

SHARP®

Be Original.

PNL851H PNL751H PNL651H

AQUOS BOARD®

Interactive Display Systems

4K Ultra HD LCD Panel with Built-in Controller Adds More Functionality and Versatility



AQUOS BOARD®

4K

3840 × 2160 Pixels



The PNL851H/751H/651H AQUOS BOARD interactive display systems are made for show and tell in the digital age. Whatever screen size you choose—85", 75", or 65" Class (84 9/16", 74 1/2", or 64 1/2", diagonally respectively)—you get pristine 4K Ultra HD resolution. With a pre-installed controller and built-in whiteboard and wireless functionality, they are 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 texture and detail of images and small text. From architecture to engineering to graphic arts, these monitors excel 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 minimizes 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.



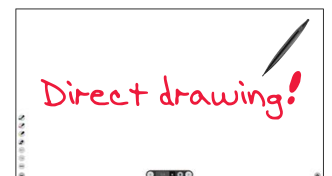
Built-in Controller with IWB Launcher

The PNL851H/751H/651H interactive displays have a built-in controller with a new IWB Launcher that makes it easy to operate these all-in-one interactive whiteboards. 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 screen 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 recognizes up-to 20 touch points, so when inspiration strikes, multiple people* can use their finger or touch pen to add input. 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 x 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.



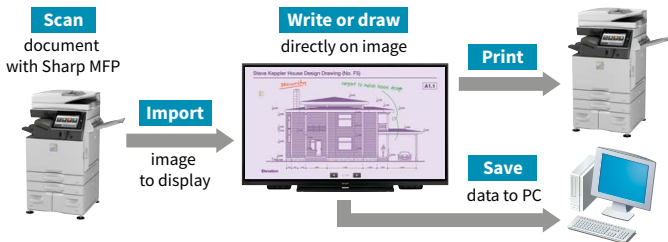
User-Friendly SHARP Pen Software

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 authorized Sharp dealer or representative.

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 PNL851H/751H/651H interactive displays are designed to match a diverse range of installation needs. They can be installed in either a landscape or a portrait orientation. With a landscape installation, they 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 authorized Sharp dealer or representative.



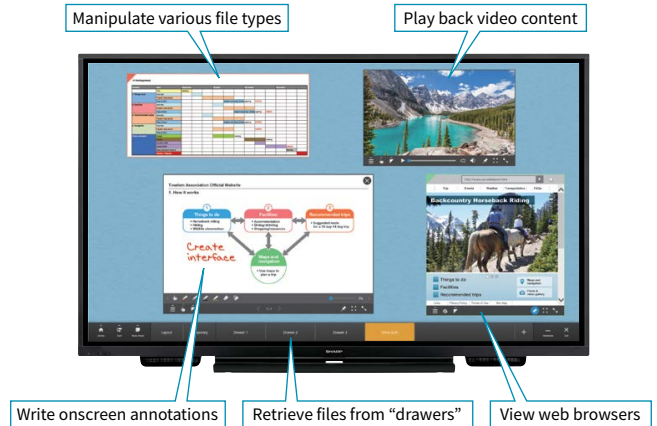
Quad-Screen Display

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 Viewer™ 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 online or via the downloader on the bundled CD-ROM.

4K Interactive Signage

Because it handles the demands of 16/7 operation, the PNL851H/751H/651H interactive displays bring 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)

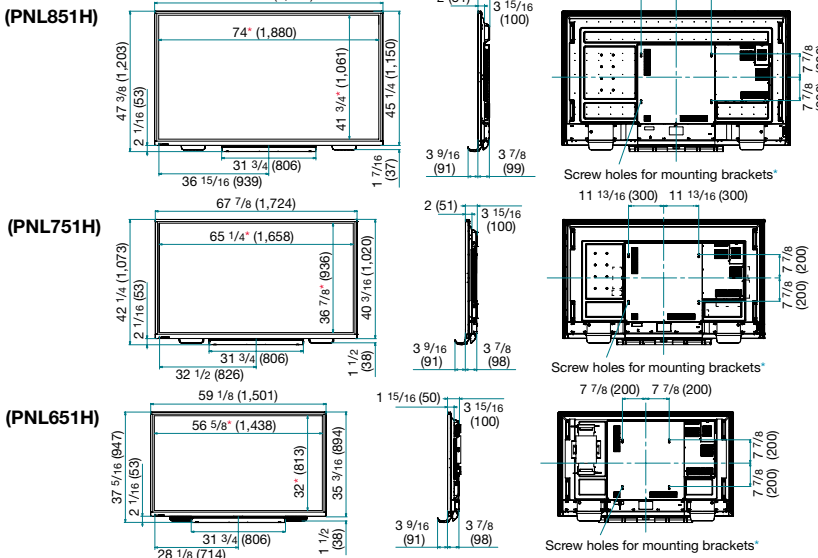
To use the touch panel, connect the bundled USB cable to the computer. The touch panel operates with the standard driver of each OS. On the Mac, operation is only possible in single-touch mode.

Specifications

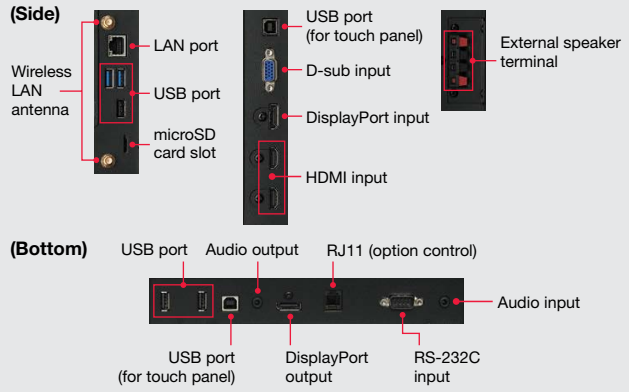
Model Name	PNL851H	PNL751H	PNL651H
Installation	Landscape / Portrait / Backward tilt (0 to 20, 45 degrees)*1		
LCD Panel	85" Class (84 9/16" diagonal) TFT LCD	75" Class (74 1/2" diagonal) TFT LCD	65" Class (64 1/2" diagonal) TFT LCD
Max. Resolution	3,840 x 2,160 pixels		
Max. Display Colours (approx.)	1.07 billion colours		
Pixel Pitch (H x V)	0.488 mm x 0.488 mm	0.430 mm x 0.430 mm	0.372 mm x 0.372 mm
Max. Brightness (average)*2	350 cd/m ²		
Contrast Ratio	5,000 : 1		
Viewing Angle (H/V)	178°/178° (CR ≥ 10)		
Active Screen Area (W x H) (approx.)	71 11/16" x 41 7/16"	64 15/16" x 36 9/16"	56 1/4" x 31 5/8"
Response Time	9.5 ms (grey to grey, avg.)		
Backlight	LED, direct lit		
Touchscreen	InGlass™		
PC Connection Port	USB (2.0 compliant) (Type B) x 2		
Power Supply	Supplied from main unit		
Multi Touch	20 points		
Protection Glass	Thickness: Approx. 4 mm Shock resistance: 130 cm		
Computer Input	Video: Analog RGB (0.7 Vp-p) [75Ω], HDMI™, DisplayPort™		
Synchronization	Horizontal/vertical separation (TTL: positive/negative)		
Plug & Play	VESA DDC2B		
Power Management	Supported		
Input Terminals*3	PC analog: Mini D-sub 15-pin x 1, HDMI (HDCP2.2 compatible, HDR10 supported) x 2, 3.5 mm-diameter mini stereo jack x 1, DisplayPort (HDCP compatible) x 1, RS-232 x 1		
Output Terminals*3	3.5 mm-diameter mini stereo jack x 1, DisplayPort (HDCP compatible) x 1*4		
Controller	CPU: Hexa Core [Arm® Cortex®-A72 processor (dual core) + Arm Cortex-A53 processor (quad core)]		
Memory	4 GB		
Storage	32 GB		
External Interface	LAN port (10Base-T/100Base-TX/1000Base-T), microSD card slot (microSD/microSDHC/microSDXC *) x 1, USB port (3.0-compliant) x 2, USB port (2.0-compliant) x 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) x 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 x 400 mm pitch, M6 screw		4 points, 400 x 400 mm pitch, M6 screw
Power Supply*6	100V – 240 V AC, 50/60 Hz		
Power Consumption	310 W	330 W	270 W
Environmental Conditions	Operating Temperature*7*8: 5°C to 35°C Operating Humidity*8: 20% to 80% RH (no condensation)		
Dimensions (W x D x H) (approx.) (display only)	76 13/16" x 3 7/8" x 45 1/4"	67 7/8" x 3 7/8" x 40 3/16"	59 1/8" x 3 7/8" x 35 3/16"
Weight (approx.)	170 lbs	135 lbs	106 lbs
Main Accessories	AC power cord, remote control unit, remote control unit battery (AAA size) x 2, set-up manual, speaker cover x 2, vertical sticker, blank sticker, cable clamp x 5, camera mount, USB cable, eraser, pen tray, SHARP Pen Software (CD-ROM), touch pen (PNL851H x 2, PNL751H/651H x 1), SHARP Display Connect license, Wireless LAN antenna x 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 authorized Sharp dealer or representative. *2 Brightness depends on input mode and other picture settings. Brightness level will decrease slightly over the lifetime of the product. Due to the physical limitations of the equipment, it is not possible to maintain a precisely constant level of brightness. *3 Use a commercially available connection cable for PC and other video connections. *4 Use a commercially available DisplayPort-certified cable. Some video equipment may not be supported. *5 exFAT is not supported. *6 The AC power cord is an inlet type. The cable is bundled (3 pins). *7 When the monitor is tilted more than 20 degrees upward from the perpendicular in relation to a level surface, the ambient temperature must be within the range of 5°C to 30°C. *8 Check the requirements of the computer and other devices to be connected, and make sure that all requirements are satisfied.

Dimensions



Input/Output Terminals



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



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