SHARP

Be Original.

PN-85TH1
PN-75TH1
PN-65TH1

TOUCHSCREEN LCD MONITOR

4K LCD Panel with Built-in Controller Sets a New Standard in Functionality

BIG PAD

4K
3840 × 2160 Pixels

The PN-85TH1/75TH1/65TH1 is made for show and tell in the digital age. Whatever screen size you choose—85, 75, or 65 inches—you get pristine 4K Ultra-HD resolution. With a pre-installed controller and built-in whiteboard and wireless functionality, it's always ready for a quick meeting. The touchscreen supports up to 20 touch points at a time. You can use either a finger or the bundled touch pen, which gives a Pen-on-Paper writing experience. Your group collaborations just got more seamless and intuitive.

Practical Office Technologies

Cutting-Edge Panel Technology

Supporting 4K Ultra-HD (3,840 × 2,160-pixel) resolution, the LCD panel renders all the texture and detail of images and small text. From architecture to engineering to graphic arts, this monitor excels in demanding professional settings. The panel boasts new optical technology that uses advanced opto-mechanics and signal processing. It differentiates finger and pen input, so you can write and draw on the screen with intuitive ease. An anti-glare film minimises fingerprint soiling and reduces reflections. Even in a brightly lit room, onscreen content is easy to read.

Wireless Connectivity

Wireless LAN and Bluetooth® compatibility allow wire-free connection to multiple devices—including smartphones, tablets, and computers*. No need for tangled wires or conversion adapters. Each device can project images wirelessly to the monitor. You can then capture the wirelessly projected screen and freely add annotations to it using a touch pen.

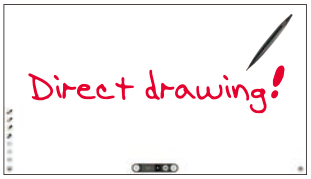
*Compatible with Windows® and Android™ operating systems

Built-in Controller with IWB Launcher

The PN-85TH1/75TH1/65TH1 has a built-in controller with a new IWB Launcher that makes it easy to operate this all-in-one interactive whiteboard. You don't even need to hook up a dedicated PC. When you start up the main unit, the IWB Launcher is displayed automatically. Simply touch the icons on the desktop for instant access to the features you want to use.

Direct Drawing

Switch to Direct Drawing to use the LCD monitor like a regular whiteboard. Even for first-time users, this simple write-and-erase function is a breeze to operate. You can also save screen captures as PDF files, either on internal storage or on an external storage device.



Simultaneous Writing

The LCD panel recognises up to 20 touch points. Up to four people* at a time can use a finger or touch pen to add their input when inspiration strikes. Meetings, lessons, and brainstorming sessions will come alive.

* With Direct Drawing, only one person at a time can write.

Note: When you use Sharp applications on the built-in controller—including IWB Launcher, Direct Drawing, and Wireless Display—content is displayed at full-HD (1,920 × 1,080-pixel) resolution.

Enhanced Usability

Pen-on-Paper Experience

When the tip of the touch pen glides across the screen, it feels just like a pen on paper. No skips or delays. Instead, you get a smooth and responsive digital ink experience. Whether you choose a 2 mm or a 4 mm tip, the easy-grip bundled touch pen gives you a comfortable writing feel. And thanks to the pen's angular profile, it won't roll away when you put it on a table.

Touch pen (bundled)

User-Friendly SHARP Pen Software

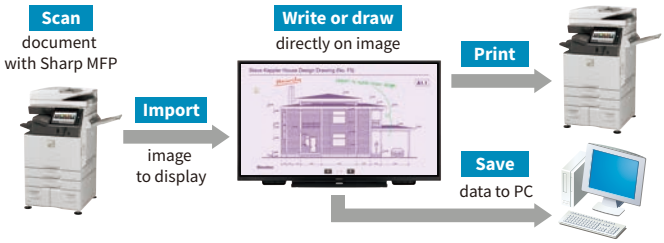
The easy-to-launch SHARP Pen Software interface has a menu with smartly arranged icons. These give you easy access to pen settings and other useful functions. Further handy functions* include access to cloud storage, an e-mail address book, sticky notes, and bookmarks.

* Availability varies by country/region. For details, please consult your local authorised Sharp dealer or representative.

Note: Requires Windows PC .

MFP Connectivity

Scanned documents can be imported directly to SHARP Pen Software from a compatible Sharp MFP. Onscreen image data—including written notes—can be sent to a PC for storage or to an MFP for printing.



Versatile Installation

The PN-85TH1/75TH1/65TH1 is designed to match a diverse range of installation needs. It can be installed in either a landscape or a portrait orientation. With a landscape installation, it can be tilted backwards at 45 degrees or between 0 and 20 degrees*.

* There are restrictions on the tiltable angles and other installation conditions. For details, please consult with your local authorised Sharp dealer or representative.

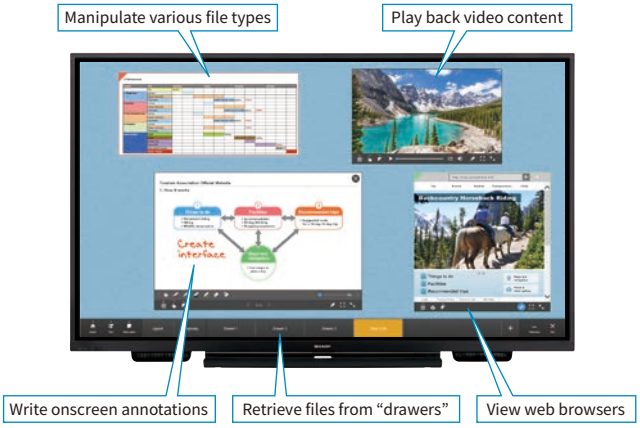
Quad-Screen Display

By connecting four PCs to the monitor, you can simultaneously display four screens at full-HD. You can easily switch between single-screen and quad-screen modes.

Note: Requires video cables.

SHARP Touch Viewing Software

This touch-operated onscreen user interface lets you easily manipulate different types of files, including Microsoft® Office applications, videos, and web pages. Files are displayed onscreen as "sheets", which can be stored in onscreen virtual "drawers". This convenient software adds a fresh touch to business meetings, in-store installations, and more.



SHARP Display Connect

This software supports multifaceted wireless communication. Onscreen content, including handwritten notes, can be shared simultaneously with up to 50 devices. And devices connected to the monitor can exchange files between themselves.

Note: Available via the downloader on the bundled CD-ROM.

4K Interactive Signage

Because it handles the demands of 16/7 operation, the PN-85TH1/75TH1/65TH1 brings reliable daily performance to retail, office, and many other locations.

<System Requirements>

Connected Equipment	
Hardware	PC/AT compatible machine with USB 2.0 port (CD-ROM drive required for installation)
OS	Windows® 8.1 (32-bit/64-bit), Windows® 10 (32-bit/64-bit) macOS v10.13, macOS v10.14, Google Chrome™ OS v59 or later
Supplied Software (Windows®)	
CPU	Intel® Core™ i5-6360U or higher Intel® Core™ i7-6650U or higher recommended
Memory	4 GB or more
Hard disk	5 GB or more free space (additional space required for saving data)

To use the touch panel, connect the bundled USB cable to the computer. The touch panel operates with the standard driver of each OS. On the Mac, operation is only possible in single-touch mode.

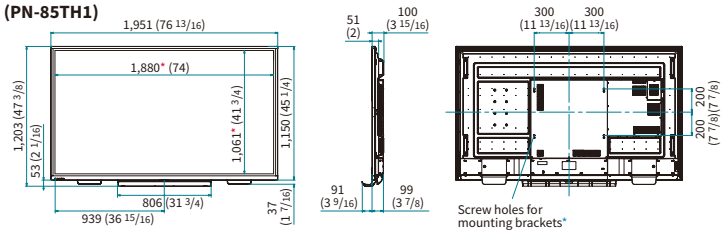
Specifications

Model Name		PN-85TH1	PN-75TH1	PN-65TH1
Installation		Landscape / Portrait / Backward tilt (0 to 20, 45 degrees)*1		
LCD Panel		85-inch-class [84 9/16 inch (214.8 cm) diagonal] TFT LCD	75-inch-class [74 1/2 inch (189.3 cm) diagonal] TFT LCD	65-inch-class [64 1/2 inch (163.9 cm) diagonal] TFT LCD
	Max. Resolution	3,840 × 2,160 pixels		
	Max. Display Colours (approx.)	1.07 billion colours		
	Pixel Pitch (H x V)	0.488 × 0.488 mm	0.430 mm × 0.430 mm	0.372 × 0.372 mm
	Max. Brightness (average)*2	350 cd/m²		
	Contrast Ratio	5,000 : 1		
	Viewing Angle (H/V)	178°/178° (CR ≧ 10)		
	Active Screen Area (W x H) (approx.)	1,872 × 1,053 mm (73 11/16" × 41 7/16")	1,650.2 × 928.3 mm (64 15/16" × 36 9/16")	1,428.5 × 803.5 mm (56 1/4" × 31 5/8")
	Response Time	9.5 ms (grey to grey, avg.)		
	Backlight	LED, direct lit		
Touchscreen	Touch Technology	InGlass™		
	PC Connection Port	USB (2.0 compliant) (Type B) × 2		
	Power Supply	Supplied from main unit		
	Multi Touch	20 points		
	Protection Glass	Thickness: Approx. 4 mm Shock resistance: 130 cm*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	Supported		
Input Terminals*4		PC analogue: Mini D-sub 15-pin × 1, HDMI (HDCP2.2 compatible, HDR10 supported) × 2, 3.5 mm-diameter mini stereo jack × 1, DisplayPort (HDCP compatible) × 1, RS-232 × 1		
Output Terminals*4		3.5 mm-diameter mini stereo jack × 1, DisplayPort (HDCP compatible) × 1*5		
Controller	CPU	Hexa Core [Arm® Cortex®-A72 processor (dual core) + Arm Cortex-A53 processor (quad core)]		
	Memory	4 GB		
	Storage	32 GB		
	External Interface	LAN port (10Base-T/100Base-TX/1000Base-T), microSD card slot (microSD/microSDHC/microSDXC*6) × 1, USB port (3.0-compliant) × 2, USB port (2.0-compliant) × 1		
	Wireless LAN	Compliant with IEEE802.11ac/n/a/g/b		
	Bluetooth	Compliant with version 4.1 (A2DP/AVRCP/GATT/GAP/HID/HOGP)		
USB Hub Function		USB port (2.0-compliant) × 2		
Expansion Slot		12 V, 2.5 A (power supplied when expanding the functions with an optional part)		
Speaker Output	Built-in	10 W + 10 W		
	External	10 W + 10 W (6 Ω)		
Mounting		4 points, 600 × 400 mm pitch, M6 screw		4 points, 400 × 400 mm pitch, M6 screw
Power Supply*7		100V – 240 V AC, 50/60 Hz		
Power Consumption		310 W	330 W	270 W
Environmental Conditions	Operating Temperature*8*9	5 °C to 35 °C		
	Operating Humidity*9	20% to 80% RH (no condensation)		
Dimensions (W x D x H) (approx.) (display only)		1,951 × 99 × 1,150 mm (76 13/16" × 3 7/8" × 45 1/4")	1,724 × 98 × 1,020 mm (67 7/8" × 3 7/8" × 40 3/16")	1,501 x 98 x 894 mm (59 1/8" × 3 7/8" × 35 3/16")
Weight (approx.)		77 kg (170 lbs)	61 kg (135 lbs)	48 kg (106 lbs)
Main Accessories		AC power cord, remote control unit, remote control unit battery (AAA size) × 2, set-up manual, speaker cover × 2, vertical sticker, blank sticker, cable clamp × 5, camera mount, USB cable, eraser, pen tray, SHARP Pen Software (CD-ROM), touch pen (PN-85TH1 × 2, PN-75TH1/65TH1 × 1), SHARP Display Connect license, Wireless LAN antenna × 2, USB flash drive/microSD card cover, USB flash drive/microSD card cover fixing screw		

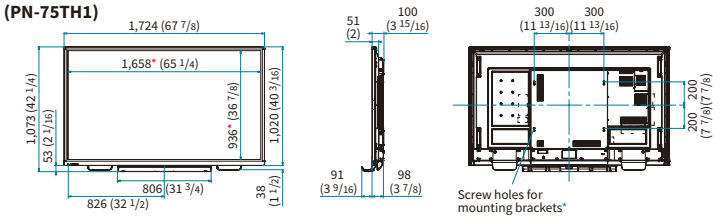
*1 There are restrictions on the tiltable angles and other installation conditions. For details, please consult with your local authorised Sharp dealer or representative. *2 Brightness depends on input mode and other picture settings. Brightness level will decrease slightly over the lifetime of the product. Due to the physical limitations of the equipment, it is not possible to maintain a precisely constant level of brightness. *3 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 Use a commercially available DisplayPort-certified cable. Some video equipment may not be supported. *6 exFAT is not supported. *7 The AC power cord is an inlet type. The cable is bundled (3 pins) *8 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. *9 Check the requirements of the computer and other devices to be connected, and make sure that all requirements are satisfied.

Dimensions

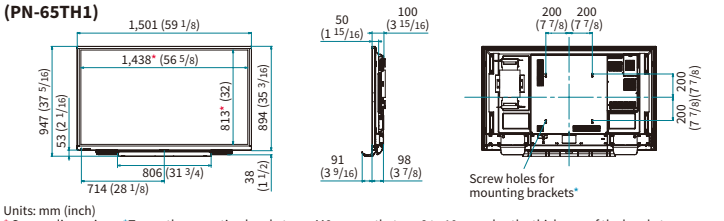
(PN-85TH1)



(PN-75TH1)



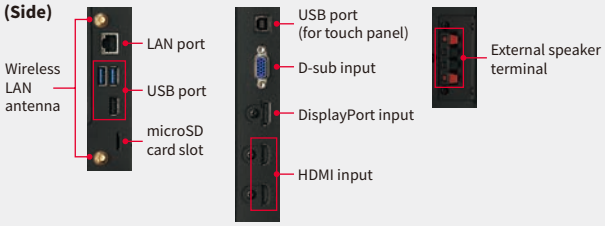
(PN-65TH1)



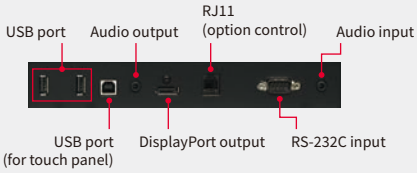
Units: mm (inch)
* Screen dimensions *To use the mounting bracket, use M6 screws that are 8 to 10 mm plus the thickness of the bracket.

Input/Output Terminals

(Side)



(Bottom)



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