

SHARP

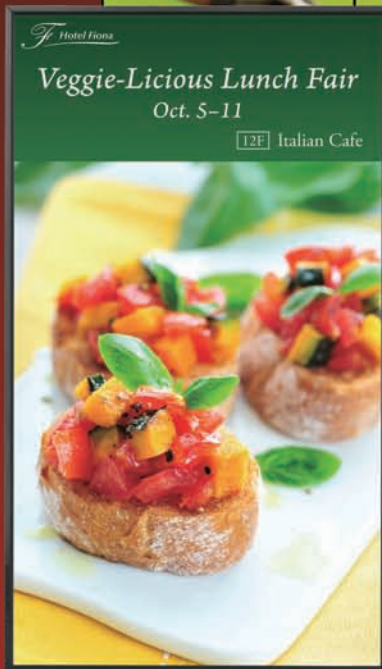
Touchboards

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10th
ANNIVERSARY



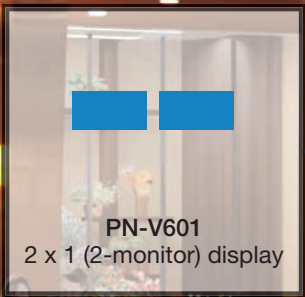
Professional LED and LCD Display Line-Up

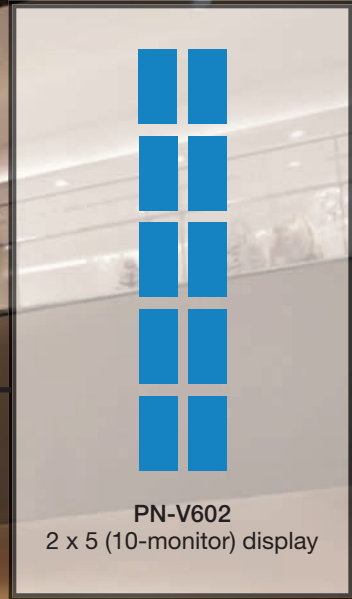


IT'S NOT JUST A DISPLAY, IT'S YOUR BUSINESS.

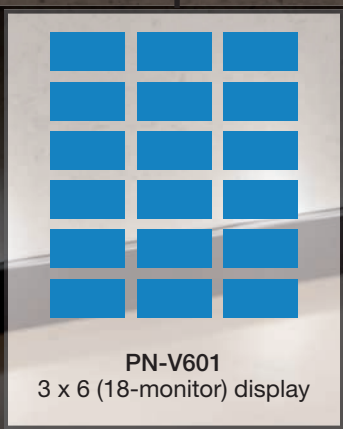
Share Your Message. Make an Impact. Grow Your Business.

When your message is important enough to share with the world – trust a leader in LCD technology to help you do it. From our AQUOS BOARD™ line of Interactive Display Systems to ultra-slim bezel video wall monitors and high-brightness digital signage displays, Sharp has just the right product to convey your message with brilliant clarity.





PN-V602
2 x 5 (10-monitor) display



PN-V601
3 x 6 (18-monitor) display

Sustainable Sharp

Sharp has a program of award-winning initiatives for social and environmental responsibility including planning, design, supply chain management, manufacturing distribution, product-end-of-life management, corporate citizenship and employee volunteers.

Sharp Professional Display Products are an integral part of the Sustainable Sharp program. From ENERGY STAR® certifications (where applicable) to advanced energy-saving features, Sharp Professional LED and LCD Display products are built to comply with our environmental initiatives. For more information on Sharp's energy-efficient products and cartridge or electronics recycling programs: www.Sharppusa.com/environment.



AQUOS BOARD™

Interactive Display Systems

PN-L802B 80" Class LED (80" diagonal)

PN-L602B 60" Class LED (60" diagonal)

PN-L702B 70" Class LED (69 ½" diagonal)



Communicate, collaborate and share ideas like never before

Imagine your greatest ideas displayed in Sharp AQUOS® HD 1080p brilliance. Now in three spectacularly large class sizes, the AQUOS BOARD brings greater collaboration and interactivity to presentations, web conferences and class lessons. That's the power of the Sharp AQUOS BOARD lineup of interactive display systems—the new cutting-edge in large format display technology.

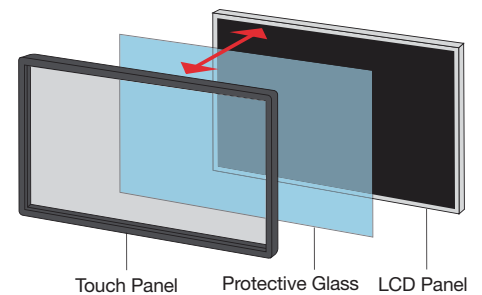
Endless Possibilities

Using the intuitive, accurate dual-touch screen and included Sharp Pen Software™, the presenter can open and close documents, enlarge or shrink images, even make annotations – all with the touch of a finger or the included pen. And when finished, even save the work and send it to the networked Sharp MFP* for printing and distributing. Add in the optional AQUOS BOARD PC with powerful processor, brilliant color full HD images and full array LED backlight, and you've got an all-in-one solution package.

* Multifunction printer

Ideal For

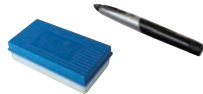
- Corporate board rooms and lobbies
- Trade shows and exhibit halls
- Airport corridors
- Retail locations
- Houses of worship
- Classrooms and lecture halls



Optical imaging (PN-L802B) and infrared blocking detection (PN-L702B/L602B) systems for quick and accurate touch response.



- Use the top menu buttons to open files and import documents to your presentations.
- Sharp Pen Software works like magic to put your best thoughts on display. Switch colors at the touch of a button for emphasis or color-coding.
- The Smart Eraser function automatically switches from draw to erase mode, when an eraser is placed on the screen.
- Undo and Redo commands make changes quick and simple.
- Save, Print and Print All commands let you save files or make hard copy printouts.
- Pan and Zoom to adjust your view or resize your image — it's easy!



With a quick click to the bundled touch pen, this user-friendly interface links directly to on-screen functions for pen-color selection and screen erasing.

Cross-industry capable, Sharp AQUOS BOARDS enable a professional, personal touch for business meetings, training sessions and more.



Highlights

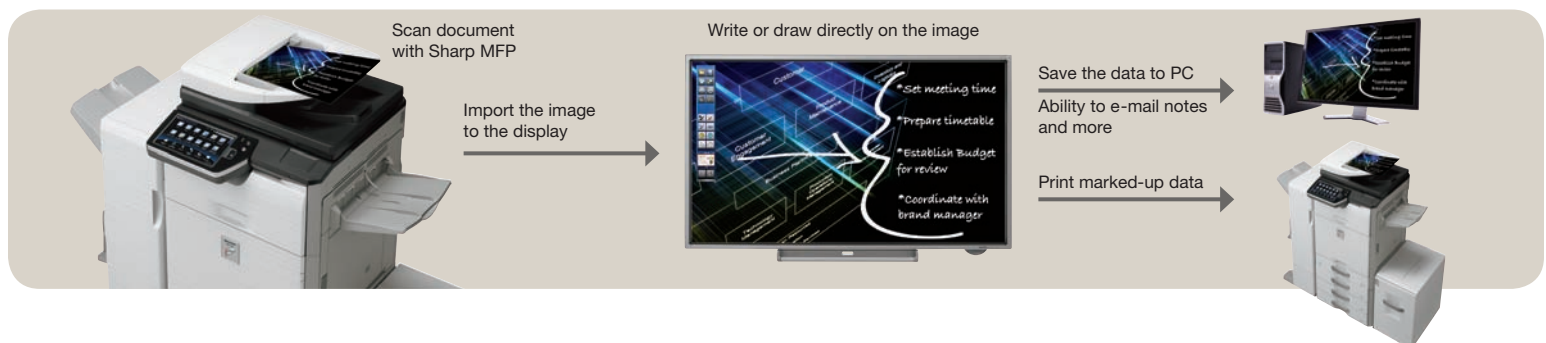
- Spectacular 80" class (80" diagonal), 70" class (69 ½" diagonal) and 60" class (60" diagonal) screen sizes
- Engineered for 24/7 commercial use
- Brilliant high definition LCD panel with energy-efficient design
- Display, annotate, store and share information
- Intuitive dual-touch operation using pen or finger
- Exclusive Sharp Pen Software™
- Built-in templates: calendar, to-do list and more
- Direct Sharp MFP connectivity to import/export data

A Flexible, All-In-One Solution

Thanks to the powerful AQUOS BOARD PC option, the AQUOS BOARD can display virtually any content, including presentations, images, photos, web pages and documents. It also allows for seamless use of a full array of Microsoft® products that you rely on every day, including:

- Microsoft Office Suite (Word®, Excel®, PowerPoint®; works especially well with the ink feature of these applications.)
- Microsoft Windows® 7 on-screen touch keyboard and OCR capability
- Microsoft Touch Pack for Windows® 7 games and programs.

Hosting a web conference? The AQUOS BOARD provides the best in web conferencing by integrating seamlessly with most web conferencing applications, such as WebEx™, Skype® and GoToMeeting®.

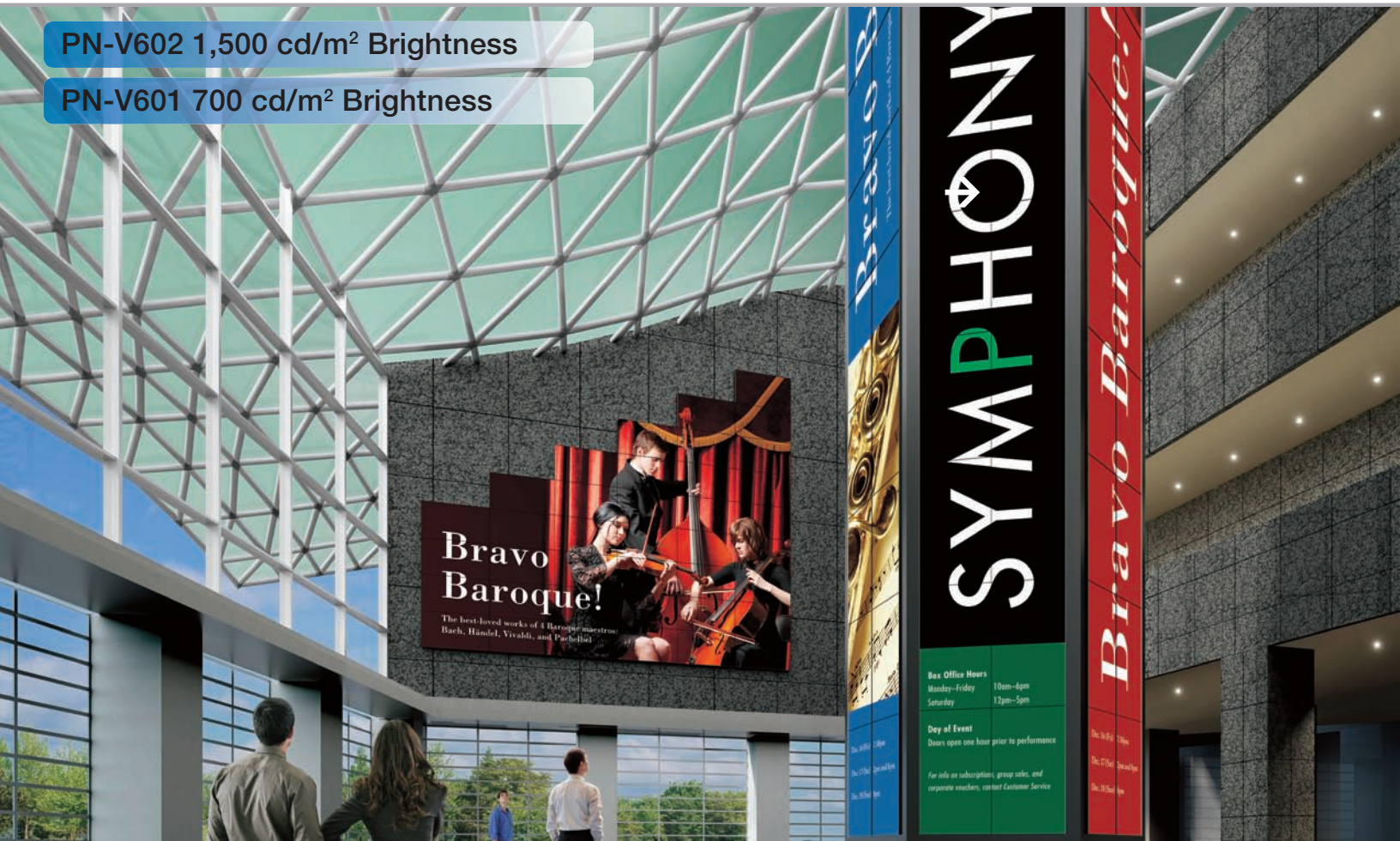


High-Brightness Video Wall Monitors

60" Class (60" Diagonal) Ultra Slim Bezel LED Video Wall Display

PN-V602 1,500 cd/m² Brightness

PN-V601 700 cd/m² Brightness



Note: The above image is an illustration.

Multiply The Imagination

With exceptionally bright LED backlighting and the slimmest bezel in the 60" class size*¹, the Sharp PN-V601/V602 let nothing stand between your message and your audience.

With up to an incredible 1,500 cd/m² of brightness in the PN-V602 and up to 700 cd/m² of brightness in the PN-V601, these 60" Class LED video wall monitors are the perfect choice for large venues with high ambient light.

- Stadiums
- Shopping Malls
- Museums
- Airports
- Control Centers

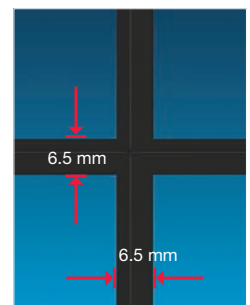
Ultra-Slim Bezels for Dynamic Video Walls

These high-brightness models boast the slimmest bezel in 60" class screen size.*¹ Ultra-slim bezels make the line between neighboring monitors an almost seamless 6.5 mm*² wide (2.4 mm right and bottom, 4.1 mm left and top).*³ This allows for the dynamic display of large, crisp, images that catch the eye and capture the attention. And, since these multi-monitor configurations can be effortlessly set up almost anywhere space allows, the only thing left to do is tap your imagination and explore all the possibilities your video wall has to offer!

*¹ Based on available information, as of March 1, 2012, for LCD panels of 60-inches diagonal or larger in size

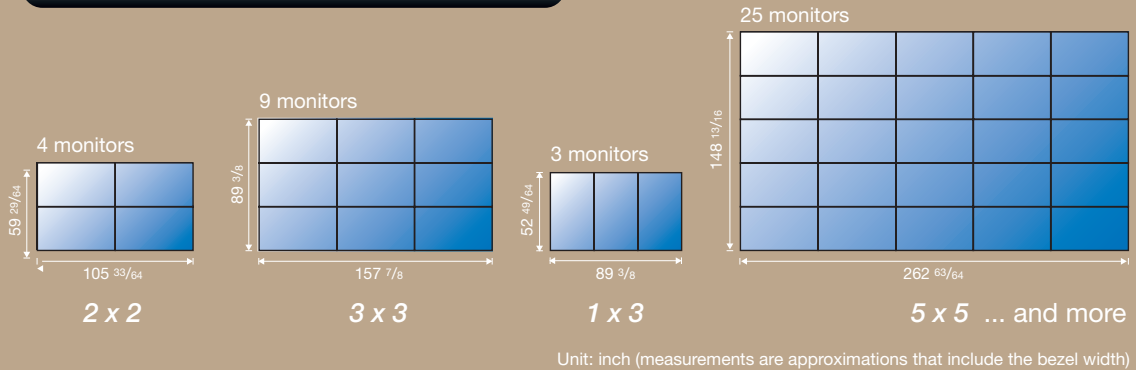
*² Does not include the gap between the monitors

*³ Non-display area for neighboring monitors is 7.1 mm



Sharp's PN-V601 and PN-V602 are the ideal choice for exciting, nearly seamless multi-monitor video wall configurations. High-impact and impressively sized, this sleek 60-inch class monitor brings a multitude of digital signage possibilities to shopping malls, airports, museums and countless other public places.

Create Dynamic Video Walls



Multiple PN-V601/PN-V602 monitors can be joined together to create video walls configured to a variety of purposes and settings. Easy-to-assemble and easily controlled via the RS-232C interface or a network*, video walls composed of Sharp PN-V601 and PN-V602 monitors bring dynamic, high-impact exposure to commercial display content.

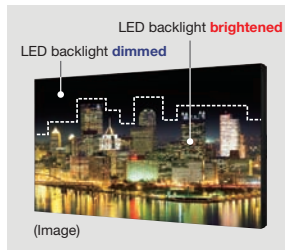
* PN-ZB02 Interface Expansion Board is required for control via a network.

Professional Quality And 24/7 Durability

Because business never stops, neither do the PN-V601/V602 Video Wall Monitors. These professional-grade products are rugged enough for continuous 24/7 operation in the most demanding professional applications.

High Contrast and Superb Energy Efficiency

The PN-V602 owes much of its outstanding black levels, amazing contrast and superb energy efficiency to local dimming of the LED backlight. Local dimming allows specific groups of LEDs to be independently dimmed or brightened for greater control of the darkness and brightness in different areas of the monitor, resulting in considerably reduced power consumption. That's why the PN-V602 can deliver significantly better contrast and brightness than conventional LCD monitors while using remarkably less power!

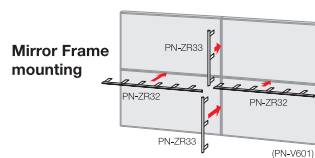


PN-ZR01 Control Kit

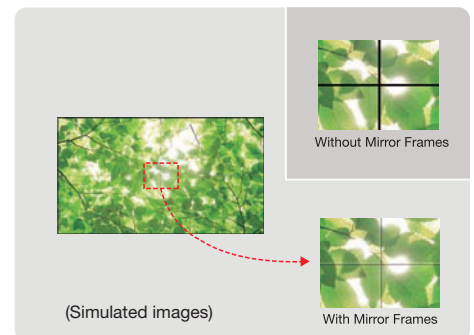
For easy, convenient control of your video wall installation, add the optional PN-ZR01 Control Kit. When fitted to one monitor, it allows for easy operation of all monitors through one remote control unit.

Mirror Frames (option)

In multi-screen configurations, mirror frames minimize the lines between slim-bezel PN-V601/V602 monitors by reflecting mirror images from the display content.



- PN-ZR32 Long Mirror Frame
- PN-ZR33 Short Mirror Frame



High-Brightness Signage/Data Display

Ultra-High Brightness 60" Class (60" Diagonal) LED Digital Signage & Data Display Monitor

PN-A601 2,000 cd/m² Brightness



Customize Your Display

The PN-A601 is a flexible solution that lets you customize your display and create the digital signage that's just right for your business.

Choose landscape or portrait mode to suit your content and application.

- Picture-in-picture mode allows an AV-sourced image to be displayed within a PC-sourced one (or vice-versa).
- Picture-by-picture mode allows images from AV and PC sources side by side for split screen viewing.
- Mirror Display mode allows the same image to be displayed on a daisy chain of PN-A601 Monitors for the powerful impact of visual repetition.
- Enlarge (Zoom) Mode allows an image to be spread across up to 25 monitors (in a 5 X 5 configuration) from a single PC.



Landscape installation

Unprecedented Brightness

With an amazing 2,000 cd/m² brightness, the Sharp PN-A601 is the perfect choice for digital signage in brightly-lit window facing indoor settings or other environments with high ambient light.

- College campuses
- Stadiums
- Shopping Malls
- Museums
- Airports
- Control Centers

Breathtaking Image Quality

The PN-A601's exceptional image quality comes from Sharp's industry-leading LCD technologies. Sharp proprietary UV²A technology incorporated into the 60" class (60" diagonal) LCD panel provides highly efficient use of light from the full array LED backlight while simultaneously preventing light leakage. The results are exceptionally high quality images with bright whites, amazingly vivid colors and extremely deep blacks.

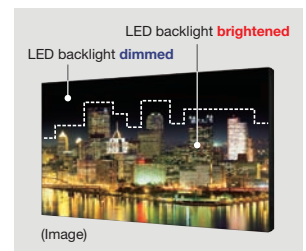
Durable And Reliable

Engineered to meet the rigors of commercial display and digital signage applications, the PN-A601 is certified for 24/7 use and supported with a 3-year on-site warranty.

It also conforms to ENERGY STAR qualifications, as well as the RoHS directive restricting the use of hazardous substances.

Local Dimming for High Contrast and Superb Energy Efficiency

Much of the PN-A601's exceptional performance – including outstanding black levels, high contrast and superb energy efficiency is due to local dimming of the LED backlight. Local dimming allows specific groups of LEDs to be dimmed for greater control of brightness and darkness in different areas of the screen. Since LEDs in a black area of the screen image can be independently turned off, local dimming can help to considerably reduce power consumption. This helps the PN-A601 deliver significantly better contrast (up to 1,000,000:1 contrast ratio with local dimming set to HIGH) and brightness (up to 2,000 cd/m²) compared to conventional LCD monitors, while utilizing less power.



(Image)

PN-E Series LED and LCD Displays

Digital Signage & Data Display

Durability you can put to work

The PN-E Series monitors are professional-grade LED and LCD digital signage displays built to withstand the rigors of professional use. Operate these workhorses around the clock and still enjoy stunning image quality and uniform brightness.

LED Backlighting

- PN-E802 (full array)
- PN-E702 (full array)
- PN-E602 (edge lit)

CCFL Backlighting

- PN-E601
- PN-E521
- PN-E471R
- PN-E421

A Wide Array of Digital Signage Choices

The PN-E Series models are no ordinary professional LED and LCD display monitors. Ranging in size from 42" class (42 1/16" diagonal) to 80" class (80" diagonal), these durable signage solutions offer versatile installation, outstanding image quality, and 24/7 reliability that add up to extraordinary performance.

Ideal For

- Conference rooms
- Hotel or office lobbies
- Trade show exhibit halls
- Classrooms and lecture halls
- Indoor shopping plazas and retail spaces

Choice of Installation Mode

These displays offer the choice of landscape or portrait installation. This allows customers to select the mode that best suits their content and application.

Mirror Display Mode (Daisy Chain)

With Mirror Display mode*, the same image can be displayed on a daisy chain of monitors for the powerful impact of visual repetition.

* Requires DVI-D cable.



Dual Screen Display

Picture-in-Picture (PIP) mode allows an AV-sourced image to be displayed within a PC-sourced one (or vice versa), while Picture-by-Picture (PbyP) mode puts images from AV and PC sources side by side for split-screen viewing.

• Picture-in-Picture mode



PC display AV display

• Picture-by-Picture mode



AV display PC display

32" Displays

32" Class (31 1/2" Diagonal) LED Display Monitors with Built-In Slide Show Function

PN-T321

PN-T322B



Exceptional Performance in a Compact Package

Thin, lightweight and sleek, PN-T322B and PN-T321 bring style and convenience to business-boosting digital signage applications. It's the perfect choice for an easy-to-use and engaging signage or wayfinding solution. Plus, simple PC-free operation adds greater convenience and ease of use.



Slide Show Function

The PN-T321/T322B* can be used as a basic stand-alone digital signage system, without a PC or a network connection. By simply plugging a USB flash drive into the unit enables playback of up to 600 stored still image files (JPEG and PNG) and audio files (MWA and MP3). Photos, posters and other still image data can be shown with ease; accompanied by audio playback via conveniently built-in speakers. These models also come with a USB thumb drive cover to prevent theft or damage of that device.

*Slide show function not applicable in touch-screen mode

Ideal For

- Corporate lobbies
- Hotel and conference facilities
- Waiting rooms
- Retail stores
- Museums

Highlights

- Built-in slide-show function
- Easy PC-free operation
- 24/7 durability
- Thin and lightweight
- Energy-efficient

PN-T322B Integrated Touch-Screen

The PN-T322B provides an easy-to-use and engaging interactive digital signage solution. Sharp's proprietary optical imaging system heightens the PN-T322B's touch-screen responsiveness via multiple infrared sensors that locate the position of the user's finger with impressive speed and accuracy. For greater interactive functionality, the PN-T322B supports dual-touch screen applications.*

*Requires Microsoft® Windows® 7 Operating System

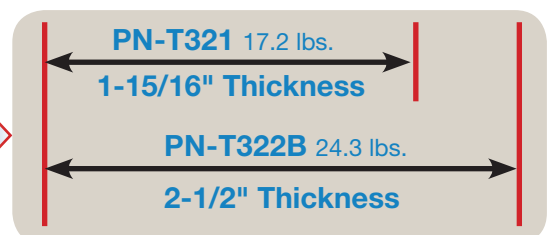
PN-T322B Touch Screen Functions:

- Single-tap
- Double-tap
- Drag-and-drop
- Flicks
- Press-and-hold
- Pan
- Zoom
- Press-and-tap
- Rotation

Thin and Lightweight

With their exceptionally slim profile, these stylish and lightweight displays offer easy placement in almost any setting.

Actual Size



LB-1085

108" Class (107 ³⁷/₆₄" Diagonal) Professional LCD Monitor

108 inches (107 ³⁷/₆₄" diagonal) of stunning, high-definition impact

For dynamic, full-HD images on a grand scale, the LB-1085 renders images with captivating clarity. As durable as it is enormous, the LB-1085 delivers reliable around-the-clock performance in even the most demanding environments.



Active Contrast

Thanks to the Active Contrast function, images displayed on the LB-1085 are analyzed to provide optimal brightness and contrast levels for each scene. Dark scenes are rendered in true-to-life gradations for dynamic visual expression.

Quick Shot Smooth Action

The LB-1085's Quick Shot function shortens response time to give fast-action video scenes smoother, more lifelike motion.

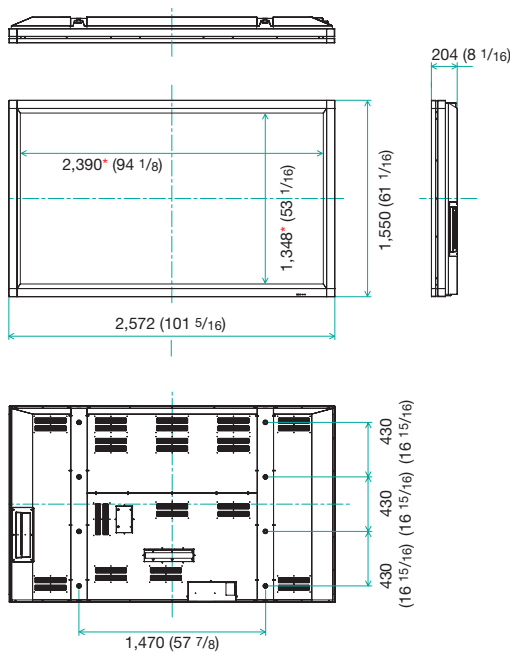
108-inch¹ Class

Landscape

LB-1085

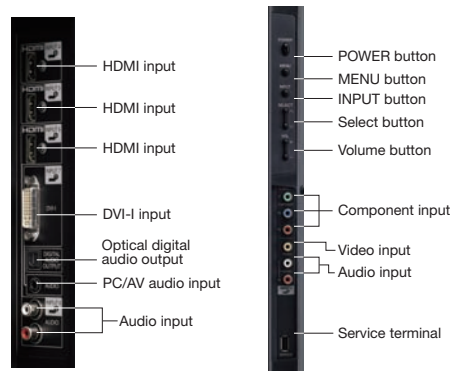
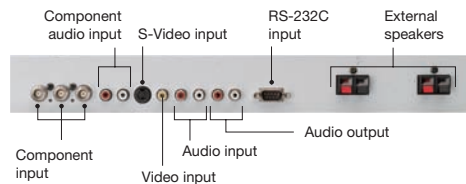
Full High-Definition 108-inch¹ Class LCD Monitor

¹ 107 ³⁷/₆₄" diagonal



Unit: mm (inch)
 * Screen dimensions

Input/Output Terminals



Outstanding Features

Hardware Functionality Guide

	Image Quality and Functions								User-Friendly Design				
	LED backlight	UV ² A technology	Full HD	Local dimming	Brightness sensor	Dual screen display (PIP, PbyP)	Enlarge (zoom) display	Mirror display (daisy chain)	ENERGY STAR [®] qualified	Built-in speakers	Portrait installation	VESA-compliant mounts	Carrying handles
PN-L802B	●	●	●			●		● *4*5		●		●	● *7
PN-L702B	●	●	●			●		● *4*5		●		●	● *7
PN-L602B	● *1	●	●			●		● *4*5	●	●		●	● *7
PN-T322B	● *1								●	●		●	
PN-V602	●	●		●	● *2	●	● *3	● *4*5	●	●		●	● *7
PN-V601	●				● *2	●	● *3	● *4*5	●	●		●	● *7
PN-E802	●	●	●			●	● *3	● *4*5		●		●	● *7
PN-E702	●	●	●			●	● *3	● *4*5		●		●	● *7
PN-E602	● *1	●	●			●	● *3	● *4*5	●	●		●	● *7
PN-A601	●	●	●	●		●	● *3	● *4*5	●	●		●	● *7
PN-E601	●	●	●			●	● *3	● *4*5	●	●		●	● *7
PN-E521		●	●			●	● *3	● *4*5	●	●		●	● *7
PN-E471R			●			●	● *3	● *4*5	●	●		●	● *7
PN-E421			●			●	● *3	● *4*5	●	●		●	● *7
PN-T321	● *1								●	●		●	
LB-1085			●		●								

*1 Edge-lit.
 *2 Requires optional PN-ZR01 Control Kit.
 *3 Up to 25x enlargement (5 x 5 monitors).
 *4 Up to five monitors (using DVI daisy chain connection).
 *5 Requires optional Interface Expansion Board.
 *6 Pen software works with landscape installation only.
 *7 Pre-assembled with main unit.
 *8 Reduces screen brightness when internal temperature reaches a certain level.

Glossary

LED Backlight - LED backlights help ensure reliable performance with low power consumption. Full array LED backlights further assist in providing images that are bright, beautiful and uniform.

UV²A Technology - Sharp's proprietary UV²A technology¹ provides highly efficient use of light from the backlight while simultaneously preventing light leakage. This helps save energy while displaying bright whites, deep blacks and vivid colors.

Full HD - Enables display of full 1920 x 1080 High Definition images.

Local Dimming - Local dimming allows specific groups of LEDs in the backlight to be dimmed for greater control of brightness and darkness in different areas of the screen. This helps to significantly increase contrast ratio (up to 1,000,000:1) while providing a considerable reduction in power consumption.

Brightness Sensor - This function helps ensure clear images by automatically adjusting backlight brightness to complement surrounding brightness levels.

Dual Screen Display - Picture-in-Picture model allows an AV-sourced image to be displayed with a PC-sourced image (or vice versa). Picture-by-Picture mode puts images from AV and PC sources side by side.

Enlarge (Zoom) Display Mode - The Enlarge (Zoom) display mode² permits multiple monitors to be grouped together to display one enlarged image.

Mirror Display Mode (Daisy Chain) - With this function, the same image can be displayed on a daisy chain of monitors.

ENERGY STAR[®] Qualified - All applicable Sharp professional displays are ENERGY STAR qualified. These displays additionally meet the RoHS Directive restricting the use of hazardous substances.

Built-In Stereo Speakers - Built-in speakers enable these displays to play back audio information without the need for separate audio components.

Choice of Installation Mode - All Sharp displays are designed for use in landscape mode. Many of these models additionally offer the option of portrait mode installation.

VESA Compliant Mounts - Compatible with VESA Compliant Mounts, this enables right/left pivot and swivel, helping ensure a high level of safety when the monitors are mounted on a wall or suspended from a ceiling.

¹ UV²A stands for "Ultraviolet-induced multi-domain Vertical Alignment," a photo-alignment technology that helps ensure uniform alignment of liquid crystal molecules in a certain direction.
² Used with PC and AV signal output on PN-V601 and PN-V602. ³ In the event the display remains above a safe operational level, the monitor will automatically go into standby mode.
⁴ Available separately.

	Reliability/Durability				Display Management							
	24/7 operation	Power on delay	Fanless architecture	Built-in temperature sensor	ID setting	Scheduling	Log save/output	Hardware diagnostics	E-mail notification	Web browser setting	SNMP support	Self adjust
PN-L802B	●	●	●	●*8	●	●	●	●	●*5	●*5	●*5	●
PN-L702B	●	●	●	●*8	●	●	●	●	●*5	●*5	●*5	●
PN-L602B	●	●	●	●*8	●	●	●	●	●*5	●*5	●*5	●
PN-T322B	●		●	●*8								
PN-V602	●	●		●*8	●	●	●	●	●*5	●*5	●*5	●
PN-V601	●	●		●*8	●	●	●	●	●*5	●*5	●*5	●
PN-E802	●	●	●	●*8	●	●	●	●	●*5	●*5	●*5	●
PN-E702	●	●	●	●*8	●	●	●	●	●*5	●*5	●*5	●
PN-E602	●	●	●	●*8	●	●	●	●	●*5	●*5	●*5	●
PN-A601	●	●		●*8	●	●	●	●	●*5	●*5	●*5	●
PN-E601	●	●	●	●*8	●	●	●	●	●*5	●*5	●*5	●
PN-E521	●	●	●	●*8	●	●	●	●	●*5	●*5	●*5	●
PN-E471R	●	●	●	●*8	●	●	●	●	●*5	●*5	●*5	●
PN-E421	●	●	●	●*8	●	●	●	●	●*5	●*5	●*5	●
PN-T321	●		●	●*8								
LB-1085	●		●									

*1 Edge-lit.
*2 Requires optional PN-ZR01 Control Kit.
*3 Up to 25x enlargement (5 x 5 monitors).
*4 Up to five monitors (using DVI daisy chain connection).

*5 Requires optional Interface Expansion Board.
*6 Pen software works with landscape installation only.
*7 Pre-assembled with main unit.
*8 Reduces screen brightness when internal temperature reaches a certain level.

Glossary Continued

Removable Carrying Handles - Helps ensure safe handling and setup.

24/7 Operation - Engineered for 24/7 commercial use, Sharp professional displays are designed to provide the reliability and durability needed for most any professional application.

Power On Delay - This function allows a time delay between the startup of each display in a multi-monitor installation. This helps reduce the load placed on the power supply when a number of monitors are turned on simultaneously.

Fanless Architecture - This helps maintain airflow and dissipate heat without the use of mechanical air ventilation fans, which can attract dust and create noise.

Built-in Temperature Sensor - In the event the temperature inside the monitor should rise, a built-in sensor will automatically adjust the backlight to keep the temperature within operation level³.

ID Setting - Through its RS-232C interface, these displays can be controlled and monitored from a central location via a PC.

Scheduling - The schedule function allows up to eight settings to be pre-programmed for automatic monitor turn on/off at precise times on a daily, weekly or one-time basis.

Log Save/Output - With this function, operation logs, signal changes and other data can be saved and tracked.

Hardware Diagnostics - This function helps detect any irregularities in power supply voltage and indicates it on the display.

E-Mail Notification - With this function, display status updates can be sent periodically to a specified e-mail address. A notice will also be sent if a malfunction occurs.

Web Browser Setting - These monitors can be operated through a Web browser and monitor control software⁴.

SNMP Support - Display status, continuous operating time and other parameters can be monitored over a local area network using Simple Network Management Protocol (SNMP).

Self Adjust - With an analog PC connection, when a change occurs to the input signal timing, the clock phase automatically adjusts.

1 UV²A stands for "Ultraviolet-induced multi-domain Vertical Alignment," a photo-alignment technology that helps ensure uniform alignment of liquid crystal molecules in a certain direction.

2 Used with PC and AV signal output on PN-V601 and PN-V602. 3 In the event the display remains above a safe operational level, the monitor will automatically go into standby mode.

4 Available separately.

Dimensions & Connections

AQUOS BOARD

80-inch¹ Class

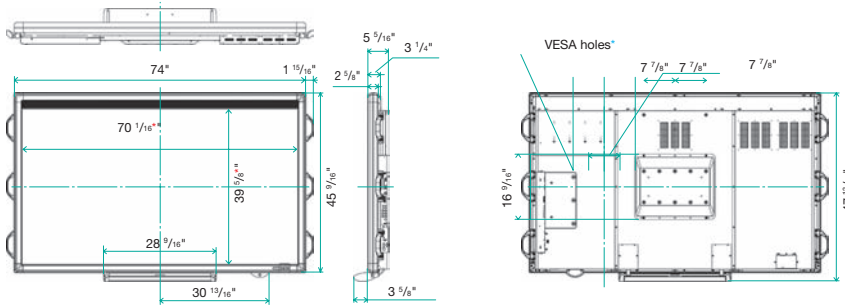
Landscape

PN-L802B

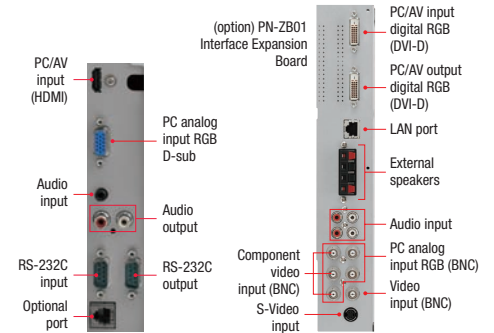
Full High-Definition 80-inch¹ Class Interactive Display System

¹ 80" diagonal

Dimensions



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



70-inch² Class

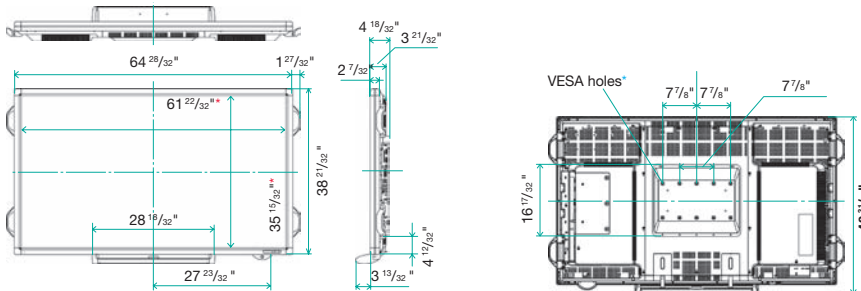
Landscape

PN-L702B

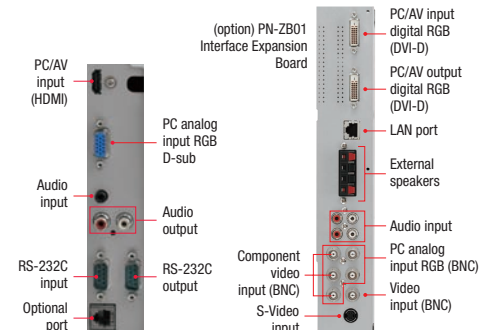
Full High-Definition 70-inch² Class Interactive Display System

² 69 1/2" diagonal

Dimensions



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



60-inch³ Class

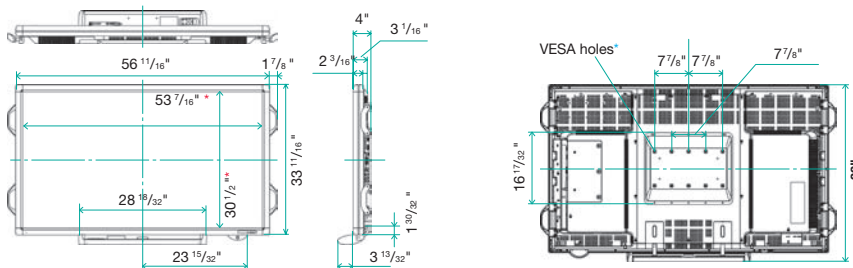
Landscape

PN-L602B

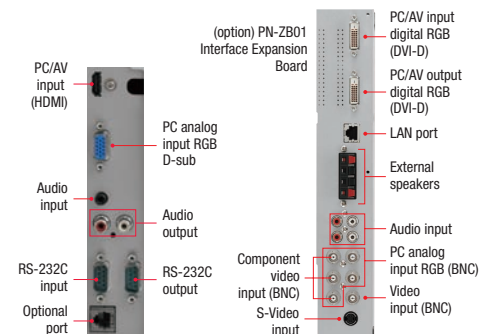
Full High-Definition 60-inch³ Class Interactive Display System

³ 60" diagonal

Dimensions



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



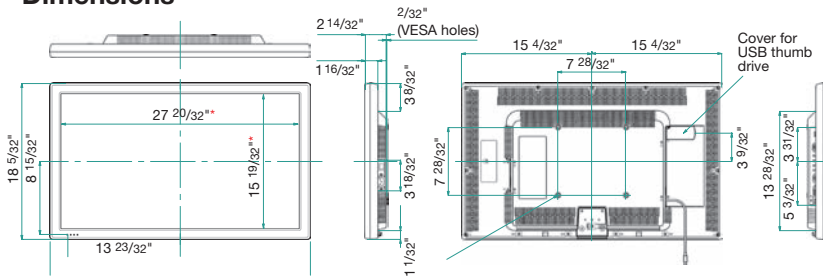
32-inch¹ Class

Landscape/Portrait

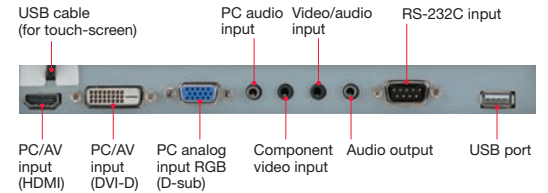
PN-T322B Full High-Definition 32-inch¹ Class LCD Monitor

¹ 31 1/2" diagonal

Dimensions



Input/Output Terminals



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

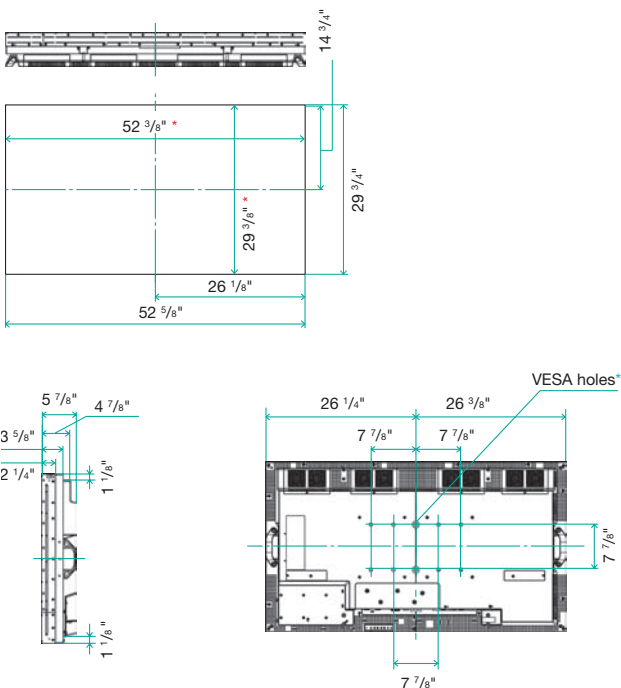
60-inch² Class

Landscape/Portrait

PN-V602 High-Definition 60-inch² Class LCD Monitor

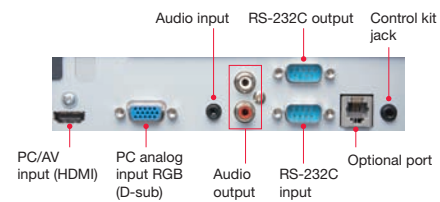
² 60" diagonal

Dimensions

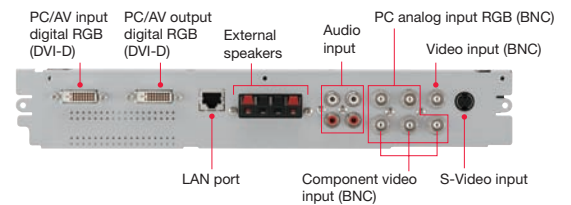


Input/Output Terminals

(standard)



PN-ZB02 Interface Expansion Board (option)



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

Dimensions & Connections

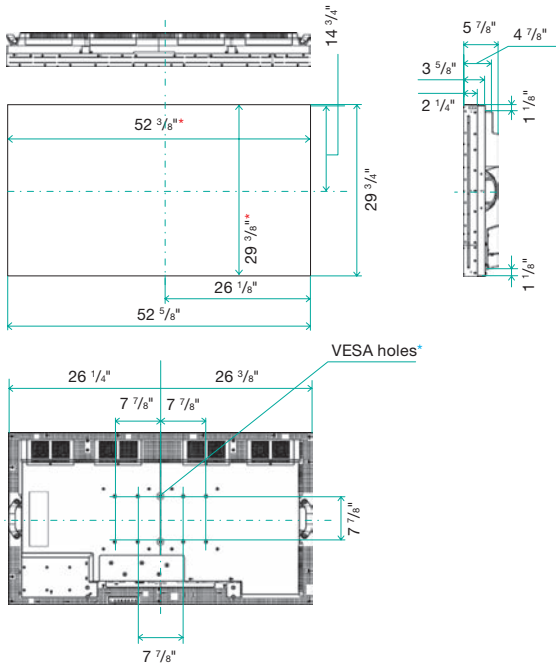
60-inch² Class

Landscape/Portrait

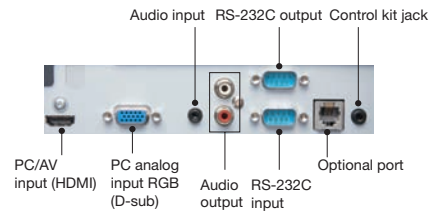
PN-V601 High-Definition 60-inch² Class LCD Monitor

² 60" diagonal

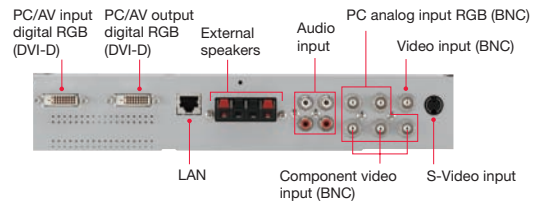
Dimensions



Input/Output Terminals (standard)



PN-ZB02 Interface Expansion Board (option)



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

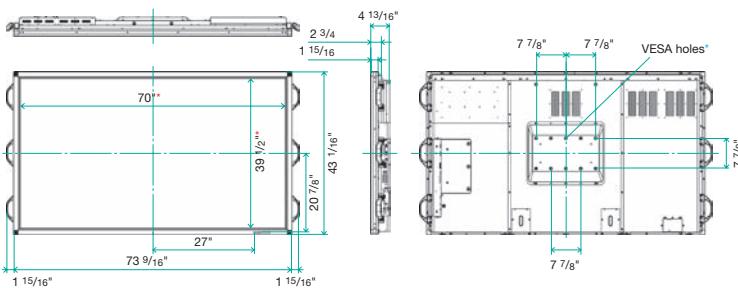
80-inch² Class

Landscape/Portrait

PN-E802 Full High-Definition 80-inch² Class LCD Monitor

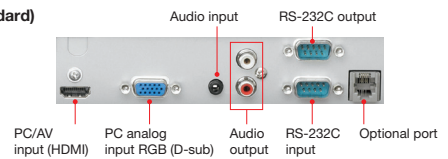
² 80" diagonal

Dimensions

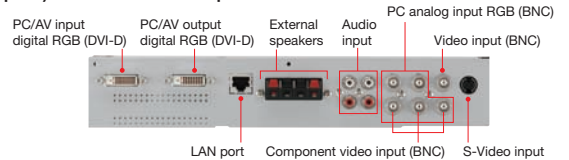


Input/Output Terminals

(standard)



(option) PN-ZB01 Interface Expansion Board



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

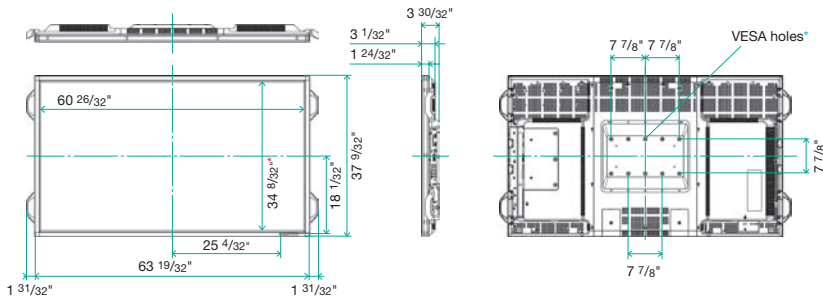
70-inch¹ Class

Landscape/Portrait

PN-E702 Full High-Definition 70-inch¹ Class LCD Monitor

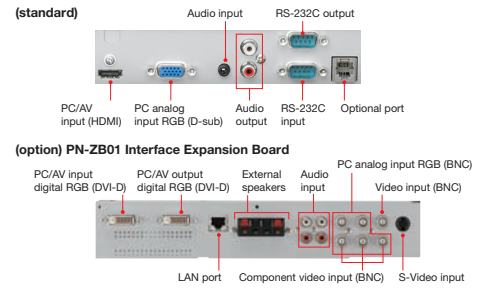
¹ 69 1/2" diagonal

Dimensions



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

Input/Output Terminals



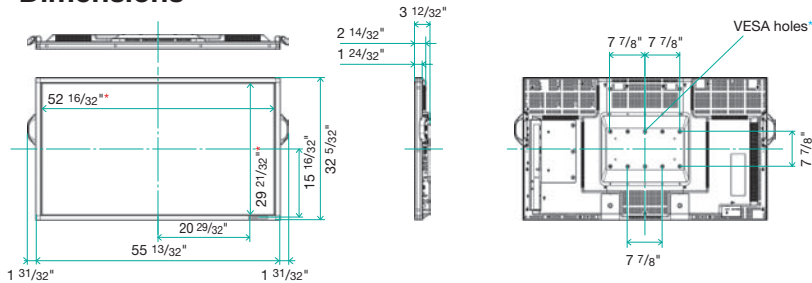
60-inch² Class

Landscape/Portrait

PN-E602 Full High-Definition 60-inch² Class LCD Monitor

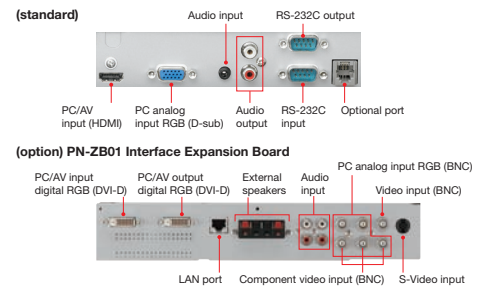
² 60" diagonal

Dimensions



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

Input/Output Terminals



Dimensions & Connections

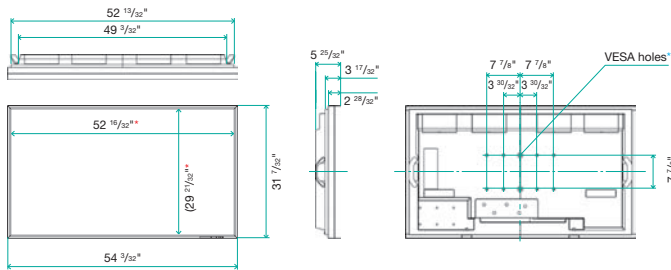
60-inch¹ Class

Landscape/Portrait

PN-A601 Full High-Definition 60-inch¹ Class LCD Monitor

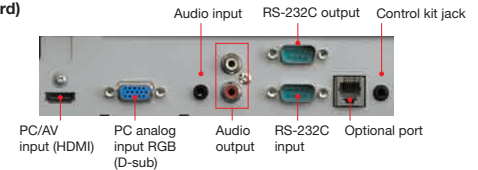
¹ 60" diagonal

Dimensions

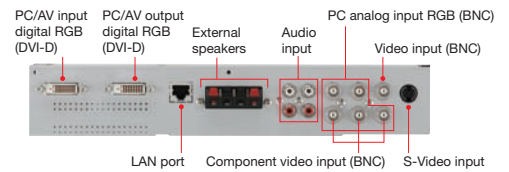


Input/Output Terminals

(standard)



(option) PN-ZB01 Interface Expansion Board



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

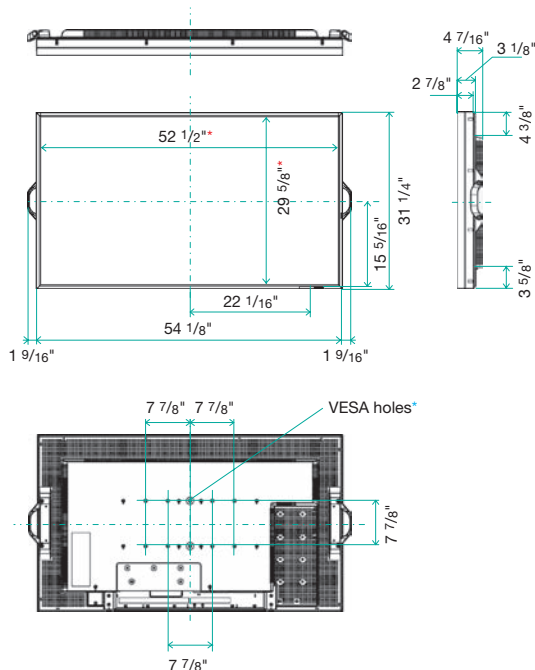
60-inch² Class

Landscape/Portrait

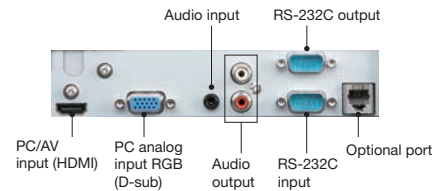
PN-E601 Full High-Definition 60-inch² Class LCD Monitor

² 60" diagonal

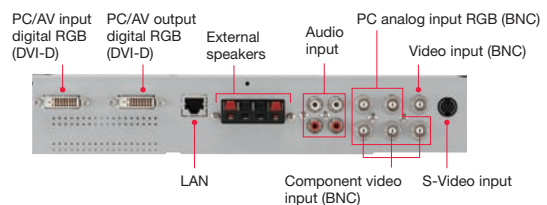
Dimensions



Input/Output Terminals (standard)



PN-ZB01 Interface Expansion Board (option)



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

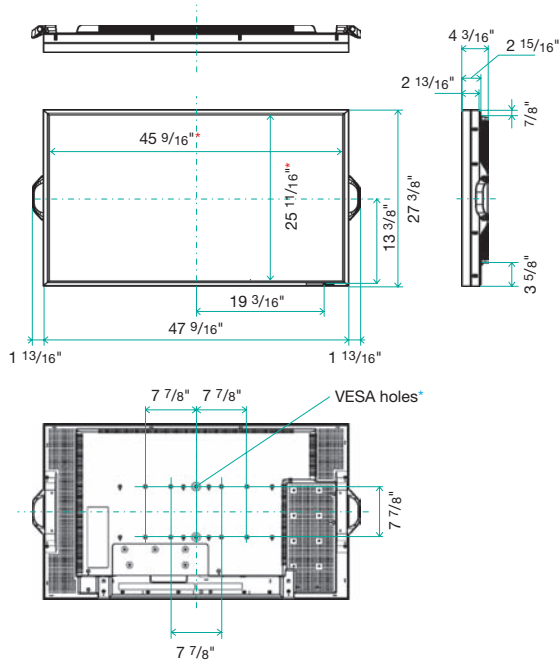
52-inch¹ Class

Landscape/Portrait

PN-E521 Full High-Definition 52-inch¹ Class LCD Monitor

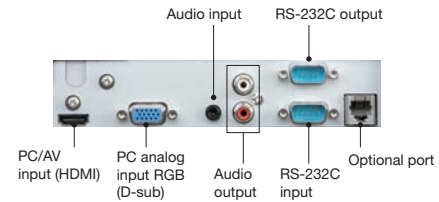
¹ 52" diagonal

Dimensions

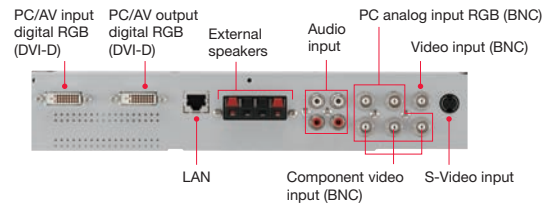


Units: inch
 * Screen dimensions
 ** To use the VESA-standard mounting bracket, use M6 screws that are 8 to 10 mm plus the thickness of the bracket.

Input/Output Terminals (standard)



PN-ZB01 Interface Expansion Board (option)



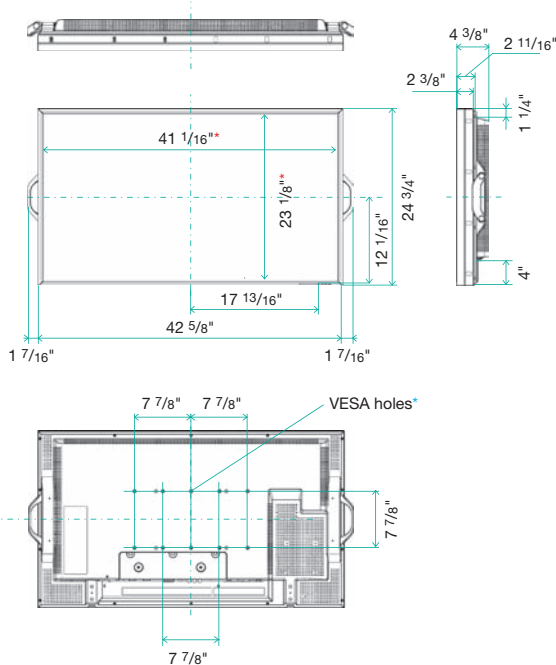
47-inch² Class

Landscape/Portrait

PN-E471R Full High-Definition 47-inch² Class LCD Monitor

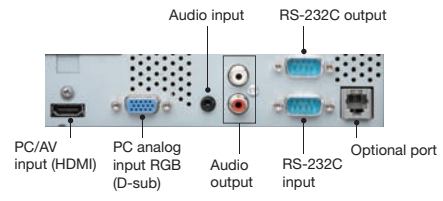
² 47" diagonal

Dimensions

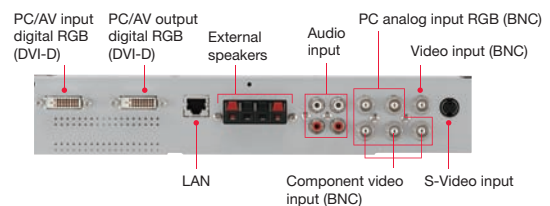


Units: inch
 * Screen dimensions
 ** To use the VESA-standard mounting bracket, use M6 screws that are 8 to 10 mm plus the thickness of the bracket.

Input/Output Terminals (standard)



PN-ZB01 Interface Expansion Board (option)



Dimensions & Connections

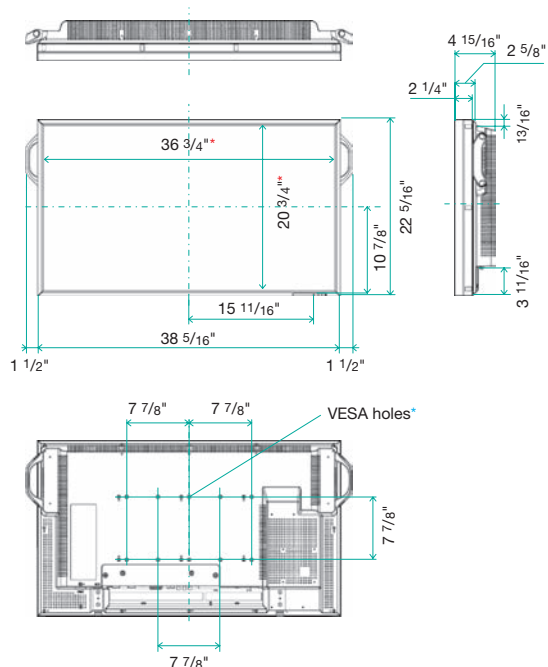
42-inch¹ Class

Landscape/Portrait

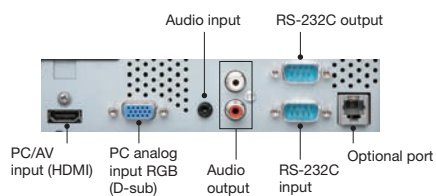
PN-E421 Full High-Definition 42-inch¹ Class LCD Monitor

¹ 42" diagonal

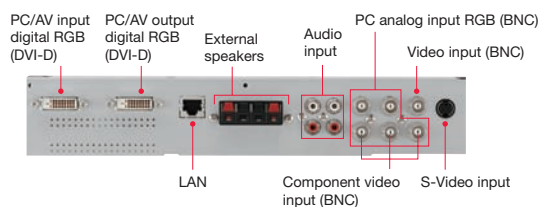
Dimensions



Input/Output Terminals (standard)



PN-ZB01 Interface Expansion Board (option)



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

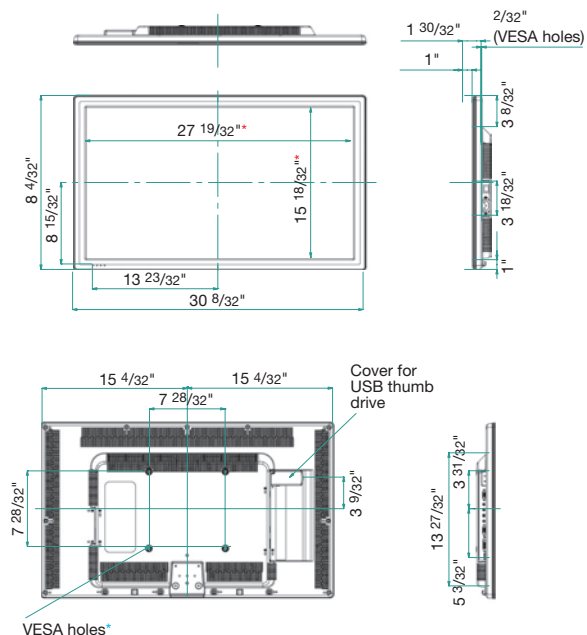
32-inch² Class

Landscape/Portrait

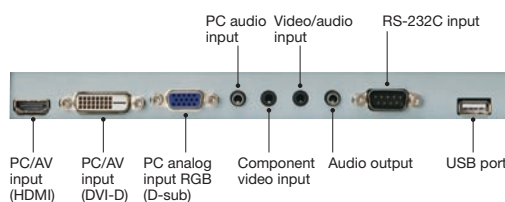
PN-T321 High-Definition 32-inch² Class LCD Monitor

² 31 1/2" diagonal

Dimensions



Input/Output Terminals



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

Specifications

		PN-L802B	PN-L702B
Installation		Landscape	Landscape
LCD Panel		80" class (80" diagonal) widescreen UV ² A LCD with full array LED Backlight	70" class (69-1/2" diagonal) widescreen UV ² A LCD with full array LED Backlight
	Max. Resolution	1,920 x 1,080 pixels	1,920 x 1,080 pixels
	Max. Display Colors (approx.)	1,064 million colors	1,064 million colors
	Pixel Pitch	0.923 x 0.923 mm	0.802 x 0.802 mm
	Max. Brightness ^{*1}	300 cd/m ²	300 cd/m ²
	Contrast Ratio	3,000:1	3,000:1
	Viewing Angle (H/V)	160°/160° (CR ≥ 10)	160°/160° (CR ≥ 10)
	Active Screen Area (W x H)	69-3/4" x 39-1/4"	60-9/16" x 34-1/16"
	Response Time	6ms (gray to gray, avg.)	6ms (gray to gray, avg.)
Touchscreen	Touch Technology	Optical imaging method with dual touch interface (requires Windows [®] 7)	Infrared blocking detection method with dual touch interface (requires Windows 7)
	PC Connection Port	USB (1.1 standard)	USB (1.1 standard)
	Power Supply	Supplied from PC through USB port	Supplied from PC through USB port
	Driver	OS: Windows [®] XP (32-bit/64-bit ver.), Windows Vista [®] (32-bit/64-bit ver.), Windows 7 (32-bit/64-bit ver.)	OS: Windows XP (32-bit/64-bit ver.), Windows Vista (32-bit/64-bit ver.), Windows 7 (32-bit/64-bit ver.)
	Protection Glass Thickness	Approx. 3.4 mm (including AR coating on both sides)	Approx. 3.4 mm (including AR coating on both sides)
Touch Pen	Transportation	Ultrasonic communication method	Ultrasonic communication method
	Button	2 function buttons	2 function buttons
Computer Input	Video	Analog RGB (0.7 Vp-p) [75Ω], Digital (conforms to DVI 1.0 standards)	Analog RGB (0.7 Vp-p) [75Ω], Digital (conforms to DVI 1.0 standards)
	Synchronization	Horizontal/vertical separation (TTL: positive/negative), Sync on green, Composite sync (TTL: positive/negative)	Horizontal/vertical separation (TTL: positive/negative), Sync on green, Composite sync (TTL: positive/negative)
	Plug & Play	VESA DDC2B	VESA DDC2B
	Power Management	VESA DPMS, DVI DMPM	VESA DPMS, DVI DMPM
Video Color System		NTSC (3.58 MHz, 4.43 MHz), PAL, PAL60, SECAM	NTSC (3.58 MHz, 4.43 MHz), PAL, PAL60, SECAM
Input Terminals	Standard	PC analog: mini-D-sub 15-pin x 1, HDMI x 1 ^{*4} , 3.5 mm-diameter mini stereo jack x 1, RS-232C D-sub 9-pin x 1	PC analog: mini-D-sub 15-pin x 1, HDMI x 1 ^{*4} , 3.5 mm-diameter mini stereo jack x 1, RS-232C D-sub 9-pin x 1
	With optional PN-ZB01	PC digital: DVI-D 24-pin x 1, PC analog: BNC x 1 ^{*6*7} , Video: BNC x 1, S-Video x 1, Component video: BNC (Y, Cb/Pb, Cr/Pr) x 1 ^{*6}	PC digital: DVI-D 24-pin x 1, PC analog: BNC x 1 ^{*6*7} , Video: BNC x 1, S-Video x 1, Component video: BNC (Y, Cb/Pb, Cr/Pr) x 1 ^{*6}
Output Terminals	Standard	Audio: RCA pin (L/R) x 1, RS-232C D-sub 9-pin x 1	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 (6Ω)	PC digital: DVI-D 24-pin x 1, External Speakers 7W + 7W (6Ω)
Input/Output Terminals	With optional PN-ZB01	LAN port	LAN port
Power Supply		100V – 240V AC, 50/60 Hz	100V – 240V AC, 50/60 Hz
Power Consumption		260W	240W
Environmental Conditions	Operating Temperature	5°C to 35°C	5°C to 35°C
	Operating Humidity	20% to 80% RH (no condensation)	20% to 80% RH (no condensation)
Dimensions (approx.)	(W x D x H)	74" x 5-5/16" x 45-9/16"	64-7/8" x 4-9/16" x 38-21/32"
Weight (approx.)		224.9 lbs	154.3 lbs
Main Accessories		Touch pen, battery (AAA size), pen tip (for touch pen) x 2, eraser, pen tray, power cord (approx. 3 m), remote controller and batteries (AA size x 2), CD-ROM, set-up manual, terminal label, Sharp logo cover sticker, USB cable (3.5 m) x 1, tray mounting fittings x 2, tray mounting screws x 6, cable clamp x 3	Touch pen, battery (AAA size), pen tip (for touch pen) x 2, eraser, pen tray, power cord (approx. 3 m), remote controller and batteries (AA size x 2), CD-ROM, set-up manual, terminal label, Sharp logo cover sticker, USB cable (3.5 m) x 1, tray mounting fittings x 2, tray mounting screws x 6, cable clamp x 2

^{*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} The monitor is not equipped with a mini D-sub 15-pin terminal. Analog PC signals can be input from the DVI-I terminal with the use of a commercially available conversion cable or adaptor. ^{*4} For both PC and AV components. ^{*5} Use a 3-pin compatible power outlet. ^{*6} The analog and component BNC terminals are switchable. Use the menu to select. ^{*7} Does not support plug & play. ^{*8} Use the bundled conversion cable and a commercially available RCA pin. ^{*9} The slide show function can play back files in the jpg, png, mp3, and wma formats.
^{**} Requires separately sold Interface Expansion Board.

Specifications

		PN-L602B	PN-T322B
Installation		Landscape	Landscape/portrait
LCD Panel		60" class (60" diagonal) widescreen UV ² A LCD with edge lit LED Backlight	32" class (31-1/2" diagonal) widescreen TFT LCD with edge lit LED Backlight
	Max. Resolution	1,920 x 1,080 pixels	1,366 x 768 pixels
	Max. Display Colors (approx.)	1,064 million colors	16.77 million colors
	Pixel Pitch	0.692 x 0.692 mm	0.511 x 0.511 mm
	Max. Brightness ^{*1}	380 cd/m ²	350 cd/m ²
	Contrast Ratio	3,000:1	2,500:1
	Viewing Angle (H/V)	160°/160° (CR ≥ 10)	176°/176° (CR ≥ 10)
	Active Screen Area (W x H)	52-5/16" x 29-7/16"	27-7/16" x 15-7/16"
	Response Time	6ms (gray to gray, avg.)	6.5 ms (gray to gray, avg.)
Touchscreen			
	Touch Technology	Infrared blocking detection method with dual touch interface (requires Windows 7)	Infrared camera method with dual touch interface (requires Windows 7)
	PC Connection Port	USB (1.1 standard)	USB (1.1 standard)
	Power Supply	Supplied from PC through USB port	Supplied from PC through USB port
	Driver	OS: Windows XP (32-bit/64-bit ver.), Windows Vista (32-bit/64-bit ver.), Windows 7 (32-bit/64-bit ver.)	OS: Windows XP (32-bit/64-bit ver.), Windows Vista (32-bit/64-bit ver.), Windows 7 (32-bit/64-bit ver.)
	Protection Glass Thickness	Approx. 3.0 mm (including AR coating on both sides)	Approx. 4.0 mm (including AR coating on both sides)
Touch Pen			
	Transportation	Ultrasonic communication method	Not applicable
	Button	2 function buttons	Not applicable
Computer Input			
	Video	Analog RGB (0.7 Vp-p) [75Ω], Digital (conforms to DVI 1.0 standards)	Analog RGB (0.7 Vp-p) [75Ω], Digital (conforms to DVI 1.0 standards)
	Synchronization	Horizontal/vertical separation (TTL: positive/negative), Sync on green, Composite sync (TTL: positive/negative)	Horizontal/vertical separation (TTL: positive/negative), Sync on green, Composite sync (TTL: positive/negative)
	Plug & Play	VESA DDC2B	VESA DDC2B
	Power Management	VESA DPMS, DVI DMPM	VESA DPMS, DVI DMPM
Video Color System		NTSC (3.58 MHz, 4.43 MHz), PAL, PAL60, SECAM	NTSC (3.58 MHz, 4.43 MHz), PAL, PAL60, SECAM
Input Terminals			
	Standard	PC analog: mini-D-sub 15-pin x 1, HDMI x 1 ^{*4} , 3.5 mm-diameter mini stereo jack x 1, RS-232C D-sub 9-pin x 1	PC analog: mini-D-sub 15-pin x 1, HDMI x 1 ^{*4} , Digital DVI-D 24-pin x 1 (HDCP compatible), 3.5 mm-diameter mini stereo audio jack x 1, RCA pin (L/R audio), RS-232C D-sub 9-pin x 1, USB port x 1 (for slide shows) ^{*9}
	With optional PN-ZB01	PC digital: DVI-D 24-pin x 1, PC analog: BNC x 1 ^{*6*} , Video: BNC x 1, S-Video x 1, Component video: BNC (Y, Cb/Pb, Cr/Pr) x 1 ^{*6}	Not applicable
Output Terminals			
	Standard	Audio: RCA pin (L/R) x 1, RS-232C D-sub 9-pin x 1	3.5 mm-diameter mini stereo audio jack x 1
	With optional PN-ZB01	PC digital: DVI-D 24-pin x 1, External Speakers 7W + 7W (6Ω)	Not applicable
Input/Output Terminals		With optional PN-ZB01	LAN port
Power Supply		100V – 240V AC, 50/60 Hz	100V – 240V AC, 50/60 Hz
Power Consumption		170W	82W
Environmental Conditions			
	Operating Temperature	5°C to 35°C	5°C to 35°C
	Operating Humidity	20% to 80% RH (no condensation)	20% to 80% RH (no condensation)
Dimensions (approx.)		(W x D x H) 56-11/16" x 3-31/32" x 33-21/32"	30-1/4" x 2-7/16" x 18-1/8"
Weight (approx.)		119 lbs	24.3 lbs
Main Accessories		Touch pen, battery (AAA size), pen tip (for touch pen) x 2, eraser, pen tray, power cord (approx. 3 m), remote controller and batteries (AA size x 2), CD-ROM, set-up manual, terminal label, Sharp logo cover sticker, USB cable (3.5 m) x 1, tray mounting fittings x 2, tray mounting screws x 6, cable clamp x 3	Power cord (approx. 4 m), remote controller, touch panel driver (CD-ROM), set-up manual, stickers (operation panel, blank, Sharp logo), cable clamp, cover for USB thumb drive, conversion cable x 2, air blower (to remove dust between touch-screen and frame)

^{*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} The monitor is not equipped with a mini D-sub 15-pin terminal. Analog PC signals can be input from the DVI-I terminal with the use of a commercially available conversion cable or adaptor. ^{*4} For both PC and AV components. ^{*5} Use a 3-pin compatible power outlet. ^{*6} The analog and component BNC terminals are switchable. Use the menu to select. ^{*7} Does not support plug & play. ^{*8} Use the bundled conversion cable and a commercially available RCA pin. ^{*9} The slide show function can play back files in the jpg, png, mp3, and wma formats. ^{**} Requires separately sold Interface Expansion Board.

		PN-V602	PN-V601
Installation		Landscape/portrait	Landscape/portrait
LCD Panel		60" class (60" diagonal) widescreen UV ² A LCD with full array LED backlight	60" class (60" diagonal) widescreen (152.5 cm diagonal), TFT LCD
	Max. Resolution	1,366 x 768 pixels	1,366 x 768 pixels
	Max. Display Colors (approx.)	16.77 million colors	16.77 million colors
	Pixel Pitch (H x V)	0.973 x 0.973 mm	0.973 x 0.973 mm
	Max. Brightness* ¹	1,500 cd/m ²	700 cd/m ²
	Contrast Ratio	1,000,000:1 (local dimming set to HIGH) 5,000:1 (without local dimming)	2400:1
	Viewing Angle (H/V)	176°/176° (CR ≥ 10)	176°/176° (CR ≥ 10)
	Active Screen Area (W x H)	52-5/8" x 29-7/16"	52 5/8" x 29 7/16"
	Response Time	6 ms (gray to gray, avg.)	6 ms (gray to gray, avg.)
Computer Input			
	Video	Analog RGB (0.7Vp-p) (75 Ω), Digital (conforms to DVI 1.0 standards)	Analog RGB (0.7 Vp-p) [75Ω], Digital (conforms to DVI 1.0 standards)
	Synchronization	Horizontal/vertical separation (TTL: positive/negative), Sync on green, Composite sync (TTL: positive/negative)	Horizontal/vertical separation (TTL: positive/negative), Sync on green, Composite sync (TTL: positive/negative)
	Plug & Play	VESA DDC2B	VESA DDC2B
	Power Management	VESA DPMS, DVI DMPM	VESA DPMS, DVI DMPM
Video Color System		NTSC (3.58 MHz, 4.43 MHz)**, PAL, PAL60, SECAM	NTSC (3.58 MHz, 4.43 MHz)**, PAL, PAL60, SECAM
Input Terminals* ²			
	PC/AV Video	DVI-D 24-pin** (HDCP compatible), Analog mini D-sub 15-pin, Analog BNC** * ⁶ * ⁷	DVI-D 24-pin** (HDCP compatible), Analog mini D-sub 15-pin, Analog BNC**
	PC/AV Audio	3.5 mm-diameter mini stereo jack x 1	3.5 mm-diameter mini stereo jack x 1
	Video	BNC x 1**	BNC x 1**
	S-Video	1**	1**
	Component	BNC (Y, Cb/Pb, Cr/Pr) x 1** * ⁸	BNC (Y, Cb/Pb, Cr/Pr) x 1**
	HDMI [®]	1 (HDCP compatible)* ⁴	1 (1080p compatible)* ⁴
	Audio	RCA pin (L/R) x 2**	RCA pin (L/R) x 2**
	Other	Control kit terminal x 1	Control Kit terminal x 1
Output Terminals* ²			
	Computer Signal	DVI-D 24-pin** (HDCP compatible, PC/AV signal)	DVI-D 24-pin**
	Audio	RCA pin (L/R)	RCA pin (L/R)
	Speakers	10W + 10W (6 Ω)**	10W + 10W (6 Ω)**
Input/Output Terminals* ²			
	LAN Port	1**	1**
	RS-232C	D-sub 9-pin (input x 1, output x 1)	D-sub 9-pin (input x 1, output x 1)
Speaker Output		—	—
Mounting		VESA (6 points), 7-7/8" pitch, M6 screw or VESA (4 points), 7-7/8" pitch, M6 screw	VESA (6 points), 200 mm (7 7/8") pitch, M6 screw or VESA (4 points), 200 mm (7 7/8") pitch, M6 screw
Power Supply		100V – 240V AC, 50/60 Hz	100V – 240V AC, 50/60 Hz
Power Consumption		510W	480W
Environmental Conditions			
	Operating Temperature	0°C to 40°C	0°C to 40°C
	Operating Humidity	20% to 80% RH (no condensation)	20% to 80% RH (no condensation)
Frame Width		Right/bottom: 2.4mm Left/top: 4.1 mm	Right/bottom: 2.4 mm Left/top: 4.1 mm
Dimensions (approx.)	W x D x H	52-5/8" x 5-7/8" x 29-11/16"	52 5/8" x 5 7/8" x 29 11/16"
Weight (approx.)		97 lbs	97 lbs
Package Dimensions (approx.)	W x D x H, Weight	62-1/4" x 15" x 36-3/4", 123.5 lbs	62 1/4" x 15" x 36 3/4", 121.3 lbs
Main Accessories		Power cord (3-pin* ⁵ , approx. 3 m), CD-ROM, operation manual, stand hole protection cover, vertical sticker (operation panel) x 1, vertical sticker (logo) x 1, blank sticker x 1, cable clamp x 2. For horizontal (face-up) installation, the optional PN-ZR31 Fan Cover is required. For details, consult your Sharp dealer/representative.	Power cord (3-pin* ⁵ , approx. 3 m), operation manual, CD-ROM, stand hole protection cover. For horizontal (face-up) installation, the optional PN-ZR31 Fan Cover is required. For details, consult your Sharp dealer/representative.

*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 The monitor is not equipped with a mini D-sub 15-pin terminal. Analog PC signals can be input from the DVI-I terminal with the use of a commercially available conversion cable or adaptor. *⁴ For both PC and AV components. *⁵ Use a 3-pin compatible power outlet. *⁶ The analog and component BNC terminals are switchable. Use the menu to select. *⁷ Does not support plug & play. *⁸ Use the bundled conversion cable and a commercially available RCA pin. *⁹ The slide show function can play back files in the jpg, png, mp3, and wma formats. ** Requires separately sold Interface Expansion Board.

Specifications

		PN-E802	PN-E702
Installation		Landscape/portrait	Landscape/portrait
LCD Panel		80" class (80" diagonal) widescreen UV ² A LCD with full array LED backlight	70" class (69 1/2" diagonal) widescreen UV ² A LCD with full array LED backlight
	Max. Resolution	1,920 x 1080 pixels	1,920 x 1080 pixels
	Max. Display Colors (approx.)	1,064 million colors	1,064 million colors
	Pixel Pitch (H x V)	0.923 x 0.923 mm	0.802 x 0.802 mm
	Max. Brightness* ¹	450 cd/m ²	450 cd/m ²
	Contrast Ratio	4,000:1	4,000:1
	Viewing Angle (H/V)	176°/176° (CR ≥ 10)	176°/176° (CR ≥ 10)
	Active Screen Area (W x H)	69-3/4" x 39-1/4"	60-9/16" x 34-1/16"
	Response Time	6 ms (gray to gray, avg.)	6 ms (gray to gray, avg.)
Computer Input	Video	Analog RGB (0.7Vp-p) (75Ω), Digital (conforms to DVI 1.0 standards)	Analog RGB (0.7Vp-p) (75 Ω), Digital (conforms to DVI 1.0 standards)
	Synchronization	Horizontal/vertical separation (TTL: positive/negative), Sync on green, Composite sync (TTL: positive/negative)	Horizontal/vertical separation (TTL: positive/negative), Sync on green, Composite sync (TTL: positive/negative)
	Plug & Play	VESA DDC2B	VESA DDC2B
	Power Management	VESA DPMS, DVI DMPM	VESA DPMS, DVI DMPM
	Video Color System	NTSC (3.58 MHz, 4.43 MHz)**, PAL, PAL60, SECAM	NTSC (3.58 MHz, 4.43 MHz)**, PAL, PAL60, SECAM
Input Terminals* ²	PC/AV Video	DVI-D 24-pin** (HDCP compatible), Analog mini D-sub 15-pin, Analog BNC** * ⁶ * ⁷	DVI-D 24-pin** (HDCP compatible), Analog mini D-sub 15-pin, Analog BNC** * ⁶ * ⁷
	PC/AV Audio	3.5 mm-diameter mini stereo jack x 1	3.5 mm-diameter mini stereo jack x 1
	Video	BNC x 1**	BNC x 1**
	S-Video	1**	1**
	Component	BNC (Y, Cb/Pb, Cr/Pr) x 1** * ⁶	BNC (Y, Cb/Pb, Cr/Pr) x 1** * ⁶
	HDMI®	1 (HDCP compatible)* ⁴	1 (HDCP compatible)* ⁴
	Audio	RCA pin (L/R) x 2**	RCA pin (L/R) x 2**
	Other	—	—
Output Terminals* ²	Computer Signal	DVI-D 24-pin** (HDCP compatible, PC/AV signal)	DVI-D 24-pin** (HDCP compatible, PC/AV signal)
	Audio	RCA pin (L/R)	RCA pin (L/R)
	Speakers	7W + 7W (6Ω)**	7W + 7W (6 Ω)**
Input/Output Terminals* ²	LAN Port	1**	1**
	RS-232C	D-sub 9-pin (input x 1, output x 1)	D-sub 9-pin (input x 1, output x 1)
Speaker Output		7W + 7W	7W + 7W
Mounting		VESA (6 points), 7-7/8" pitch, M6 screw or VESA (4 points), 7-7/8" pitch, M6 screw	VESA (6 points), 7-7/8" pitch, M6 screw or VESA (4 points), 7-7/8" pitch, M6 screw
Power Supply		100V – 240V AC, 50/60 Hz	100V – 240V AC, 50/60 Hz
Power Consumption		270W	240W
Environmental Conditions	Operating Temperature	0°C to 40°C	0°C to 40°C
	Operating Humidity	20% to 80% RH (no condensation)	20% to 80% RH (no condensation)
Frame Width		45 mm	35 mm V (left/right) x 39 mm H (top/bottom)
Dimensions (approx.)	W x D x H	73-9/16" x 4-13/16" x 43-1/16"	63-19/32" x 3-15/16" x 37-9/32"
Weight (approx.)		174.2 lbs	110.2 lbs
Package Dimensions (approx.)	W x D x H, Weight	82-11/16" x 18-7/16" x 55-1/8", 258 lbs	72-1/4" x 11-1/4" x 42-5/8", 132.3 lbs
Main Accessories		Power cord (3-pin* ⁵ , approx. 3 m), remote controller and batteries (AA size x 2), CD-ROM, operation manual, stand hole protection cover x 2, vertical sticker (operation panel) x 1, vertical sticker (logo) x 1, blank sticker x 1, cable clamp x 2	Power cord (3-pin* ⁵ , approx. 3 m), remote controller and batteries (AA size x 2), CD-ROM, operation manual, stand hole protection cover x 2, vertical sticker (operation panel) x 1, vertical sticker (logo) x 1, blank sticker x 1, cable clamp x 2

*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 The monitor is not equipped with a mini D-sub 15-pin terminal. Analog PC signals can be input from the DVI-I terminal with the use of a commercially available conversion cable or adaptor. *⁴ For both PC and AV components. *⁵ Use a 3-pin compatible power outlet. *⁶ The analog and component BNC terminals are switchable. Use the menu to select. *⁷ Does not support plug & play. *⁸ Use the bundled conversion cable and a commercially available RCA pin. *⁹ The slide show function can play back files in the jpg, png, mp3, and wma formats. ** Requires separately sold Interface Expansion Board.

PN-E602	PN-A601	PN-E601
Landscape/portrait	Landscape/portrait	Landscape/portrait
60" class (60" diagonal) widescreen UV2A LCD with edge lit LED backlight	60" class (60" diagonal) widescreen UV2A LCD with full array LED backlight	60" class (60" diagonal) widescreen, UV2A LCD
1,920 x 1080 pixels	1,920 x 1080 pixels	1,920 x 1,080 pixels
1,064 million colors	1,060 million colors	1,064 million colors
0.692 x 0.692 mm	0.692 x 0.692 mm	0.692 x 0.692 mm
450 cd/m ²	2,000 cd/m ²	500 cd/m ²
4,000:1	1,000,000:1 (local dimming set to HIGH) 5,000:1 (without local dimming)	5,000:1
176°/176° (CR ≥ 10)	176°/176° (CR ≥ 10)	176°/176° (CR ≥ 10)
52-5/16" x 29-7/16"	52-5/16" x 29-7/16"	52 5/16" x 29 7/16"
6 ms (gray to gray, avg.)	6 ms (gray to gray, avg.)	6 ms (gray to gray, avg.)
Analog RGB (0.7Vp-p) (75 Ω), Digital (conforms to DVI 1.0 standards)	Analog RGB (0.7Vp-p) (75 Ω), Digital (conforms to DVI 1.0 standards)	Analog RGB (0.7 Vp-p) [75Ω], Digital (conforms to DVI 1.0 standards)
Horizontal/vertical separation (TTL: positive/negative), Sync on green, Composite sync (TTL: positive/negative)	Horizontal/vertical separation (TTL: positive/negative), Sync on green, Composite sync (TTL: positive/negative)	Horizontal/vertical separation (TTL: positive/negative), Sync on green, Composite sync (TTL: positive/negative)
VESA DDC2B	VESA DDC2B	VESA DDC2B
VESA DPMS, DVI DMPM	VESA DPMS, DVI DMPM	VESA DPMS, DVI DMPM
NTSC (3.58 MHz, 4.43 MHz)**, PAL, PAL60, SECAM	NTSC (3.58 MHz, 4.43 MHz)**, PAL, PAL60, SECAM	NTSC (3.58 MHz, 4.43 MHz)**, PAL, PAL60, SECAM
DVI-D 24-pin** (HDCP compatible), Analog mini D-sub 15-pin, Analog BNC** *6*7	DVI-D 24-pin** (HDCP compatible), Analog mini D-sub 15-pin, Analog BNC** *6*7	DVI-D 24-pin** (HDCP compatible), Analog mini D-sub 15-pin, Analog BNC** *6*7
3.5 mm-diameter mini stereo jack x 1	3.5 mm-diameter mini stereo jack x 1	3.5 mm-diameter mini stereo jack x 1
BNC x 1**	BNC x 1**	BNC x 1**
1**	1**	1**
BNC (Y, Cb/Pb, Cr/Pr) x 1** *6	BNC (Y, Cb/Pb, Cr/Pr) x 1** *6	BNC (Y, Cb/Pb, Cr/Pr) x 1** *6
1 (HDCP compatible)*4	1 (HDCP compatible)*4	1 (HDCP compatible)*4
RCA pin (L/R) x 2**	RCA pin (L/R) x 2**	RCA pin (L/R) x 2**
—	Control kit terminal x 1	—
DVI-D 24-pin** (HDCP compatible, PC/AV signal)	DVI-D 24-pin** (HDCP compatible, PC/AV signal)	DVI-D 24-pin** (HDCP compatible, PC/AV signal)
RCA pin (L/R)	RCA pin (L/R)	RCA pin (L/R)
7W + 7W (6 Ω)**	10W + 10W (6Ω)**	10W + 10W (6Ω)**
1**	1**	1**
D-sub 9-pin (input x 1, output x 1)	D-sub 9-pin (input x 1, output x 1)	D-sub 9-pin (input x 1, output x 1)
7W + 7W	10W + 10W	10W + 10W
VESA (6 points), 7-7/8" pitch, M6 screw or VESA (4 points), 7-7/8" pitch, M6 screw	VESA (6 points), 7-7/8" pitch, M6 screw or VESA (4 points), 7-7/8" pitch, M6 screw	VESA (6 points), 7-7/8" pitch, M6 screw or VESA (4 points), 7-7/8" pitch, M6 screw
100V – 240V AC, 50/60 Hz	100V – 240V AC, 50/60 Hz	100V – 240V AC, 50/60 Hz
170W	620W	395W (without audio input), max. 400W
0°C to 40°C	0°C to 40°C	0°C to 40°C
20% to 80% RH (no condensation)	20% to 80% RH (no condensation)	20% to 80% RH (no condensation)
37 mm V (left/right) x 32 mm H (top/bottom)	19.8 mm	19.8 mm
55-13/32" x 3-3/8" x 32-5/32"	54-3/32" x 5-25/32" x 31-7/32"	54 1/8" x 4 7/16" x 31 1/4"
83.8 lbs	99.2 lbs	77.2 lbs
64-3/16" x 11-1/4" x 37-13/16", 105.8 lbs	62-7/32" x 13-5/8 x 36-11/16", 119 lbs	62 3/16" x 15" x 36 3/16", 97 lbs
Power cord (3-pin*5, approx. 3 m), remote controller and batteries (AA size x 2), CD-ROM, operation manual, stand hole protection cover x 2, vertical sticker (operation panel) x 1, vertical sticker (logo) x 1, blank sticker x 1, cable clamp x 2	Power cord (3-pin*5, approx. 3 m), remote controller and batteries (AA size x 2), CD-ROM, operation manual, stand hole protection cover x 2, vertical sticker (operation panel) x 1, vertical sticker (logo) x 1, blank sticker x 1, cable clamp x 2	Power cord (3-pin*5, approx. 3 m), remote controller and batteries (AA size x 2), CD-ROM, operation manual, stand hole protection cover x 2, vertical sticker (operation panel) x 1, vertical sticker (logo) x 1, blank sticker x 1, cable clamp x 2

*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 The monitor is not equipped with a mini D-sub 15-pin terminal. Analog PC signals can be input from the DVI-I terminal with the use of a commercially available conversion cable or adaptor. *4 For both PC and AV components. *5 Use a 3-pin compatible power outlet. *6 The analog and component BNC terminals are switchable. Use the menu to select. *7 Does not support plug & play. *8 Use the bundled conversion cable and a commercially available RCA pin. *9 The slide show function can play back files in the jpg, png, mp3, and wma formats. ** Requires separately sold Interface Expansion Board.

Specifications

		PN-E521	PN-E471R
Installation		Landscape/portrait	Landscape/portrait
LCD Panel		52" class (52" diagonal) widescreen, UV ² A LCD	47" class (47" diagonal) widescreen, TFT LCD
Computer Input	Max. Resolution	1,920 x 1,080 pixels	1,920 x 1,080 pixels
	Max. Display Colors (approx.)	1,064 million colors	1,064 million colors
	Pixel Pitch (H x V)	0.600 x 0.600 mm	0.542 x 0.542 mm
	Max. Brightness ^{*1}	500 cd/m ²	700 cd/m ²
	Contrast Ratio	5,000:1	1,200:1
	Viewing Angle (H/V)	176°/176° (CR ≥ 10)	178°/178° (CR ≥ 10)
	Active Screen Area (W x H)	45 3/8" x 25 1/2"	40 15/16" x 23"
	Response Time	6 ms (gray to gray, avg.)	9 ms (gray to gray, avg.)
	Video	Analog RGB (0.7 Vp-p) [75Ω], Digital (conforms to DVI 1.0 standards)	Analog RGB (0.7 Vp-p) [75Ω], Digital (conforms to DVI 1.0 standards)
	Synchronization	Horizontal/vertical separation (TTL: positive/negative), Sync on green, Composite sync (TTL: positive/negative)	Horizontal/vertical separation (TTL: positive/negative), Sync on green, Composite sync (TTL: positive/negative)
Plug & Play	VESA DDC2B	VESA DDC2B	
Power Management	VESA DPMS, DVI DMPM	VESA DPMS, DVI DMPM	
Video Color System		NTSC (3.58 MHz, 4.43 MHz) ^{**} , PAL, PAL60, SECAM	NTSC (3.58 MHz, 4.43 MHz) ^{**} , PAL, PAL60, SECAM
Input Terminals ^{*2}	PC/AV Video	DVI-D 24-pin ^{**} (HDCP compatible), Analog mini D-sub 15-pin, Analog BNC ^{** *6*7}	DVI-D 24-pin ^{**} (HDCP compatible), Analog mini D-sub 15-pin, Analog BNC ^{** *6*7}
	PC/AV Audio	3.5 mm-diameter mini stereo jack x 1	3.5 mm-diameter mini stereo jack x 1
	Video	BNC x 1 ^{**}	BNC x 1 ^{**}
	S-Video	1 ^{**}	1 ^{**}
	Component	BNC (Y, Cb/Pb, Cr/Pr) x 1 ^{** *6}	BNC (Y, Cb/Pb, Cr/Pr) x 1 ^{** *6}
	HDMI [®]	1 (HDCP compatible) ^{*4}	1 (HDCP compatible) ^{*4}
	Audio	RCA pin (L/R) x 2 ^{**}	RCA pin (L/R) x 2 ^{**}
	Other	—	—
Output Terminals ^{*2}	Computer Signal	DVI-D 24-pin ^{**} (HDCP compatible, PC/AV signal)	DVI-D 24-pin ^{**} (HDCP compatible, PC/AV signal)
	Audio	RCA pin (L/R)	RCA pin (L/R)
	Speakers	10W + 10W (6Ω) ^{**}	10W + 10W (6Ω) ^{**}
Input/Output Terminals ^{*2}	LAN Port	1 ^{**}	1 ^{**}
	RS-232C	D-sub 9-pin (input x 1, output x 1)	D-sub 9-pin (input x 1, output x 1)
Speaker Output		10W + 10W	10W + 10W
Mounting		VESA (6 points), 7-7/8" pitch, M6 screw or VESA (4 points), 7-7/8" pitch, M6 screw	VESA (6 points), 7-7/8" pitch, M6 screw or VESA (4 points), 7-7/8" pitch, M6 screw
Power Supply		100V – 240V AC, 50/60 Hz	100V – 240V AC, 50/60 Hz
Power Consumption		260W (without audio input), max. 265W	245W (default settings/without audio input), max. 260W
Environmental Conditions	Operating Temperature	0°C to 40°C	0°C to 40°C
	Operating Humidity	20% to 80% RH (no condensation)	20% to 80% RH (no condensation)
Frame Width		Left/right: 25.5 mm Top/bottom: 21.0 mm	19.5 mm
Dimensions (approx.)	W x D x H	47 9/16" x 4 3/16" x 27 3/8"	42 5/8" x 4 3/8" x 24 3/4"
Weight (approx.)		61.7 lbs	56.2 lbs
Package Dimensions (approx.)	W x D x H, Weight	55 29/32" x 14 21/32" x 32 29/32", 79.4 lbs	48 13/16" x 11 1/32" x 31 3/32", 68.3 lbs
Main Accessories		Power cord (3-pin ^{*5} , approx. 3 m), remote controller and batteries (AA size x 2), CD-ROM, operation manual, stand hole protection cover x 2, vertical sticker (operation panel) x 1, vertical sticker (logo) x 1, blank sticker x 1, cable clamp x 2	Power cord (3-pin ^{*5} , approx. 3 m), remote controller and batteries (AAA size x 2), CD-ROM, operation manual, stand hole protection cover x 2, vertical sticker (operation panel) x 1, vertical sticker (logo) x 1, blank sticker x 1, cable clamp x 2

^{*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} The monitor is not equipped with a mini D-sub 15-pin terminal. Analog PC signals can be input from the DVI-I terminal with the use of a commercially available conversion cable or adaptor. ^{*4} For both PC and AV components. ^{*5} Use a 3-pin compatible power outlet. ^{*6} The analog and component BNC terminals are switchable. Use the menu to select. ^{*7} Does not support plug & play. ^{*8} Use the bundled conversion cable and a commercially available RCA pin. ^{*9} The slide show function can play back files in the jpg, png, mp3, and wma formats. ^{**} Requires separately sold Interface Expansion Board.

PN-E421	PN-T321	LB-1085
Landscape/portrait	Landscape/portrait	Landscape
42" class (42" diagonal) widescreen, TFT LCD	32" class (31 1/2" diagonal) widescreen, TFT LCD	108" Class (107 37/64" diagonal) widescreen, TFT LCD
1,920 x 1,080 pixels	1,366 x 768 pixels	1,920 x 1,080 pixels
1,064 million colors	16.77 million colors	758 million colors
0.485 x 0.485 mm	0.511 x 0.511 mm	1.2405 x 1.2405 mm
700 cd/m ²	420 cd/m ²	400 cd/m ²
3,000:1	2,500:1	1,200:1
178°/178° (CR ≥ 10)	176°/176° (CR ≥ 10)	176°/176° (CR ≥ 10)
36 5/8" x 20 5/8"	27 7/16" x 15 7/16"	93 25/32" x 52 3/4"
8 ms (gray to gray, avg.)	6.5 ms (gray to gray, avg.)	6 ms (gray to gray, avg.)
Analog RGB (0.7 Vp-p) [75Ω], Digital (conforms to DVI 1.0 standards)	Analog RGB (0.7 Vp-p) [75Ω], Digital (conforms to DVI 1.0 standards)	Analog RGB (0.7 Vp-p) [75Ω], Digital (conforms to DVI 1.0 standards)
Horizontal/vertical separation (TTL: positive/negative), Sync on green, Composite sync (TTL: positive/negative)	Horizontal/vertical separation (TTL: positive/negative), Sync on green, Composite sync (TTL: positive/negative)	Horizontal/vertical separation (TTL: positive/negative)
VESA DDC2B	VESA DDC2B	VESA DDC2B
VESA DPMS, DVI DMPM	VESA DPMS, DVI DMPM	Not supported
NTSC (3.58 MHz, 4.43 MHz)**, PAL, PAL60, SECAM	NTSC (3.58 MHz, 4.43 MHz), PAL, PAL60, SECAM	NTSC (3.58 MHz), PAL
DVI-D 24-pin** (HDCP compatible), Analog mini D-sub 15-pin, Analog BNC** *6*7	DVI-D 24-pin (HDCP compatible), Analog mini D-sub 15-pin, 3.5 mm-diameter mini stereo jack x 1	DVI-I 29-pin (HDCP compatible, up to 1080p)*3 3.5 mm-diameter mini stereo jack x 1
3.5 mm-diameter mini stereo jack x 1	RCA pin (L/R) x 1	RCA x 2
BNC x 1**	—	1
1**	RCA pin (Y, Cb/Pb, Cr/Pr) x 1*8	RCA x 1, BNC x 1
BNC (Y, Cb/Pb, Cr/Pr) x 1** *6	1 (HDCP compatible)	3 (1080p compatible)*4
1 (HDCP compatible)*4	3.5 mm-diameter mini stereo jack, RCA pin (L/R) x 1*6	RCA pin (L/R 4 channels)
RCA pin (L/R) x 2**	USB port x 1 (for slide shows)*9	—
—	—	—
DVI-D 24-pin** (HDCP compatible, PC/AV signal)	3.5 mm-diameter mini stereo jack	RCA pin (L/R 1 channel)
RCA pin (L/R)	8W + 8W	15W + 15W (4Ω)
10W + 10W (6Ω)**	—	—
1**	D-sub 9-pin (input x 1)	—
D-sub 9-pin (input x 1, output x 1)	8W + 8W	D-sub 9-pin x 1 (input)
10W + 10W	—	—
VESA (6 points), 7-7/8" pitch, M6 screw or VESA (4 points), 7-7/8" pitch, M6 screw	VESA (4 points), 7 7/8" pitch, M6 screw	Optional mounting required
100V – 240V AC, 50/60 Hz	100V – 240V AC, 50/60 Hz	200V – 240V AC (single-phase, 3-wire type), 50/60 Hz
195W (default settings/without audio input), max. 225W	82W	1,130W
0°C to 40°C	0°C to 40°C	0°C to 40°C
20% to 80% RH (no condensation)	20% to 80% RH (no condensation)	20% to 80% RH (no condensation)
19.5 mm	Left/right: 33.9 mm Top/bottom: 32.4 mm	Left/right: 91 mm Top/bottom: 101 mm
38 5/16" x 4 15/16" x 22 5/16"	30 9/32" x 1 30/32" x 18 5/32"	101 5/16" x 8 1/16" x 61 1/16"
48.5 lbs	17.2 lbs	429.9 lbs
43 5/16" x 10 13/32" x 27 23/32", 61.7 lbs	34 26/32" x 21 18/32" x 6 22/32", 22.0 lbs	108 15/32" x 29 11/32" x 79 17/32", 698.9 lbs
Power cord (3-pin*5, approx. 3 m), remote controller and batteries (AAA size x 2), CD-ROM, operation manual, stand hole protection cover x 2, vertical sticker (operation panel) x 1, vertical sticker (logo) x 1, blank sticker x 1, cable clamp x 2	Power cord (approx. 4 m), remote controller, CD-ROM, set-up manual, stickers (operation panel, blank, Sharp logo), cable clamp, cover for USB thumb drive, conversion cable x 2	Power cord (3-pin*5, approx. 4 m), remote controller and batteries (AA size x 2), operation manual, bolt caps, power cord holder clamp

*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 The monitor is not equipped with a mini D-sub 15-pin terminal. Analog PC signals can be input from the DVI-I terminal with the use of a commercially available conversion cable or adaptor. *4 For both PC and AV components. *5 Use a 3-pin compatible power outlet. *6 The analog and component BNC terminals are switchable. Use the menu to select. *7 Does not support plug & play. *8 Use the bundled conversion cable and a commercially available RCA pin. *9 The slide show function can play back files in the jpg, png, mp3, and wma formats. ** Requires separately sold Interface Expansion Board.



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Additional Notes: Mounting of these displays requires special expertise and all work must be performed by an authorized Sharp dealer, servicer or installer. Sharp bears no responsibility for accidents or injuries caused by improper mounting or mishandling. Continuous display of static images may result in temporary image retention on the screen. The LCD component panel used in these displays is engineered using high precision technology. However, there may be minute points on the screen where pixels never light, or are permanently lit. Additionally, if the screen is viewed from an acute angle, there may appear to be uneven colors or brightness. These are not malfunctions but common phenomena of LCDs and will not affect performance of the display. Using the monitor's screen size switching or dual-screen display functions to compress or expand the screen for commercial or public viewing may infringe on the rights of the creators, as protected by Copyright Law.