SHARP

Sharp Quality and Brilliance— for Utterly Sensational Signage

Bravo
Baroque!

The best-loved works of 4 Baroque maestros:
Bach, Händel, Vivaldi, and Pachelbel

Bravo Ba

SYMPHONY

Box Office Hours
Monday–Friday
Saturday

Day of Event
Doors open one hour

For info on subscriptions
corporate vouchers, con

Dec. 26 (Fri) 7:30pm

Dec. 27 (Sat) 2pm and 8pm

Dec. 28 (Sun) 8pm

Note: The PN-V602 is intended for use in indoor environments. If the monitor is installed in a location exposed to excessive direct sunlight such as a windowfront, consult your installer to determine if additional measures to reduce ultraviolet and infrared radiation and ambient temperature are required.

Introducing the PN-V602 professional LCD monitor with super-h[...]
multi-screen configurations in bright locations. The PN-V602 also[...]
cutting-edge PN-V602 is such a shining example of digital signage[...]

High Brightness, High Visibility

Ultra-high brightness of **1,500 cd/m²** lets the PN-V602 excel in brightly lit indoor locations, even those awash in sunlight. And high contrast makes images clearly visible from a distance, so the PN-V602 can be installed in places where the LCD monitor is well out of reach—but not view—of the targeted audience. Indoor sports facilities, transportation hubs, shopping centres, and event venues are just some of the many settings where the PN-V602 can give vivid display to superb-quality images.

Breathtaking Image Quality

The PN-V602's exceptional image quality comes from Sharp's own industry-leading LCD technologies. Sharp **UV²A*** technology, incorporated into the 60-inch LCD panel, ensures highly efficient use of light from the backlight and prevents light leakage for the display of truly bright whites, amazingly vivid colours, and extremely deep blacks. And Sharp's **full-array LED backlight**, sporting LED elements evenly positioned across the entire panel, gives PN-V602 images remarkably uniform brightness.

* UV²A stands for "<u>U</u>ltra<u>v</u>iolet-induced Multi-domain <u>V</u>ertical <u>A</u>lignment," a photo-alignment technology that ensures uniform alignment of liquid crystal molecules in a certain direction.
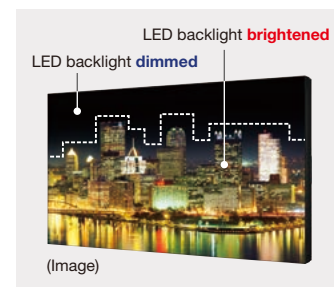
(Image)

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!

Local Dimming

LED backlight **brightened**

LED backlight **dimmed**

(Image)

Power Consumption Comparison*

1,500 cd/m² Local dimming: OFF	**500W**
1,500 cd/m² Local dimming: HIGH	**270W** **Down by approx. 46%**
(ref) 700 cd/m² Local dimming: HIGH	**155W**

* Results of Sharp measurements when displaying broadcast content (sub-clause 11.6) stipulated under IEC 62087 Ed. 2.0 and with brightness set to maximum. Note that the power consumption reduction will vary depending on the images displayed.

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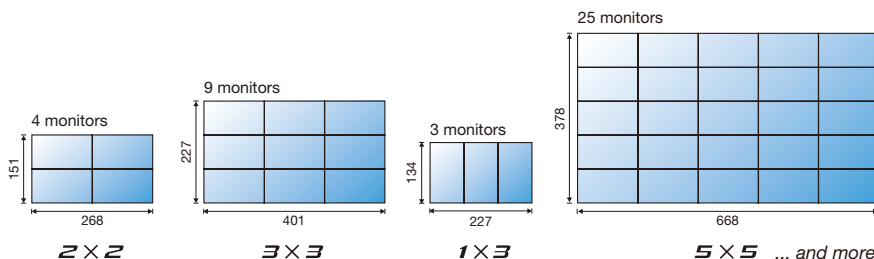
Note: The images in this brochure are simulated. Depending on the system, additional software/hardware may be required.

...high 1,500 cd/m² brightness and extraordinary image quality—the brilliant way to bring dazzling results to
...boasts streamlined bezels, making it the ideal monitor for nearly seamless, high-impact video walls. No wonder the
...potential.

Create Dynamic Video Walls

Multiple 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-V602 monitors bring dynamic, high-impact exposure to commercial display content.

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

25 monitors

9 monitors

4 monitors

3 monitors

151
268
2 × 2

227
401
3 × 3

134
227
1 × 3

378
668
5 × 5 ... and more

Units: cm (measurements are approximations that include the bezel width)
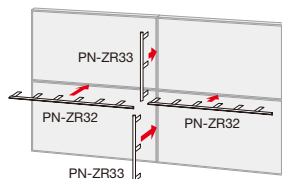
Choice of Installation Mode

The PN-V602 offers a choice of landscape or portrait installation, allowing customers to select the mode that best suits their display content and application.

Mirror Frames (option)

In multi-screen configurations, Mirror Frames minimise* the lines between slim-bezel PN-V602 monitors by reflecting mirror images from the display content. This creates more dynamic video walls and an even smoother big-picture effect.
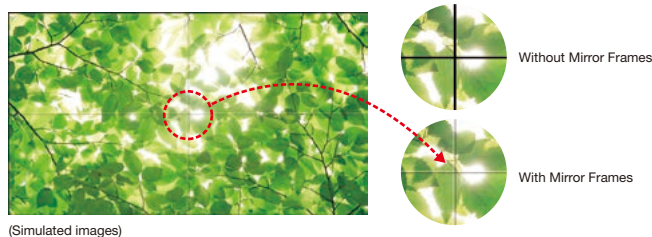
* Visibility of the seams between monitors will vary depending on such factors as the on-screen images and the viewing angle.

Mirror Frame Mounting

PN-ZR33

PN-ZR32   PN-ZR32

PN-ZR33

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

A Multi-Screen Configuration with Mirror Frames

Without Mirror Frames

With Mirror Frames

(Simulated images)

Brightness Sensor*

The Brightness Sensor function ensures clear visibility by automatically adjusting backlight brightness to complement surrounding brightness levels. In dark surroundings, backlight brightness automatically lowers, providing optimal viewing and energy savings as well.

* Requires optional PN-ZR01

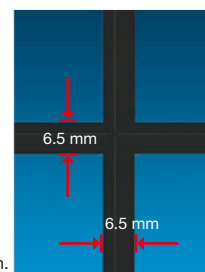## PN-ZR01 Control Kit (sold separately)

When one of the PN-V602s in a multi-screen configuration is fitted with a remote control sensor box, all of the monitors can be conveniently operated through one remote control unit.

Remote control unit   Remote control sensor box

Ultra-Slim Bezel

The PN-V602 boasts an ultra-slim bezel that makes the lines between neighbouring monitors an almost seamless 6.5 mm*[1] wide (2.4 mm right and bottom, 4.1 mm left and top)*[2]. This enables the high-impact display of large, crisp images that catch the eye and capture the attention.

*[1]: Does not include the gap between the monitors.
*[2]: Non-display area for neighbouring monitors is 7.1 mm.

6.5 mm

6.5 mm

Enlarge (Zoom) Display Mode
(for up to 25 Monitors)

The Enlarge (Zoom) Display mode can spread one image from a PC across up to 25 monitors (in a 5 x 5 configuration). The Frame Width Adjustment function eliminates misalignment and boldly enhances the enlarged image on a multi-screen display.

Single-screen display   5 x 5 (25-screen) display

24/7 Operation

The PN-V602 is rugged enough for continuous 24/7 operation in the most demanding professional applications.

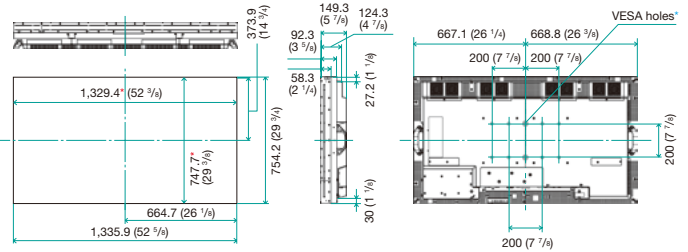## Environmentally Friendly Design

The PN-V602 conforms to the RoHS Directive restricting the use of hazardous substances.

Specifications (tentative)

Model Name		PN-V602
Installation		Landscape / Portrait
LCD Panel		60-inch widescreen (152.4 cm diagonal), UV²A LCD
	Max. Resolution	1,366 x 768 pixels
	Max. Display Colours (approx.)	16.77 million colours
	Pixel Pitch (H x V)	0.973 x 0.973 mm
	Max. Brightness*1	1,500 cd/m²
	Contrast Ratio	1,000,000 : 1 (local dimming set to HIGH) 5,000 : 1 (without local dimming)
	Viewing Angle (H/V)	176°/176° (CR ≥ 10)
	Active Screen Area (W x H)	1,328.8 x 747.1 mm (52 ⁵/₈" x 29 ⁷/₁₆")
	Response Time	6 ms (gray to gray, avg.)
Computer Input	Video	Analogue RGB (0.7 Vp-p) [75 Ω], Digital (conforms to DVI 1.0 standards)
	Synchronisation	Horizontal/vertical separation (TTL: positive/negative) Sync-on-green, Composite sync (TTL: positive/negative)
	Plug & Play	VESA DDC2B
	Power Management	VESA DPMS, DVI DMPM
Video Colour System		NTSC (3.58 MHz, 4.43 MHz)*2 / PAL / PAL60 / SECAM
Input Terminals*3	Standard	PC analogue: Mini D-sub 15-pin x 1*4, HDMI (1080p compatible) x 1*5, 3.5 mm-diameter mini stereo jack x 1, Video*4*6, Component video*4*6, RS-232C: D-sub 9-pin x 1, Control Kit jack x 1
	Via Optional PN-ZB02 Board	PC digital: DVI-D 24-pin (HDCP compatible) x 1, PC analogue: BNC x 1*7*8*9, Video: BNC x 1*6, S-Video x 1, Component video: BNC (Y, Cb/Pb, Cr/Pr) x 1*6*7, Audio: RCA pin (L/R) x 2
Output Terminals*3	Standard	Audio: RCA pin (L/R) x 1, RS-232C: D-sub 9-pin x 1
	Via Optional PN-ZB02 Board	PC digital: DVI-D 24-pin x 1, External speaker: 10W + 10W (6 Ω)
Input/Output Terminals*3	Via Optional PN-ZB02 Board	LAN port (10Base-T/100Base-TX)
Mounting		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
Power Consumption		510W
Environmental Conditions	Operating Temperature	0°C to 40°C
	Operating Humidity	20% to 80% RH (no condensation)
Dimensions (W x D x H) (approx.)		1,335.9 x 149.3 x 754.2 mm (52 ⁵/₈" x 5 ⁷/₈" x 29 ¹¹/₁₆") (Display section only, not including protrusions)
Weight (not including PN-ZB02) (approx.)		44 kg (97 lbs)

*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 Requires separately sold PN-ZB02 Interface Expansion Board. *3 Use a commercially available connection cable for PC and other video connections. *4 The mini D-sub 15-pin terminal can be used for PC analogue, video, or component video, all of which are selectable from the menu. When used with a video or component video source, a commercially available conversion cable is required. *5 For both PC and AV components. *6 When the PN-V602 is equipped with the optional PN-ZB02 board, either the LCD monitor's standard-equipped video and component terminals or the PN-ZB02's video and component terminals can be selected for use from the menu. *7 The analogue and component BNC terminals are switchable. Use the menu to select. *8 For the proper display of 1,366 x 768 images, a separately sold graphics board with appropriate specifications is required. Consult your Sharp representative for more information. *9 Does not support plug & play. DESIGN AND SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.
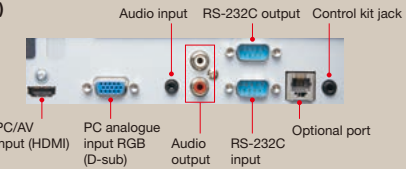
Dimensions
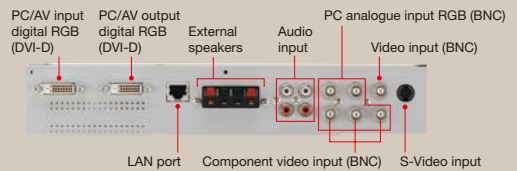

Units: mm (inch)
* Screen dimensions
* To use the VESA-standard mounting bracket, use M6 screws that are 8 to 10 mm plus the thickness of the bracket.

Input/Output Terminals

(standard)

Audio input, RS-232C output, Control kit jack
PC/AV input (HDMI), PC analogue input RGB (D-sub), Audio output, RS-232C input, Optional port

(option) PN-ZB02 Interface Expansion Board

PC/AV input digital RGB (DVI-D), PC/AV output digital RGB (DVI-D), External speakers, Audio input, PC analogue input RGB (BNC), Video input (BNC)
LAN port, Component video input (BNC), S-Video input

Other Options

■ **PN-ZR01 : Control Kit**
(remote controller and remote control sensor box)

■ **PN-ZR32 : Long Mirror Frame**
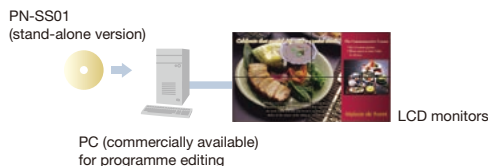
■ **PN-ZR33 : Short Mirror Frame**

Sharp Digital Signage Software (option)

Sharp Digital Signage Software is a versatile management software package that provides total support for the creation, scheduling, distribution, and display of a wide range of content for the PN-V602.

■ PN-SS01 Stand-Alone Version

In stand-alone systems, PN-SS01 software enables programmes to be edited on a single PC for display on LCD monitors according to a set schedule. Programmes can be transferred to another client* via a USB thumb drive.

Stand-Alone System Configuration**

PN-SS01 (stand-alone version)
PC (commercially available) for programme editing
LCD monitors

* Each client represents a separate PC and Sharp LCD monitor.
** Depending on the system, additional hardware such as a graphics board may be required.
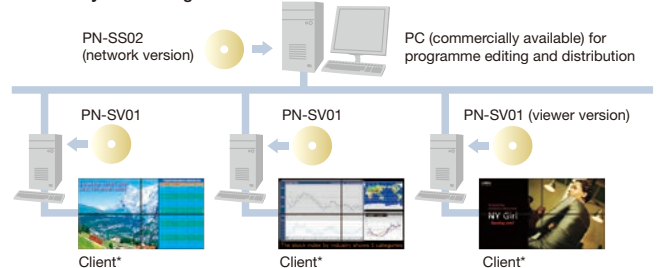
■ PN-SS02 Network Version

In network systems, PN-SS02 software enables programmes to be edited and stored on a networked PC then distributed via the network to up to 100 clients* according to a set schedule.

Note: Networked clients must use PN-SV01 viewer version software

■ PN-SV01 Viewer Version

Used on the client* side, PN-SV01 viewer software allows programmes edited with PN-SS01 or PN-SS02 software to be displayed on the client's LCD monitors according to a set schedule.

Network System Configuration**

PN-SS02 (network version)
PC (commercially available) for programme editing and distribution
PN-SV01, PN-SV01, PN-SV01 (viewer version)
Client*, Client*, Client*

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