up to 50 devices for wider collaboration
- Full-HD, 1920 x 1080 resolution 65" display
- Two 10W + 10W built-in speakers
- Cloud Portal Office option for cloud-based document management

Specifications

Model		**PN-65SC1**
Installation		Landscape
LCD Panel		65-inch-class (64 $^1/_2$-inch [163.9 cm] diagonal) TFT LCD
	Max. Resolution	1,920 x 1,080 pixels
	Max. Display Colours	16.77 million colours
	Pixel Pitch (H x V)	0.744 x 0.744 mm
	Brightness*[1]	350 cd/m²
	Contrast Ratio	5,000 : 1
	Viewing Angle (H/V)*[2]	178°/178° (CR ≥10)
	Active Screen Area (W x H)	1,428.5 x 803.5 mm (56 $^1/_4$" x 31 $^5/_8$")
	Response Time	6.5 ms (grey to grey, avg.)
	Backlight	LED, edge lit
Touchscreen	Touch Technology	IR (infrared blocking detection method)
	PC Connection Port	USB (2.0 compliant) (Type B) x 1
	Power Supply	Supplied from USB port
	Multi-Touch	10 points
	Protection Glass	Thickness: 4.1 mm*[3] Shock resistance: 130 cm*[4]
Touch Pen	Function Button	N/A (passive pen)
Computer Input	Video	Analogue RGB (0.7 Vp-p) [75 Ω], HDMI™ DisplayPort™
	Synchronisation	Horizontal/vertical separation (TTL: positive/negative)
	Plug & Play	VESA DDC2B
	Power Management	VESA DPMS
Input Terminals*[5]		PC analogue: Mini D-sub 15-pin x 1, HDMI x 4 (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 D-sub 9-pin x 1
Output Terminals*[5]		3.5 mm-diameter mini stereo jack x 1
USB Hub Function		USB 2.0 (type A) x 2
Mini OPS Expansion Slot		12 V, 2.4 A (power supplied when expanding the functions with an optional part)
Speaker Output		10 W + 10 W
Mounting		VESA (4 points), 400 x 400 mm, M6 screw
Power Supply*[6]		100 V – 240 V AC, 50/60 Hz
Power Consumption		205 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)		1,521 x 99 x 952 mm (59 $^7/_8$" x 3 $^7/_8$" x 37 $^1/_2$")
Weight		57.5 kg (126.8 lbs)
Main Accessories		AC power cord, remote control unit, battery (AAA size) x 2, set-up manual, blank sticker, cable clamp x 3, USB cable*[7], pen tray, pen tray mounting screw x 2, touch pen, camera mount, camera mount screw x 2, camera screw, CD-ROM, SHARP Display Connect license

PN-50TC1/40TC1
The BIG PAD for huddle spaces

Sharp's BIG PAD range makes meetings and communications smoother and more productive. Reinforcing the line-up are the **PN-50TC1/40TC1**, which 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"/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/m^2	300 cd/m^2
	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*[3]	Thickness: 2.5 mm*[2] Shock resistance: 130 cm^3*[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

* 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 $^1/_2$-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/m²
	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 $^9/_{16}$" x 19 $^1/_8$")
	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

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

*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.

Advanced Multi-Board software

Multi-touch, multi-user, multi-display experience with BIG PADs PN-80TC3A and PN-80TH5/70TH5

Sharp's **Advanced 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 **Advanced Multi-Board** driver option offers an easy to setup and easy to use interactive performance that's the only one of its kind available today.

Key benefits | Advanced 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 Advanced Multi-Board

Model	Advanced 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

Optimised Video Collaboration

Remote collaboration anywhere anytime

Even the best planned meetings are expensive in time and money and this is especially true when an element of travel is involved. But now there's a way to make any meeting substantially more productive and less expensive. It's called Video Collaboration and Sharp is leading the way with its **Optimised Video Collaboration Solutions**. Built around industry-leading technologies and standards for easy integration.

The core standard components of a **Sharp Optimised Video Collaboration Solution** are a MondoCenter software suite with 121 Premium Dialler on a PC workstation, matched with superb video and audio technology. Together, they let teams or individuals from up to four remote locations connect securely and easily, exploring ideas and exchanging content over video, voice, and file and application sharing. If you add the optional ConX software, you can increase the number of locations from 4 right the way up to 25.

Key benefits | Optimised Video Collaboration

- Remote real-time collaboration
- Effortless client/agency collaboration
- Distance learning made easy
- Part No.: INMCVCPACK

Optimised
Video Collaboration

Specifications

MondoCenter

Processor	Intel® Core i7-4770T, Q87 chipset
Memory (GB)	8
Hard Drive (GB)	SSD 120
LAN	802.3 10/100/1000 Base-T
Wi-Fi	Dual band 802.11 a/b/g/n MIMO PCIe half mini card, 2.4 GHz and 5 GHz with Intel, AMT support
Output Connections	VGA, HDMI x 2, 3.5mm stereo audio out x 2, RS232
Operating System	Windows 10
Warranty (years)	3

PTZ RealCam Camera

Video System	HD: 1080p/60, 1080p/50, 1080i/60, 1080i/50, 1080p/30, 1080p/25, 720p/60, 720p/50, 720p/30, 720p/25 SD: 480i, 576i
Zoom	12x optical, 32x digital
Size (mm)	128.5 x 118 x 156.2
Net Weight (kg)	0.91
Video Compression	H.264/MJEPG
USB	1xUSB3.0: Type B female jack
Power Connector	JEITA type (DC IN 12V)
Warranty (years)	3

Thunder Speakerphone

Connections	Mini-B input, 2.5mm analog audio input, RJ9 x 2 external microphone ports
Controls	On-hook, off-hook, volume up, volume down, microphone mute, Bluetooth mode
Audio	6.5-inch woofer, Speaker bandwidth: 200 Hz - 7 kHz, Max output level: 89 dB @ 1
Power (V DC@A) (max)	5, 2
Product Dimensions (W x D x H) (mm)	215 x 215 x 50
Product Weight (kg)	0.8
Warranty (years)	3

121 Premium Dialler

Max number of Participants (including the host MondoCenter)	4
SIP Based Calling	Yes
H.323 support	Yes
Browser based Calling	Internet Explorer, Firefox, Chrome, Safari
License Period (years)	3

ConX (Optional License Extensions for 8, 16 or 25 Users)

SIP Based Calling	Yes
H.323 support	Yes
Browser based Calling	Internet Explorer, Firefox, Chrome, Safari
PSTN Audio-only telephones	Yes
License Period (years)	3

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.
PC for 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 new 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/m²
- 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"/ 204.4	
	Aspect Ratio	16:9	
	Local Dimming LED Backlight control system	Yes	
	Backlight	LED	
	Display Colours	10 Bit	
	CIE1931 xy Cover Ratio vs ITU-R BT.2020	Yes	
	CIE1976 uv Cover Ratio vs ITU-R BT.2020	Yes	
	Hybrid Log Gamma (HLG)	Auto/HLG/PQ/SDR	
	HLG Standard HDR	Yes (8K input only)	
	BD Standard Perceptual Quantiser (PQ) HDR	Yes (inputs 1&7)	
	HDR10 (PQ)	Yes (inputs 1&7)	
	Brightness (cd/m^2)	800 (Peak Brightness 4.000)	
	Dynamic / Static Contrast	TBC / 3000.1	
	Response Time (grey to grey avg) ms	8	
	Built in Speakers (W)	2 x 10W + 15W Subwoofer 2.1	
	8K Input	1x HDMI2.1 (Spring 2019), 4x HDMI 2.0a	
	2K and 4K Input	4 x HDMI	
	Cabinet Colour	Black	
	Operating Voltage (ACV) / Frequency (Hz)	240/50	
	Power Consumption (W) (Operating MAX)	TBC	
	Heat Dissipation (BTU/h) MA	TBC	
Media Player	USB player for 8K still image	JPG/JPEG/BMP/PNG	
	USB player for 4K video	H256/H.264;30p	
Weights and Measures	Product Dimensions without Stand (W/H/D) mm	1810 x 1055 x 113 (without stand)	
	Product Weight without Stand (Kg)	TBC	
	Mounting position	Landscape	
	Mounting (VESA/Pitch mm)	TBC	

[1] Sharp 8C-B60A 8K professional camcorder available in Asia at time of release.

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		
		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
LCD Panel	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*2	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 The PN-HW861 is available now and all other models coming later 2019. *2 Brightness depends on input mode and other picture settings.

Specifications

Model		PN-HW551	PN-HW501	PN-HW431
Installation		Landscape / Portrait		
		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
LCD Panel	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*[2]	350cd/m^2		
	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] The PN-HW861 is available now and all other models coming later 2019. *[2] Brightness depends on input mode and other picture settings.

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 smart large format displays combines outstanding performance and flexibility. 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-HB851/HB751/HB651** is great for shopping centres or large corporate offices, while the **PN-HM851/HM751/ HM651** 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" Class	75" Class	65" Class
LCD Panel	LED Backlight	Direct		
	Native Resolution, Pixel	3840 x 2160		
	Max. Display Colour	10,7 billion		
	Colour Processing	10 Bit		
	Brightness in cdm²	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		
	RS232C Out 3,5mm mini Jack	1		
Android Board	SD Card Slot	1		
	USB Type A	3		
	LAN	1		
	System on Chip (SoC)	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

Specifications

Model		PN-HM851	PN-HM751	PN-HM651
Installation		Landscape / Portrait / Face-up		
		85" Class	75" Class	65" Class
LCD Panel	LED Backlight	Direct		
	Native Resolution, Pixel	3840 x 2160		
	Max. Display Colour	10,7 billion		
	Colour Processing	10 Bit		
	Brightness in cdm²	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		
	RS232C Out 3,5mm mini Jack	1		
Android Board	SD Card Slot	1		
	USB Type A	3		
	LAN	1		
	System on Chip (SoC)	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

PN-H801/H701
Sized for impact, styled for detail

The **PN-H801/H701** boasts an impressive level of image quality that allows it to display all manner of content, from detailed text to textured graphics. With four times the resolution of full-HD, the **PN-H801/H701** delivers all the detail, depth, and clarity that the content creator intended. The LED backlight supports a wide colour gamut for extended colour range. This combined with the panels advanced picture quality to deliver rich and vivid images for more natural looking visuals and images. Compared to a conventional large format display model, the **PN-H801/H701** has an approximately 20% larger sRGB colour gamut range (area ratio).

With a choice of landscape or portrait installation this UHD 4K display is perfect for retail, meeting rooms and control centres.

Key benefits | PN-H801/H701

- 80"/70" diagonal screen size
- 4K Ultra-HD, 3840 x 2160 with 60hz
- Wide gamut colour for next generation colour performance
- Integrated 4K USB media player
- Latest HDMI connectivity for 4K with 60hz
- Solid, stylish and slim bezel design
- 24/7 Operation
- Portrait and landscape installation

Specifications

Model	PN-H801	PN-H701
Installation	Landscape/Portrait	

LCD Panel		PN-H801	PN-H701
		80-inch-class (204.4 cm diagonal) TFT LCD	70-inch-class (176.6 cm diagonal) TFT LCD
	Max. Resolution	3,840 x 2,160 pixels	
	Max. Display Colours	1.06 billion colours	16.77 million colours
	Pixel Pitch (H x V)	0.464 x 0.464 mm	0.401 x 0.401 mm
	Brightness*1*2	440 cd/m2	
	Contrast Ratio	4,000 : 1	3,000 : 1
	Viewing Angle (H/V)	176°/176° (CR ≥10)	
	Active Screen Area (W x H)	1,781.76 x 1002.24 mm	1,538.9 x 865.6 mm
	Response Time	6 ms (grey to grey, avg.)	
	Backlight	LED, full array	LED, edge lit
Computer Input	Video	HDMI , Analogue RGB	
	Synchronisation**	Horizontal/vertical separation (TTL: positive/negative)	
	Plug & Play	VESA DDC2B	
	Input Terminals*3	HDMI x 4: (HDCP1.4 compatible: HDMI 1 – HDMI 3), (HDCP2.2 compatible: HDMI 4), (ARC compatible: HDMI 1), (MHL compatible: HDMI 4), Mini D-sub 15-pin x 1, RS-232C x 1*4*5, USB x 1 (photo, video, music)*6, 3.5 mm-diameter mini stereo jack x 2	
	Output Terminals*3	Digital audio output (optical) x 1, 3.5 mm-diameter mini stereo jack x 1	
Input/Output Terminals*3		LAN: 10Base-T/100Base-TX x 1	
Built-in Speakers		10 W + 10 W	
Internal Memory		400MB	
Mounting		VESA (4 points), 600 x 400 mm (23 5/8" x 15 3/4") pitch, M6 screw	VESA (4 points), 400 mm (15 3/4") pitch, M6 screw
Power Supply		100V – 240V AC, 50/60 Hz	
Power Consumption		490 W	270 W
Environmental Conditions	Operating Temperature	0°C to 40°C	
	Operating Humidity	20% to 80% RH (no condensation)	
Dimensions*7 (W x D x H) (display only)		1,816 x 114 x 1,045 mm	1,559 x 69 x 894 mm
Weight		54 kg	37 kg
Main Accessories		Remote control unit x 1, cable clamp x 4, cable clamp (insertion type) x 1, power cord x 1 (3-pin*7), DisplayPort1.2 to HDMI conversion cable x 1, LR-6 battery (AA size) x 2, CD-ROM x 1, setup manual x 1, power cord clamp x 1, USB flash drive cover x 1, vertical sticker (operation panel) x 1, horizontal sticker x 1, RS-232C conversion cable (3.5 mm-diameter mini stereo jack) x 1, USB extension cable 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. *2 When installing the monitor in the portrait orientation, and the internal temperature of the monitor rises excessively, the brightness of the backlight automatically decreases in order to prevent a further temperature rise. *3 Use a commercially available connection cable for PC and other video connections. *4 Requires the bundled RS-232C conversion cable. *5 Only for command control. *6 Supported media formats: JPEG for photos; MP4, M2TS, 3GP, and MOV for videos; and WAV, WMA, M4A, and MP3 for music. *7 Use a 3-pin compatible power outlet. ** Sync-on green and composite sync are not supported.

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 1500cd/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 UV^{2}A 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/m^2
	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

PN-V600A/PN-V601A/PN-V602A

For sensational signage on a big scale

Sharp's **PN-V600A/V601A/V602A** is the ideal choice for exciting, nearly seamless multi-monitor configurations. High-impact and impressively sized, this sleek 60" display brings a multitude of digital signage possibilities to public spaces, commercial establishments, transportation hubs, and corporate settings. In business presentations and videoconferences, the **PN-V600A/V601A/V602A** is a dynamic communicator.

For High Visual Impact and
Multi-Monitor Dynamic Video Walls

3 monitors	4 monitors	9 monitors	25 monitors
134 / 227	151 / 268	227 / 401	378 / 668
3 × 1	2 × 2	3 × 3	5 × 5 ... and more
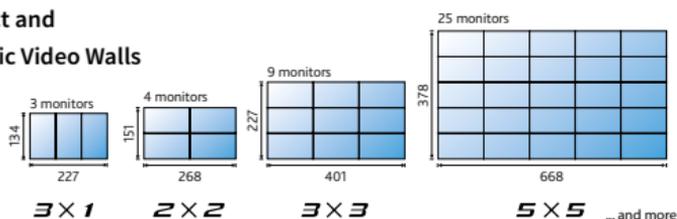
Units: cm (measurements are approximations that include the bezel width)

Key benefits | PN-V600A/V601A/V602A

- 60" (152 cm) diagonal screen size
- 1366 x 768 resolution
- Brightness : 450 cd/m^2 (PN-V600A), 700 cd/m^2 (PN-V601A), 1500 cd/m^2 (PN-V602A)
- Bezel only 4.1 and 2.4 mm (6.5 mm between 2 models)
- 24/7 50.000 hours life time
- Contrast Ratio : 4,000 :1 (PN-V600A / PN-V601A) / 5,000:1 (PN-V602A)
- 5 x 5 Multi-screen capability (enlargement) internal
- Module slot system
- UV^{2}A technology (PN-V600A / PN-V601A)

Specifications

Model		PN-V600A	PN-V601A	PN-V602A
Installation		Landscape/Portrait		
		60-inch widescreen (152.4 cm diagonal), TFT LCD		60-inch widescreen (152.4 cm diagonal), UV²A LCD
LCD Panel	Max. Resolution	1,366 x 768 pixels		
	Max. Display Colours	16.77 million colours		
	Pixel Pitch (H x V)	0.973 x 0.973 mm		
	Brightness*¹	450 cd/m²	700 cd/m²	1,500 cd/m²
	Contrast Ratio	4,000:1		1,000,000 : 1 (local dimming set to HIGH) 5,000 : 1 (without local dimming)
	Viewing Angle (H/V)	176°/176° (CR ≥10)		
	Active Screen Area (W x H)	1,328.8 x 747.1 mm		
	Response Time	6 ms (grey to grey, avg.)		
	Backlight	White LED, Full Array		
Computer Input	Video	Analogue RGB (0.7 Vp-p) [75], Digital (conforms to DVI 1.0 standards)		
	Synchronisation	Horizontal/vertical separation (TTL: positive/negative)		
	Plug & Play	VESA DDC2B		
	Power Management	VESA DPMS, DVI DMPM		
Video Colour System		NTSC (3.58 MHz, 4.43 MHz)*¹, PAL, PAL60, SECAM		
Input Terminals*²		Standard - PC analogue: Mini D-sub 15-pin x 1, HDMI (1080p compatible) x 1*², 3.5 mm-diameter mini stereo jack x 1, RS-232C: D-sub 9-pin x 1,Control Kit jack x 1		
		Via Optional PN-ZB02 Board - PC digital: DVI-D 24-pin (HDCP compatible) x 1, PC analogue: BNC x 1*³, Video: BNC x 1, S-Video x 1, Component video: BNC (Y, Cb/Pb, Cr/Pr) x 1*³, Audio: RCA pin (L/R) x 2		
Output Terminals*³		Standard - Audio: RCA pin (L/R) x 1, RS-232C: D-sub 9-pin x 1		
		Via Optional PN-ZB02 Board - PC digital: DVI-D 24-pin x 1, External speaker: 10W + 10W (6)		
Input/Output Terminals		Via Optional PN-ZB02 Board - LAN port (10Base-T/100Base-TX)		
Built-in Speakers		—		
Power Supply		100V – 240V AC, 50/60 Hz		
Power Consumption		310 W	480 W	510 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)		1,335.9 x 149.3 x 754.2 mm		
Weight		41 kg	44 kg	

*¹ Requires separately sold PN-ZB02 Interface Expansion Board. *² For both PC and AV components. *³ The analogue and component BNC terminals are switchable. Use the menu to select.

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 32 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-B and PN-M shipping from Q1-Q2 2018.

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
- UV²A 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 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/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 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" / 60" diagonal screen size
- 700 cd/m^2
- 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

Specifications

Model		PN-R706	PN-R606
Installation		Landscape / Portrait / Face-up	
LCD Panel		70 -inch widescreen (176.6 cm diagonal) UV²A LCD	60 -inch widescreen (152.5 cm diagonal) UV²A LCD
	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

* Not PN-R606/706.

PN-R556/R496/R426

The heavy duty range for high impact demanding professional signage

Sharp's **PN-R range of LFDs** are available in a variety of sizes: 42", 49"and 55". 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-E803/E703/E603

The slimline LCD displays that meet a diverse range of signage needs

These 70" and 60" Sharp displays combine full-HD image quality, stylishly thin profiles, and energy efficiency to create appealing professional signage solutions for a wide range of applications. With a sleek design, round-the-clock operation, and supported by landscape and portrait installation modes, these displays offer an amazing degree of flexibility. In hotel lobbies, conference rooms, retail spaces, and elsewhere, the **PN-E803/E703/E603** will grab and keep the attention of your target audience.

Key benefits | PN-E803/E703/E603

- 80" (203,2 cm) diagonal screen
- 70" (176.6 cm) diagonal screen size
- 60" (152.5 cm) diagonal screen size
- 1920 x 1080 resolution
- 470 cd/m^2 / 450 cd/m^2
- UV^{2}A technology
- Slim bezel design
- Contrast 5,000:1 / 4,000:1
- LED full array / LED, edge-lit
- 24/7 Operation
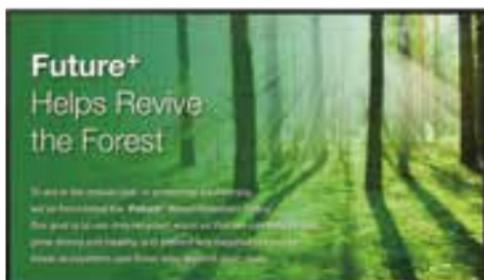
Specifications

Model		PN-E803	PN-E703	PN-E603
Installation		Landscape / Portrait		
		80 -inch widescreen (203.2 cm diagonal) UV²A LCD	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)	0.923 x 0.923 mm	0.802 x 0.802 mm	0.692 x 0.692 mm
	Brightness[*1]	470 cd/m²	450 cd/m²	
	Contrast Ratio[*2]	5,000 : 1	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	1,329.1 x 747.6 mm
	Response Time	4 ms (grey to grey, avg.)	6 ms (grey to grey, avg.)	
	Backlight	LED, full array	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[*3]		DisplayPort x 1, DVI-I x 1, Mini D-sub 15-pin x 1, HDMI x 2[*3], 3.5 mm-diameter mini stereo jack x 2, RS-232C x 1		
Output Terminals[*3]		DisplayPort x 1 (supports video signals only), DVI-D x 1, 3.5 mm-diameter mini stereo jack x 1, RS-232C x 1		
Input/Output Terminals		LAN port x 1		
Built-in Speakers		10 W + 10 W		
Power Supply		100V – 240V AC, 50/60 Hz		
Power Consumption		280 W	225 W	180 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)		1,850 x 96 x 1,072 mm	1,578 x 39.4 x 916 mm	1,378 x 39.4 x 794 mm
Weight		57 kg	43 kg	32 kg
Main Accessories		Power cord, remote control unit, battery (AA size) x 2, set-up manual, vertical sticker (logo), vertical sticker (operation panel)[*4] cable clamp, CD-ROM		

[*1] Brightness will depend on input mode and other picture settings. Brightness level will decrease over time. Due to the nature of the equipment, it is not possible to precisely maintain a constant level of brightness. [*2] Use a commercially available connection cable for PC and other video connections. [*3] For both PC and AV components.

PN-Y556/Y496/Y436/Y326

Easy to use signage displays that place you in control

Easy to use, great to look at and available in a range of sizes to suit all needs, from a small and compact 32" up to 55". The **PN-Y556/Y496/Y436/Y326** range of affordable 1920 x 1080 robust 24/7 displays offer 450 cd/m^2 from Sharp puts you in total control, with innovative new content management delivery tools. Proprietary SHARP Content Distributor software for plug and play signage solutions. This enables content to be easily transferred directly to the displays via a LAN connection.

Key benefits | PN-Y556/Y496/Y436/Y326

- Heavy duty Sharp display range with embedded USB player and secure SD Card slot
- 55" / 49" / 43" / 32" display sizes
- 450 cd/m^2 (PN-Y556 / Y496 / Y436), 400 cd/m^2 (PN-Y326) brightness
- 24/7 Operation
- 1920 x 1080 resolution
- HDMI + DVI (Daisy Chain) + VGA
- Proprietary SHARP Content Distributer software
- Fanless design
- Automatic default to USB player - the screen never goes blank
- Portrait, landscape format orientation and unique, face-up, face-down installation

Specifications

Model		PN-Y556	PN-Y496	PN-Y436	PN-Y326
		55-inch (138.8cm) diagonal] TFT LCD	49-inch (123.2cm) diagonal] TFT LCD	43-inch (107.98cm) diagonal] TFT LCD	32-inch (80.1cm) 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	0.364 x 0.364 mm
	Brightness (average)	450 cd/m^2			400 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	698.4 x 392.9cm
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			5 W + 5 W
USB Power Supply		5V, 2A (USB TYPE A connector)			
SD card slot		SD memory card (SD memory card/SDHC memory card)			
LAN terminal		10 BASE-T/100 BASE-TX			
Power Consumption (Input signal waiting mode / standby mode*²)		105W	87W	76W	69W
Power Requirement		AC 100 - 240 V, 50/60 Hz			
Environmental Conditions	Operating Temperature*¹	32°F to 104°F (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	724.5 x 56 x 424cm
Weight		18 kg	15 kg	10.5 kg	6 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 32°F (0°C) and 104°F (30°C). *² When POWER SAVE MODE is set to OFF. When POWER SAVE MODE is set to ON: 0.5 W.

PN-Q901E/Q801E/Q701E/Q601E

Affordable large commercial displays perfect for signage and meeting Rooms

Sharp's **PN-Q range of displays** includes an ultra-large 90" screen and delivers affordable and high impact large signage. With its elegantly slim profile, this professional LCD display range has been designed to fulfil professional signage, corporate reception, and office meeting room applications.

Key benefits | PN-Q901E/Q801E/Q701E/Q601E

- 90", 80", 70", 60" diagonal screen size
- 350 cd/m^2
- 1920 x 1080 resolution
- UV^{2}A technology
- Contrast 5,000:1
- LED, edge lit
- 16/7 operation
- 3-year warranty
- Integrated USB media player

Specifications

Model		PN-Q901E	PN-Q801E	PN-Q701E	PN-Q601E
Installation		Landscape			
		90" Class TFT LCD	80" Class TFT LCD	70" Class TFT LCD	60" Class TFT LCD
	Max. Resolution	1,920 x 1,080 pixels			
	Max. Display Colours	1.07 billion colours			
	Pixel Pitch (H x V)	1.038 x 1.038 mm	0.9225 x 0.9225 mm	0.8015 x 0.8015 mm	0.693 x 0.693 mm
	Brightness*[1]	350 cd/m²			
LCD Panel	Contrast Ratio	5,000 : 1			
	Dynamic Contrast Ratio	4,000,000 : 1			
	Viewing Angle (H/V)	176°/176° (CR ≥10)			
	Active Screen Area (W x H)	78 $^{15}/_{32}$" x 44 $^9/_{64}$"	69 $^{47}/_{64}$" x 39 $^{15}/_{64}$"	60.6" x 34.0"	52 $^{25}/_{64}$" x 34 $^{15}/_{32}$"
	Response Time	4 ms (grey to grey, avg.)			
	Backlight	LED, full array	LED, full array	LED, edge lit	LED, edge lit
Computer Input	Video	HDMI, Analogue RGB			
	Synchronisation	Horizontal/vertical separation (TTL: positive/negative)			
	Plug & Play	VESA DDC2B			
Video Colour System		NTSC-M/PAL-N/PAL-M			
Input Terminals*[2]		HDMI x 3, Mini D-sub 15-pin x 1, Component Video RCA (Y, Cb/Pb, Cr/Pr) x 1, Composite Video RCA pin x 2, RCA pin (L/R) x 2, 3.5 mm-diameter mini stereo jack x 1, RS-232C x 1, USB x 1			
Output Terminals*[2]		Audio: RCA pin (L/R) x 1, Digital audio output (optical) x 1			
Input/Output Terminals*[2]		Ethernet RJ-45 x 1			
Built-in Speakers		10W + 10W			
Power Supply		110 – 240V AC, 50/60Hz			
Power Consumption		290W	300W	180W	150 W
Operating Temperature		0°C to 40°C			
Dimensions (W x D x H) (display only)		2,054 x 116 x 1,211 mm	1,816 x 114 x 1,055 mm	1,563 x 87 x 908 mm	1,355 x 86 x 792 mm
Weight		64 kg	50 kg	33.5 kg	24 kg

Accessories

Contents

Accessories

Easy to use solutions - Sharp's Mini-OPS

Sharp is proud to introduce 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 3 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

FRONT VIEW — 34.00" (864mm), 60.1" (1526mm)

SIDE VIEW — 68.54" (1741mm)

ADAPTOR BRACKET — 1.25" (32mm), 0.75" (19mm), 0.33" (8mm), 16.89" (429mm)
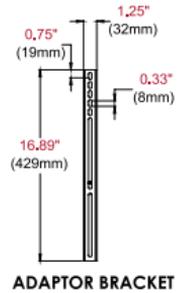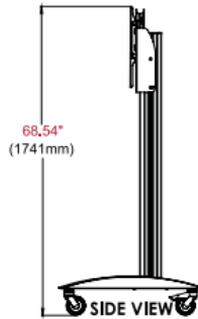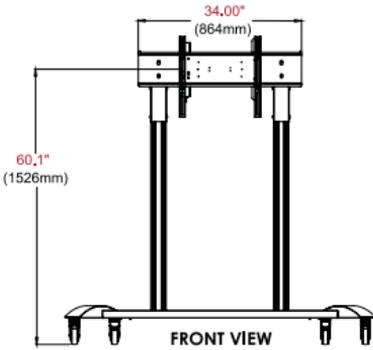
Wireless USB adapter - PN-ZW01

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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