Professional and Interactive Display Guide

SHARP

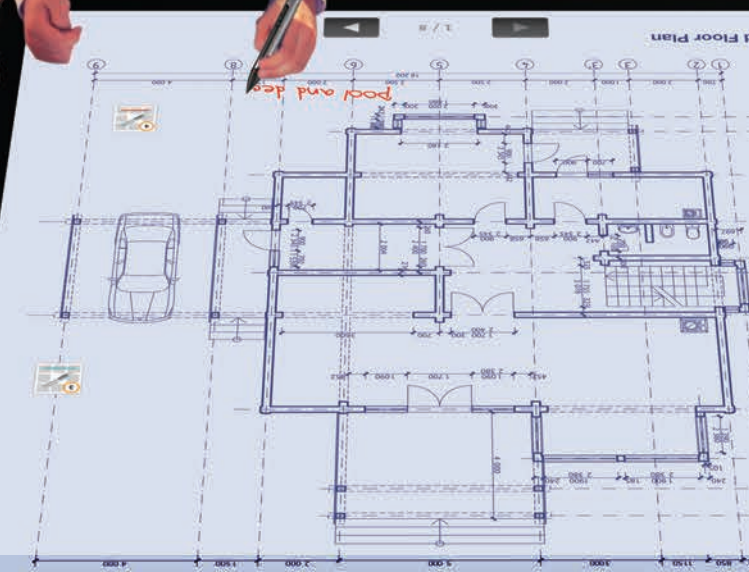Be Original.

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

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BIG PAD

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BIG PAD

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

Pen-on-Paper

a collaborative working environment. The range includes affordable versions for campus environments and small and medium-sized offices and extends to the award-winning PN-80TC3A and PN-70TH5 with the smoothest projected capacitive (P-CAP) touch technology for transformative collaborative meetings.

PN-70TH5

Sharp's BIG PAD **PN-70TH5** is the ultimate premium 4K interactive display for corporate office meetings, architectural construction, engineering design, medical review and demanding specialized collaborative working environments. Building on Sharp's unique pioneering interactive display legacy, the BIG PAD **PN-70TH5** represents 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 (P-CAP) touch technology, Sharp's new flagship 4K BIG PAD interactive display is once again setting the industry standard for collaborative teamwork.

Key Benefits | PN-70TH5

- 4K BIG PAD for demanding corporate, Office, Education and specialised applications
- 70" (176,6cm) Size with 3840 X 2160 pixels
- Pen-On-Paper user experience with highly responsive P-CAP 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-70TH5 - NEW		
Installation	Landscape/Portrait		
LCD Panel		70-inch widescreen (176.6 cm diagonal) UV^{2}A*[1] LCD	
	Max. Resolution	3,840 x 2,160 pixels	
	Max. Display Colours (approx.)	1.06 billion colours	
	Pixel Pitch (H x V)	0.401 x 0.401 mm	
	Brightness*[2]	300 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 865.6 mm	
	Response Time	6 ms (grey to grey, avg.)	
	Backlight	LED, edge lit	
Touchscreen	Touch Technology	Projected Capacitive (P-CAP)	
	PC Connection Port	USB 2.0 (type B) x 2	
	Power Supply	Supplied from main unit	
	Multi-Touch	30 points	
	Protection Glass	Thickness: Approx. 1.9 mm*[3] Shock resistance: 130 cm*[4]	
Touch Pen	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 (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 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		
Speaker Output	Built-in	10 W + 10 W	
Mounting	VESA (4 points), 600 x 400 mm pitch, M6 screw		
Power Supply	100V – 240V AC, 50/60 Hz		
Power Consumption	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) (approx.) (display only)	1,612.5 x 92.5 x 941.4 mm		
Weight (approx.)	57 kg		
Main Accessories	AC power cord, remote control unit, battery (AA size) x 2, set-up manual, blank sticker, cable clamps x 4, camera mount, USB cable, USB extension cable, eraser, pen tray, touch pen (with function button), pen adaptor, touch pen battery (AAA size), SHARP Display Connect* software CD-ROM, RS-232C conversion cable		

*[1]UV^{2}A 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-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 (P-CAP) 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 P-CAP 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 - NEW
Installation		Landscape/Portrait
LCD Panel		80-inch widescreen (203.2 cm diagonal) UV^{2}A*^{1} LCD
	Max. Resolution	1,920 x 1,080 pixels
	Max. Display Colours (approx.)	1.06 billion colours
	Pixel Pitch (H x V)	0.923 x 0.923 mm
	Brightness*^{2}	300 cd/m^2
	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 (P-CAP)
	PC Connection Port	USB 2.0 (type B) x 2
	Power Supply	Supplied from main unit
	Multi-Touch	10 points
	Protection Glass	Thickness: Approx. 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) (approx.) (display only)		1,850 x 96 x 1,072 mm
Weight (approx.)		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}UV^{2}A 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/PN-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 - NEW**	**PN-60TW3A - NEW**
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 (approx.)	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: Approx. 3.4 mm*³ Shock resistance: 130 cm*⁴	Thickness: Approx. 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) (approx.) (display only)		1,647 x 94 x 1,010 mm	1,437 x 94 x 890 mm
Weight (approx.)		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	

*¹UV²A stands for Ultraviolet-induced Multi-domain Vertical Alignment, a photo-alignment technology that ensures uniform alignment of liquid crystal molecules. *²Brightness 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. *³Including AG film on the front and AR film on the back. *⁴Approximate distance at which the glass panel can withstand the impact of a 500-gram iron ball dropped on its centre. *⁵D-sub input terminal only. *⁶Use a commercially available connection cable for PC and other video connections. *⁷Analogue 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. *⁸Requires 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 in dots
- 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 (approx.)	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) (approx.) (display only)		1,647 x 94 x 1,010 mm	1,437 x 94 x 890 mm
Weight (approx.)		61 kg	46 kg

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

PN-80SC5/PN-70SC5/PN-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/ PN-70SC5/PN-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/PN-70SC5/PN-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 (approx.)	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: Approx. 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, HDMITM 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) (approx.) (display only)		1,882 x 127 x 1,139 mm	1,635 x 96 x 998 mm	1,422 x 96 x 877
Weight (approx.)		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		

*¹UV²A stands for Ultraviolet-induced Multi-domain Vertical Alignment, a photo-alignment technology that ensures uniform alignment of liquid crystal molecules. *²Maximum 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. *³Brightness 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. *⁴Excluding the touch sensor part around the LCD panel. *⁵Including anti-glare film on the front. *⁶Approximate distance at which the glass panel can withstand the impact of a 500-gram iron ball dropped on its centre. *⁷Use a commercially available connection cable for PC and other video connections. *⁸ Video and component video are switchable; use the menu to select. *⁹The AC power cord is an inlet type. The cable is bundled (3 pins). *¹⁰Please 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-inch 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 (approx.)	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: Approx. 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) (approx.) (display only)		1,521 x 99 x 952 mm (59 $^7/_8$" x 3 $^7/_8$" x 37 $^1/_2$")
Weight (approx.)		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/PN-40TC1
The BIG PAD for Huddle Spaces

Sharp's BIG PAD series makes meetings and communications smoother and more productive. Reinforcing the line-up are the **PN-50TC1/PN-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 / PN-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 P-CAP 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 - NEW	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 (approx.)	16.77 million colours	
	Pixel Pitch (H x V)	0.571 x 0.571 mm	0.457 x 0.449 mm
	Brightness*[1]	400 cd/m²	300 cd/m²
	Contrast Ratio	5,000 : 1	
	Viewing Angle (H/V)	178°/178° (CR ≥10)	
	Active Screen Area (W x H)	1,095.8 x 616.4 mm (43 $^1/_8$" x 24 $^1/_4$")	878.1 x 485.3 mm (34 $^9/_{16}$" x 19 $^1/_8$")
	Response Time	9.5 ms (grey to grey, avg.)	
	Backlight	LED, edge lit	
Touchscreen	Touch Technology	Capacitive touch	
	PC Connection Port	USB (2.0 compliant) (Type B) x 1	
	Power Supply	Supplied from main unit	
	Multi-Touch	10 points	
	Protection Glass	Thickness: approx. 3.2 mm*[2] Shock resistance: 130 cm*[3]	Thickness: approx. 2.5 mm*[2] Shock resistance: 130 cm*[3]
Computer Input	Video	Analogue RGB (0.7 Vp-p) [75Ω], HDMI, DisplayPort	
	Synchronisation	Horizontal/vertical separation (TTL: positive/negative)	
	Plug & Play	VESA DDC2B	
	Power Management	VESA DPMS	
Input Terminals*[4]		PC analogue: Mini D-sub 15-pin x 1, HDMI x 2 (HDCP and 1080p compatible, PC/AV signal compatible), DisplayPort (HDCP compatible, PC signal compatible) x 1, 3.5 mm-diameter mini stereo jack x 1, RS-232C x 1	
Output Terminals*[4]		3.5 mm-diameter mini stereo jack x 1	
Input/Output Terminals*[4]		LAN port (10Base-T/100Base-TX) x 1	
USB Hub Function		USB 2.0 (Type A) x 2	
Expansion Slot		12 V, 2.5 A (power supplied when expanding the functions with an optional board)	
Speaker Output		10 W + 10 W	
Mounting		VESA (4 points), 400 x 200mm, M6 screw	VESA (4 points), 200 x 200mm, M6 screw
Power Supply		100V – 240V AC, 50/60 Hz*[5]	
Power Consumption		105 W	89W
Environmental Conditions	Operating Temperature*[6]	5 ˚C to 35 ˚C	
	Operating Humidity	20% to 80% RH (no condensation)	
Dimensions (W x D x H) (approx.) (display only)		1,151 x 68.5 x 686 mm	939 x 65 x 546 mm
Weight (approx.)		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.

Advanced multi-board software

Multi-Touch, Multi-User, Multi-Display experience with BIG PAD PN-80TC3A and PN-70TH5

Sharp's **Advanced Multi-Board** driver solution allows an existing standard Multi-Board setup of either two or three BIG PAD's 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 (P-CAP) 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	

4K Ultra-HD

Contents

4K Ultra-HD

Sharp's 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-H801

Sized for Impact, Styled for Detail Sharp's 4K PN-H801

The **PN-H801** 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** 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** 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

- 80" 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
Installation	Landscape/Portrait

LCD Panel		
		80-inch-class (204.4 cm diagonal) TFT LCD
	Max. Resolution	3,840 x 2,160 pixels
	Max. Display Colours (approx.)	1.06 billion colours
	Pixel Pitch (H x V)	0.464 x 0.464 mm
	Brightness*1*2	440 cd/m²
	Contrast Ratio	4,000 : 1
	Viewing Angle (H/V)	176°/176° (CR ≥10)
	Active Screen Area (W x H)	1,781.76 x 1002.24 mm (70 1/8" x 39 7/16")
	Response Time	6 ms (grey to grey, avg.)
	Backlight	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 1
Output Terminals*3		Digital audio output (optical) x 1, 3.5 mm-diameter mini stereo jack x 1
Input/Output Terminals		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
Power Supply		100V – 240V AC, 50/60 Hz
Power Consumption		490 W
Environmental Conditions	Operating Temperature	0°C to 40°C
	Operating Humidity	20% to 80% RH (no condensation)
Dimensions (W x D x H) (approx.) (display only)		1,816 x 114 x 1,045 mm
Weight (approx.)		54.0 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

*1Brightness 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. *2When 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. *3Use a commercially available connection cable for PC and other video connections. *4Requires the bundled RS-232C conversion cable. *5Only for command control. *6Supported media formats: JPEG for photos; MP4, M2TS, 3GP, and MOV for videos; and WAV, WMA, M4A, and MP3 for music. *7Use a 3-pin compatible power outlet. **Sync-on green and composite sync are not supported.

Video Wall

Contents

Video Wall

The Sharp's 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 in dots
- Signal interfaces: Display Port 1.2 (in + out) - 2 x HDMI
- DisplayPort in/out with 4K signal loop through
- HDBaseT Mini OPS option
- "Out of the box" calibrated with Sharp advanced UCCT technology
- Sharp recalibration software for fast colour maintenance of the video wall using an FLIR Camera
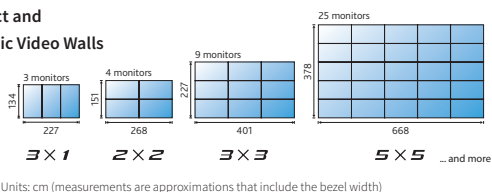
Specifications

Model		PN-V701
Installation		Landscape/Portrait
LCD Panel		70-inch widescreen (176.6cm diagonal) LCD with UV²A technology
	Max. Resolution	1,920 × 1,080 pixels
	Max. Display Colours (approx.)	1.06 billion colours
	Pixel Pitch (H x V)	0.401 x 0.401 mm
	Brightness*[1]	700 cd/m²
	Contrast Ratio	4,000 : 1
	Viewing Angle (H/V)	176°/176° (CR ≥10)
	Active Screen Area (W x H)	1,538.9 x 865.6mm
	Response Time	8 ms (grey to grey, avg.)
	Backlight	LED, full array
Input	DisplayPort	YES Ver.1.2 (1)
	DVI-D	YES (1)
	PC Analog (Mini D-sub 15-pin)	YES (1)(RGB/Component/Video)
	Component Video	YES (Via Mini D-sub 15 pin)
	HDMI	YES (2) - HDCP compatible
	RS-232C	YES (1)
	Audio (3.5 stereo mini jack)	YES (1)
	Control Kit Jack	YES (1)
Output	DisplayPort	YES Ver.1.2 (1)
	RS-232C	YES (1)
	Audio (3.5 stereo mini jack)	YES (1)
Input/Output	LAN	10BASE-T/100BASE-TX (×1)
Power Consumption		380W
Environmental Conditions	Operating Temperature	0°C to 40°C
	Operating Humidity	20% to 80% RH (no condensation)
Dimensions (W x D x H) (approx.) (display only)		1,543.7 x 122 x 870.4 mm
Weight (approx.)		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-inch monitor 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

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 dots 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), UV^{2}A LCD
LCD Panel	Max. Resolution	1,366 x 768 pixels		
	Max. Display Colours (approx.)	16.77 million colours		
	Pixel Pitch (H x V)	0.973 x 0.973 mm		
	Brightness*[1]	450 cd/m^2	700 cd/m^2	1,500 cd/m^2
	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) (approx.) (display only)		1,335.9 x 149.3 x 754.2 mm		
Weight (approx.)		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 Display

Contents

Professional Display

The Sharp portfolio of professional display products has 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

The innovative PN-B and PN-M series of smart large format displays give you everything you need to create eye-catching visual messaging in almost any environment, from commercial office buildings and retail stores to public spaces and transport hubs.

This new range of smart large format displays provides 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 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
		NEW		
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 (approx.)	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 (approx.)	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 (approx.)	22kg	15kg	22kg	15kg
Main Accessories	AC power cord, remote control unit, battery (AAA size x 2), CD-ROM, set-up manual, cable clamp x 2, USB flash drive/ SD card cover, USB flash drive/SD card cover screw, logo sticker			

PN-R903A

Breath-Taking Quality and Superb Brightness Bring Images to Life On this Ultra Large 90" LCD

Sharp's **PN-R903A** boasts an ultra-large 90-inch 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 in dots
- UV^{2}A technology
- Contrast 4.000:1
- LED, full array
- 24/7 Operation

Specifications

Model		PN-R903A
Installation		Landscape/Portrait
LCD Panel		90-inch widescreen (228.7 cm diagonal) UV²A LCD
	Max. Resolution	1,920 x 1,080 pixels
	Max. Display Colours (approx.)	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) (approx.) (display only)		2,055 x 122 x 1,197 mm
Weight (approx.)		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** series 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 in dots
- 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	
		70 -inch widescreen (176.6 cm diagonal) UV^{2}A LCD	60 -inch widescreen (152.5 cm diagonal) UV^{2}A LCD
LCD Panel	Max. Resolution	1,920 x 1,080 pixels	
	Max. Display Colours (approx.)	1.06 billion colours	
	Pixel Pitch (H x V)	0.802 x 0.802 mm	0.692 x 0.692 mm
	Brightness	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 865.6 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) (approx.) (display only)		1,578 x 39.4 x 916 mm	1,378 x 39.4 x 794 mm
Weight (approx.)		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 series 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 in dots
- 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		
		55-inch widescreen (138.78cm diagonal) TFT LCD	49-inch widescreen (123.20cm diagonal) TFT LCD	42-inch widescreen (106.47cm diagonal) TFT LCD
LCD Panel	Max. Resolution	1,920 x 1,080 pixels		
	Max. Display Colours (approx.)	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) (approx.) (display only)		1,231 x 57 x 702 mm	1,095 x 57 x 626 mm	949 x 57 x 543.5 mm
Weight (approx.)		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

Designed for Impact – Sized for Flexibility

Sharp's large format **PN-E803** is the perfect and elegant high-performance monitor for a diverse range of retail, office and public space applications. With a design philosophy allowing for demanding 24/7 operation, the **PN-E803** represents Sharp's latest innovative insight and unparalleled experience in providing optimised and dedicated information display solutions.

The **PN-E803** offers a slim bezel and shallow cabinet depth thanks to its state-of-art LED backlight technology allowing for the perfect landscape or portrait installation. Packed with Sharp's premium UV^{2}A LCD technology – the **PN-E803** offers the brightest whites and deepest blacks with vivid colours for an outstanding image quality perfect for retail signage, office receptions and public spaces.

Key Benefits | PN-E803

- 80" (203,2 cm) diagonal screen
- 1920 x 1080 pixel resolution
- Attractive slim bezel and cabinet for eye-catching display elegance
- Energy efficient LED backlight with class leading UV^{2}A technology
- High contrast ratio 5,000:1
- 24/7 Operation, built-in temperate regulation
- Latest DisplayPort, HDMI and DVI connectivity

Specifications

Model	PN-E803
Installation	Landscape/Portrait
LCD Panel	80-inch widescreen (203.2 cm diagonal) UV²A LCD
	Max. Resolution — 1,920 x 1,080 pixels
	Max. Display Colours (approx.) — 1.06 billion colours
	Pixel Pitch (H x V) — 0.923 x 0.923 mm
	Brightness*¹ — 470 cd/m²
	Contrast Ratio*² — 5,000 : 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, full array
Computer Input	Video — Analogue RGB (0.7 Vp-p) [75], Digital (conforms to DVI 1.0 standards), DisplayPort x 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*³	LAN port x 1
Built-in Speakers	10 W + 10 W
Power Supply	100V – 240V AC, 50/60 Hz
Power Consumption	280 W
Environmental Conditions	Operating Temperature — 0°C to 40°C
	Operating Humidity — 20% to 80% RH (no condensation)
Dimensions (W x D x H) (approx.) (display only)	1,850 x 96 x 1,072 mm
Weight (approx.)	57 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

*¹Brightness 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. *²Use a commercially available connection cable for PC and other video connections. *³For both PC and AV components. *⁴For PN-E803 only.
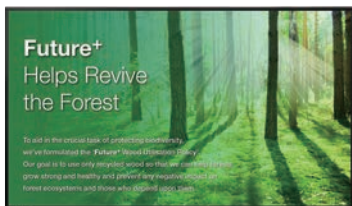
PN-E703/E603

The Slimline LCD Displays that meet a Diverse Range of Signage Needs

These 70-inch and 60-inch Sharp monitors 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-E703/E603** will grab and keep the attention of your target audience.

Key Benefits | PN-E703/E603

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

Specifications

Model		PN-E703	PN-E603
Installation		Landscape / Portrait	
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 (approx.)	1.06 billion colours	
	Pixel Pitch (H x V)	0.802 x 0.802 mm	0.692 x 0.692 mm
	Brightness*[1]	450 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*[2]		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		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) (approx.) (display only)		1,578 x 39.4 x 916 mm	1,378 x 39.4 x 794 mm
Weight (approx.)		43 kg	32 kg

*[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-A601
For Ultra-Bright Standalone Applications

For compelling digital signage, the **PN-A601** comes highly recommended. This 60-inch professional LCD monitor offers ultra-high brightness of 2,000 cd/m^2 for superb visibility-even in brightly lit indoor settings. The PN-A601 also offers a choice of landscape or portrait installation, allowing customers to select the mode that best suits their display content and application.

Key Benefits | PN-A601

- 60" (152 cm) diagonal screen size
- 1920 x 1080 resolution in dots
- 2000 cd/m² and local dimming
- Bezel only 19,8 mm
- 24/7 50.000 hours life time max.
- 5,000:1 high contrast ratio
- 5 x 5 multi-screen capability (enlargement)
- Module slot system

Note: The PN-A601 is intended for use in indoor environments. If the monitor is to be installed in a location exposed to excessive direct sunlight such as a window front, consult your installer to determine if additional measures to reduce ultraviolet and infrared radiation and ambient temperature are required.

Specifications

Model	PN-A601
Installation	Landscape/Portrait
	60-inch widescreen (152.5 cm diagonal), UV²A LCD

LCD Panel		
	Max. Resolution	1,920 x 1,080 pixels
	Max. Display Colours (approx.)	1.06 billion colours
	Pixel Pitch (H x V)	0.692 x 0.692 mm
	Brightness*[1]	2,000 cd/m²
	Contrast Ratio	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)	1,329.1 x 747.6 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) 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)*[1] / PAL / PAL60 / SECAM
Input Terminals*[2]		Standard - PC analogue: Mini D-sub 15-pin x 1*[2], HDMI (1080p compatible) x 1*[3], 3.5 mm-diameter mini stereo jack x 1, Video*[2][4], Component video*[2][4], RS-232C: D-sub 9-pin x 1, Control Kit jack x 1
		Via Optional PN-ZB01 Board - PC digital: DVI-D 24-pin (HDCP compatible) x 1, PC analogue: BNC x 1*[5][6][7], Video: BNC x 1*[4], S-Video x 1, Component video: BNC (Y, Cb/Pb, Cr/Pr) x 1*[4][5], 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
		With Optional PN-ZB01- PC digital: DVI-D 24-pin x 1, External speakers: 7W + 7W (6)
Input/Output Terminals		Via Optional PN-ZB01 Board - LAN port (10Base-T/100Base-TX)
Built-in Speakers		—
Power Supply		100V – 240V AC, 50/60 Hz
Power Consumption		620 W
Environmental Conditions	Operating Temperature	0°C to 40°C
	Operating Humidity	20% to 80% RH (no condensation)
Dimensions (W x D x H) (approx.) (display only)		1,374 x 147 x 793 mm (Display section only, not including protrusions)
Weight (approx.)		45 kg

*[1]Requires separately sold PN-ZB01 Interface Expansion Board. *[2]The mini D-sub 15-pin terminal can be used for PC analogue, video, or component video, all of which are selectable from the menu. When used with a video or component video source, a commercially available conversion cable is required. *[3]For both PC and AV components. *[4]When the PN-A601 is equipped with the optional PN-ZB01 board, either the LCD monitor's standard-equipped video and component terminals or the PN-ZB01's video and component terminals can be selected for use from the menu. *[5]The analogue and component BNC terminals are switchable. Use the menu to select. *[6]For the proper display of 1,920 x 1,080 images, a separately sold graphics board with appropriate specifications is required. Consult your Sharp representative for more information. *[7]Does not support plug & play.

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 in dots
- 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 (approx.)	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/m²			400 cd/m²
	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) (approx.) (display only)		1233 x 46 x 710cm	1097 x 46 x 634cm	965 x 46 x 559cm	724.5 x 56 x 424cm
Weight (approx.)		18 kg	15 kg	10.5 kg	6 kg

*¹Temperature 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). *²When 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-inch screen and delivers affordable and high impact large signage. With its elegantly slim profile, this professional LCD monitor 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 in dots
- 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 (approx.)	1.07 billion colours			
	Pixel Pitch (H x V)	1.038 x 1.038 mm	0.9225 x 0.9225 mm	0.693 x 0.693 mm	0.8015 x 0.8015 mm
	Brightness*[1]	350 cd/m^2			
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"	52 25/64" x 34 15/32"	60.6" x 34.0"
	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	150W	180 W
Operating Temperature		0°C to 40°C			
Dimensions (W x D x H) (approx.) (display only)		2,054 x 116 x 1,211 mm	1,816 x 114 x 1,055 mm	1,355 x 86 x 792 mm	1,563 x 87 x 908 mm
Weight (approx.)		64 kg	50 kg	24 kg	33.5 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 series, 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 Flat Panel 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 inches to 90 inches
- Includes all necessary wall and display attachment hardware
- Supports VESA mounting 200mm, 400mm and 600mm
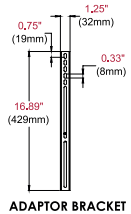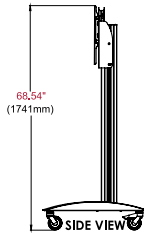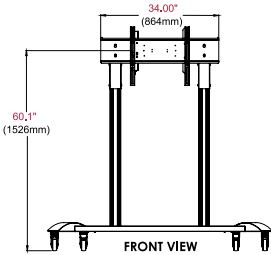- Low-profile design holds display only 30mm

Specifications

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

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

Wireless USB adapter - PN-ZW01

Plugs discreetly in the rear display cabinet

The **PN-ZW01** wireless USB module has been exclusively developed for Sharp's smart large format display line-ups PN-B and PN-M Series. 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 series
- Easy, fast, "Plug & Go" installation
- Reliable and long-life performance with all wireless networking benefits
- Supports wireless content distribution
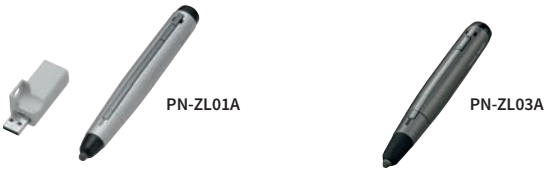- Support wireless monitor control and management

PN-ZW01

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

With powerful and ergonomic performance, the **PN-ZLxxx** series 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 (P-CAP) 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 P-CAP and Infrared Multi-touch technology
• Optimal performance with Sharp Pen software

PN-ZL01A

PN-ZL03A

Specifications

Model	PN-ZL06	PN-ZL03A	NEW 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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