

SHARP

108" class LCD Monitor
LB-1085 2008-9

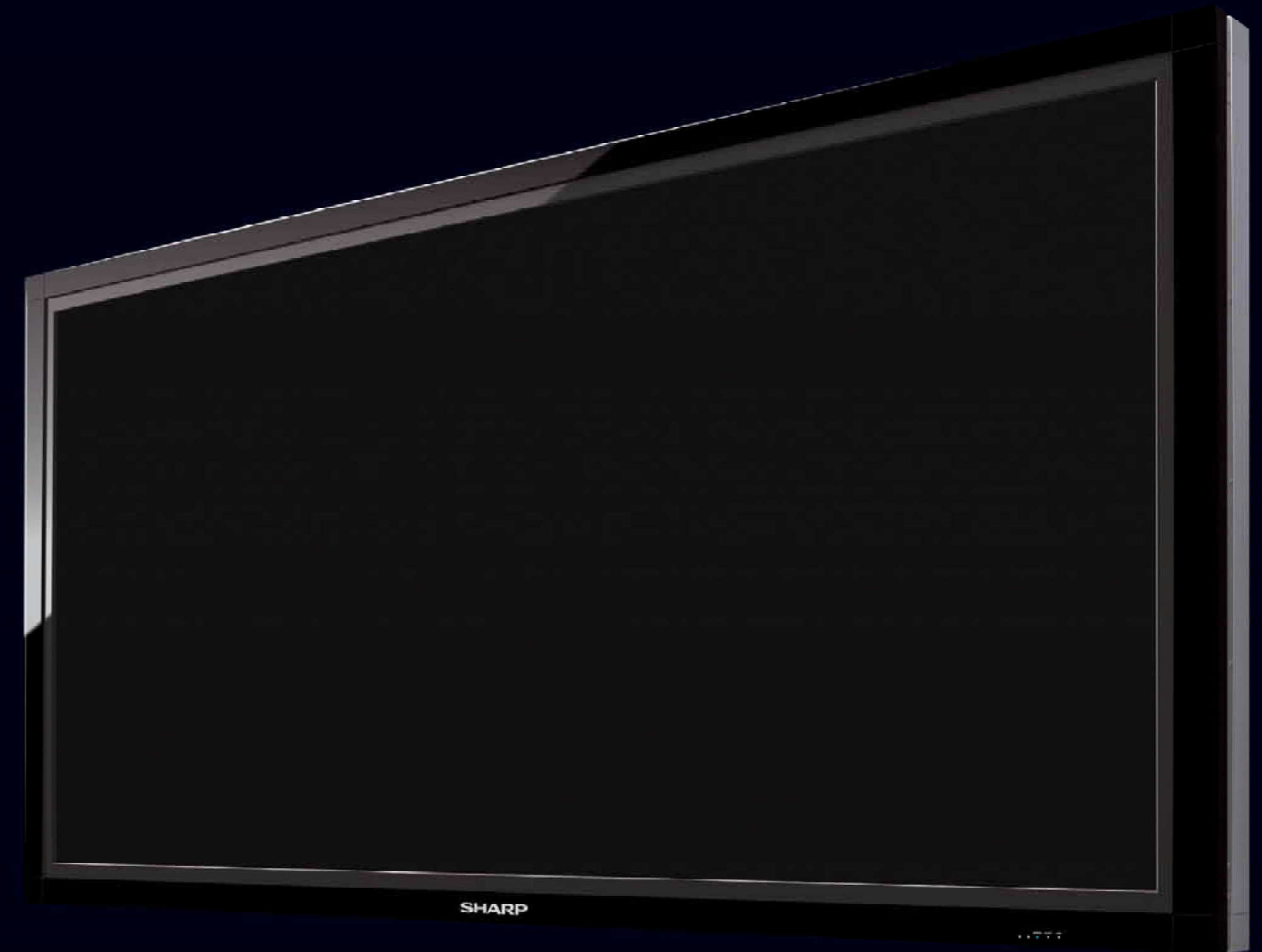
SHARP

Surprising performance — the world's largest* 108" class LCD for professional use.

108"

With exceptional size and quality,
the Sharp 108” class LCD redefines the possibilities of LCDs.

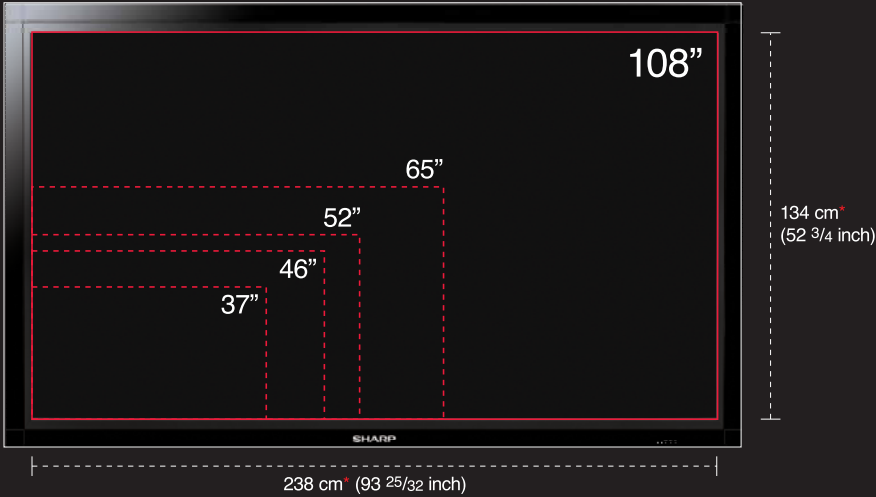
LCDs take another step forward to lead the world. A 108” class LCD monitor with a breathtakingly large screen that satisfies all your demands with its full 1080P High-Definition Sharp LCD panel. The ASV low-reflection black TFT LCD monitor with high-brightness, high-contrast features enables outstanding moving images as well as high-visibility data displays. With a durable design, capable of withstanding 24/7 non-stop operation, the Sharp 108” class LCD also benefits from a low power-consumption that is only possible with LCD monitor. This truly next generation display screen remains beautiful while catering for the harsh conditions of business and professional use.



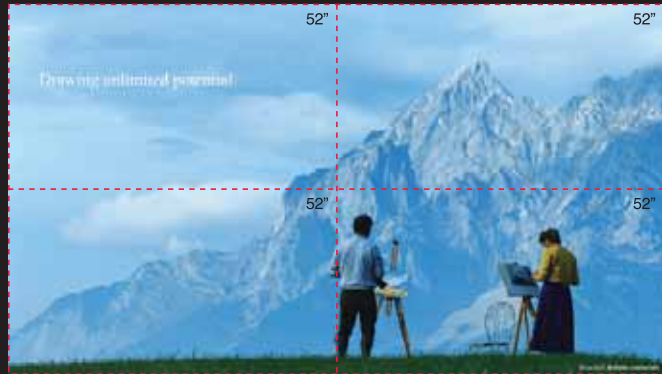
The power of world’s largest* 108” class

■ Extreme size LCD Panel

The world’s largest* 108” class LCD panel. Approximately 238 cm (93 25/32 inch) wide and 134 cm (52 3/4 inch) high, the dynamic impact of the screen size which roughly equals four 52-inch monitors brings images to life with the highest impact even in large open areas.



*Monitor Screen Size



Our previous 52-inch model (used for 4-screen multi-displays)

■ ASV Low-Reflection Black TFT LCD

Uses the ASV low-reflection black TFT LCD that displays images with beautiful quality even in bright environments without hindrance from sunlight or lighting. The 176-degree field of vision also allows images to be seen clearly from any direction ensuring your message is conveyed in all locations to all passers by.



Conventional LCD



ASV low-reflection black TFT LCD

■ High-Brightness, High-Contrast

The high-brightness panel enables all images on the screen to be delivered clearly even in bright environments. The high-contrast characteristics maximize the use of digital screen technology in all commercial environments.



Example of a low contrast LCD



Example of a high-brightness, high-contrast LCD

■ Full High-Definition

A full high-definition LCD with 1,920 x 1,080 pixels ensures that none of the image quality or dynamic impact is lost, such as in high-quality video, graphic charts, graphs, detail line drawings and fine illustrations.



High-Definition (1,366 (W) x 768 (H) pixels)

Full High-Definition

Equipped with superior environmental performance in consideration of ecological features

■ Low power-consumption design

The low power-consumption design aims at reducing CO₂ emissions, which are one of the causes of global warming. Despite the screen being four times larger than our 52-inch model (our previous model) the LB-1085 consumes less than four times the power (325 W x 4,) at 1,130 W. This power-saving will result in benefits to business users where long operation times are required.



LB-1085



Our previous 52-inch model (used for 4-screen multi-displays)

■ Reduction of substances harmful to the environment

Various chemical substances that have a detrimental affect on the global environment such as lead, mercury, cadmium, hexavalent chromium, PBB (polybrominated biphenyl,) and PBDE (polybrominated diphenyl ether)—have been reduced.



*The stand cover is optional.

Digital Signage



Airport

The impact of the large-screen 108” class LCD stands out in large public spaces.

The wide viewing angle and low reflection ensure that the monitor is fully visible from any viewpoints.



Shopping Mall

Applications Transportation, financial institutions, stadiums, amusement facilities, hotels, etc.

- The ASV low-reflection black TFT LCD suppresses glare from sunlight and electric lights and is easily visible even from angles.
- The bright screen is clearly visible even in bright environments.
- Fan-less design that reduces dust penetration.

Space Presentation



Public Office

The high-definition, high-brightness and high-contrast fully exploit the superior presentation abilities of LCD technology.

The vivid and breathtaking expressive power of LCD monitors the true beauty and scale of any content as it was originally intended.



Broadcasting Station

Applications Studios, movie theaters, museums, showrooms, promotional space, etc.

- The full spec HD Ready 1080P definition enables a wide range of content, from pictures to video, all faithfully reproduced.
- The contrast is automatically adjusted in accordance with the scene and the high-definition capabilities make sure everything is displayed with the correct levels of brightness for easy viewing.
- A slim and sleek form factor that complements the design of its surrounding for stylish presentations.

High-definition capabilities to accurately convey information, while the large screen gives a sense of being in the same room.

The large screen enables everything to be displayed easily visible fashion. This ensures information being discussed is accurately and clearly read.

- The large 108” class screen enables video conferencing to be carried out closely without the usual sense of distance.
- In addition, when images of the participants and data are projected onto the screen at the same time at video conferences, both are clearly displayed.
- The fan-less, silent design enables meetings and lectures to be held in quiet environments.



Educational Institution

Applications Schools, training centers, multi-purpose halls, etc.

Presentation



Video Conference

A tough, power-conscience design that can withstand 24/7 non-stop operation.

The high reliability and the excellent connectivity satisfy harshest and most demanding usage conditions.

- The vividness of the screen display is maintained even when used over long periods of time.
- The high-definition large screen ensures that even the smallest piece of date can be displayed vividly so that no one overlooks it.
- Equipped with PC and AV terminals as standard gives ultimate flexibility when connecting to a wide range of peripheral equipment.



Factory

Applications Research institutes, public organizations, control rooms, public facilities, etc.

Monitoring



Surveillance Center

Reliability and Flexibility to Serve Demanding Business Applications

■ 24/7*

With the reliability of 24/7 non-stop operation and the screen maintaining its vividness even when used over long periods of time, the LB-1085 it is the optimum display solution for commercial facilities, stations, airports and other locations where extended use is demanded.

*Note that continuous display of a static image for an extended period of time may result in temporary image memory retention on the screen.

■ Versatile Interface

The LB-1085 is fitted with versatile PC and AV terminals as standard to which a wide range of equipment can be connected, including HDTV recorders, Blu-Ray players and personal computers that support HDMI*. RS-232C control also enables the power to the LCD to be switched on and off and the input channel to be selected remotely by PC.

HDMI *HDMI, the HDMI Logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.



The terminals have been carefully laid out for stress-free cable layout.

■ Fan-less Design

Fan-less architecture is not only quiet but also easy on maintenance as there are no mechanical air-ventilation fans that often cause dust problems.

● Simulated Screen Images.

Other Functions

■ Active Contrast

Images are analyzed to provide optimal brightness and contrast levels for each scene. Dark scenes are displayed with authentic levels of gradation to provide video expression over a wide dynamic range.



Active Contrast: OFF



Active Contrast: ON

■ Quick Shoot Function

Improves the response time to ensure that fast action videos are displayed with clarity and vividness.



Quick Shoot : OFF



Quick Shoot : ON

■ Maximum Color Display of Approximately 758 Million Colors

The maximum display colors (approx. 758 million), roughly 45 times that of our conventional models (16.77 million) reproduces natural images with extremely detailed and smooth gradations.



Number of colors on conventional Sharp products (approximately 16.77 million colors)



LB-1085 (approximately 758 million colors)

■ Brightness Sensor

The brightness of the backlight is automatically optimized in accordance with surrounding brightness to ensure clear visibility in all environments. Brightness levels are automatically lowered in dark environments, saving power.



Dark Environment



Bright Environment

■ AV Mode

The screen modes can be selected to match videos from various sources such as PC and movie.



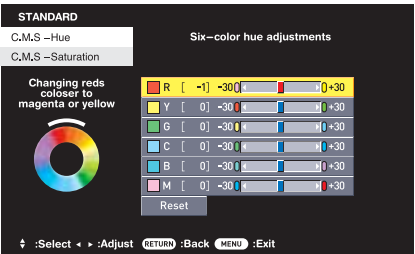
STANDARD (Standard mode)



DYNAMIC (Vibrant and dynamic color mode)

■ Video Adjustment Function

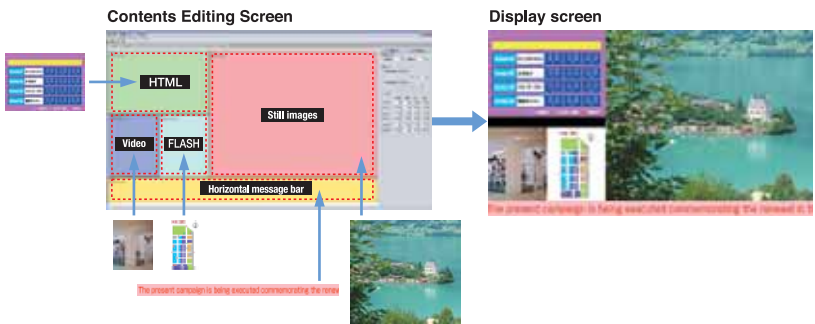
Fine video adjustments are possible such as for color temperature, hue, color saturation and 3D-Y/C.



SHARP Digital Signage Software Contents Delivery and Display System

This is management software that distributes and displays programmed still images, videos and other content posted together with pre-scheduled data on a network from a Content Delivery Server to LCD monitors.

- Four layout-free frameworks that support a diversified range of content, and two types of message bar that can be displayed horizontally or vertically with multi-language support.
- An easy operation with user-friendly interface that enables the simple setup of delivery time schedules and monthly schedules.
- Programs being played back can be monitored, and the power on / off and input control can be managed all from a remote location.
- Possible to reserve transmission times from the network to the LCD monitor. (PN-SS02 only)

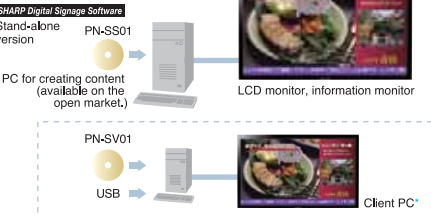


Stand-Alone System

PN-SS01 Stand-Alone Version.

A single LCD monitor is connected to a single PC.

Stand-Alone System Configuration Example



Network System

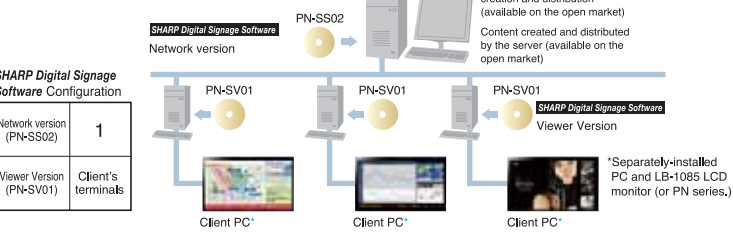
PN-SS02 Network Version.

Used by the network server. Equipped with a content creation and delivery function to enable created contents to be distributed to 100 clients via the network.

PN-SV01 Viewer Version.

Used by the client PC. Displays content received from the server (PC) in accordance with a preset schedule.

Network System Configuration Example



SHARP Digital Signage Software Operating Environment

| | | | |
|--------------------|---|------------------|--|
| Personal Computer | CPU-Celeron® M1.3GHz or faster (Pentium® 4 processor is recommended.) A high-performance CPU, such as the Pentium® 4 2GHz or faster, is required for programs including large volume of videos or content.*1 | Panel (PC use)*3 | LB-1085, PN series LCD monitors. |
| OS | Microsoft® Windows® 2000, XP, Microsoft® Windows Vista®, Microsoft® Windows Server® 2003 (English version) | Interface | USB port (only when USB memory is to be used.) LAN port (only network versions that enable TCP/IP communications.) |
| Memory | 256MB or more (512MB or more is recommended.)*1 | Miscellaneous | Microsoft® Internet Explorer® 6.0 or later, Microsoft® PowerPoint® Viewer 2003 / 2007 Microsoft® Windows Media® Player 9 or later.*4 Adobe® Flash® Player QuickTime Player 7 or later (when QuickTime content is to be played back.) |
| Hard Disk | Hard Disk: 20MB or more of free space (free space is needed for saving data.) | | |
| Display (PC use)*2 | Full-color display with a resolution of 1,024 x 768 dots or higher. | | |

*1 This operating environment must be available when using Microsoft® Windows Vista®. *2 For creating and editing programs and schedules. *3 Display used for displaying programs on the Stand-alone and Viewer Versions. *4 A codec (sold separately) might be required in some cases to play back video files.

Supported Files

| | |
|-----------------------------------|---|
| Background, Display Frames 1 to 4 | MPEG, MPEG1, MPEG2, MPEG4, WMV (format for playing back on Windows Media® VIDEO - Windows Media® Player,) MOV (format for playing back on QuickTime Player,) Adobe® Flash® (format for playing back on Adobe® Flash® Player,) PowerPoint®, HTML, JPEG, BMP, GIF, PNG. |
| Audio | WAVE, MP3, AU, AIFF, WMA (format for playing back on Windows Media® Audio - Windows Media® Player,) MIDI, MOV (format for playing back on QuickTime Player.) |

● Not all videos, sub-titles or other content can be used, depending on CPU, memory and other PC specifications.

LCD panels designed in accordance with leading-edge LCD and environmental technologies and manufactured at the reliable Kameyama Plant.

The Kameyama Plant brings together LCD technology and television production technology under one roof. With a co-generation system providing heat and electricity supply, a solar power generator system within the plant and a system to re-circulate 100% of all water used in manufacturing processes Sharp Kameyama factory truly is based on leading-edge environmental technology. The 108" class LCD monitor uses an LCD panel manufactured by the Kameyama Plant. We proudly bring you the highest levels of LCD and environmental technology.



The City of Sakai to host an Industrial Complex for the 21st Century

An integrated company providing the world with power-saving LCD monitors and clean-energy solar batteries that does not emit CO₂. In this environmentally aware era that demands both the creation of energy and energy-saving devices Sharp are creating a true industrial complex for the 21st century. Promoting unprecedented business opportunities that transcend the boundaries of corporate affairs based on a single vision shared by many different industries.



(Rendering of the completed complex.)

>>> Specifications

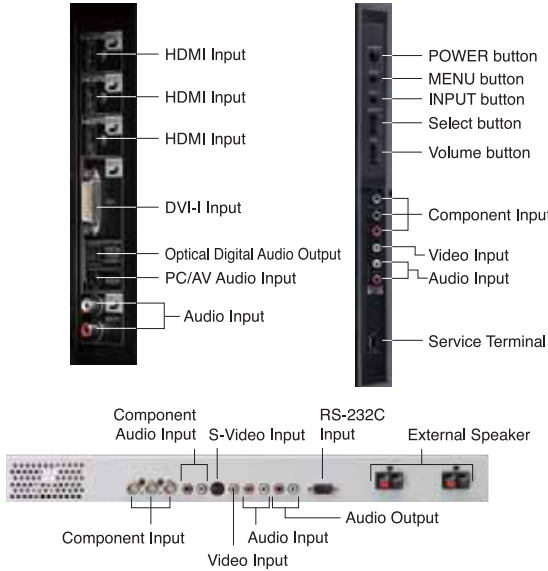
| | | |
|---|--|---|
| Model | LB-1085 | |
| Installation | Landscape | |
| LCD Panel | 108" class Wide-screen (Diagonal 2,732.7 mm (107 37/64 inch)) | |
| | Maximum Resolution | 1,920 x 1,080 pixels |
| | Maximum Display Colors | Approximately 758 million colors |
| | Pixel Pitch | H 1,240.5 mm x V 1,240.5 mm |
| | Maximum Brightness | 400 cd/m ² |
| | Contrast Ratio | 1,200:1 |
| | Viewing Angle (H/V) | 176°/176° (contrast ratio ≥10) |
| | Screen Size | 2,381.76 mm (93 25/32 inch) x 1,339.74 mm (52 3/4 inch) |
| | Response Time | 6 ms (Gray to Gray, Avg.) |
| | Video | Analog RGB, Digital (DVI 1.0) |
| Computer Input | Plug & Play | VESA DDC2B |
| | Power Management | Not supported |
| Video Color System | | |
| Input Terminal | PC/AV Video | DVH1 29-pin 1 channel*1 |
| | PC/AV Audio | φ3.5 mm mini-stereo jack 1 channel |
| | Serial | RS-232C (D-sub 9-pin x 1) |
| | HDMI | 3 channels |
| | Video | 2 channels |
| | S-Video | 1 channel |
| | Component | 2 channels (one of which is BNC) |
| | Audio | RCA pin (L/R 4 channels) |
| Output Terminals | Audio | RCA pin (L/R 1 channel) |
| | Speakers | Speaker output 15 W + 15 W (4 Ω) |
| Power Supply | | |
| AC200-240V (Single-phase, 3-wire type) 50/60Hz | | |
| Power Consumption | | |
| 1,130 W (0.8 W on standby) | | |
| Environmental Conditions | Operating Temperature | 0°C (+32°F) to 40°C (+104°F) |
| | Operating Humidity | 20% to 80% RH (no condensation) |
| Dimensions (excluding stand) | | |
| Width approx. 2,572 mm (101 17/64 inch) x Depth approx. 204 mm (8 3/64 inch) x Height approx. 1,550 mm (61 1/32 inch) | | |
| Weight | | |
| Approximately 195 kg (429.9 lbs.) (excluding stand) | | |
| Package Dimensions (Weight) | | |
| Width approx. 2,755 mm (108 15/32 inch) x Depth approx. 745 mm (29 11/32 inch) x Height approx. 2,020 mm (79 17/32 inch), (Approximately 317 kg (698.9 lbs.)) | | |
| Main Accessories | | |
| AC power cord, remote controller and batteries, operating manual, bolt caps, power cord holder | | |

>>> Supported Display Mode

| PC | Resolution (Pixels) | | Horizontal Frequency (kHz) | Vertical Frequency (Hz) |
|-------|---------------------|---------------|----------------------------|-------------------------|
| PC | VGA | 720 x 400 | 31.5kHz | 70Hz |
| | | | 31.5kHz | 60Hz |
| | | 640 x 480 | 37.9kHz | 72Hz |
| | | | 37.5kHz | 75Hz |
| | SVGA | 800 x 600 | 35.1kHz | 56Hz |
| | | | 37.9kHz | 60Hz |
| | | | 48.1kHz | 72Hz |
| | | | 46.9kHz | 75Hz |
| | XGA | 1,024 x 768 | 48.4kHz | 60Hz |
| | | | 56.5kHz | 70Hz |
| | | | 60.0kHz | 75Hz |
| | | | | |
| | WXGA | 1,360 x 768 | 47.7kHz | 60Hz |
| | SXGA | 1,280 x 1,024 | 64.0kHz | 60Hz |
| | SXGA+ | 1,400 x 1,050 | 65.3kHz | 60Hz |
| | UXGA | 1,600 x 1,200 | 75.0kHz | 60Hz |
| | 720p | 1,280 x 720 | 37.5kHz | 50Hz |
| | | | 45.0kHz | 60Hz |
| 1080i | 1,920 x 1,080 | 28.1kHz | 50Hz | |
| | | 33.8kHz | 60Hz | |
| 1080p | 1,920 x 1,080 | 56.3kHz | 50Hz | |
| | | 67.5kHz | 60Hz | |

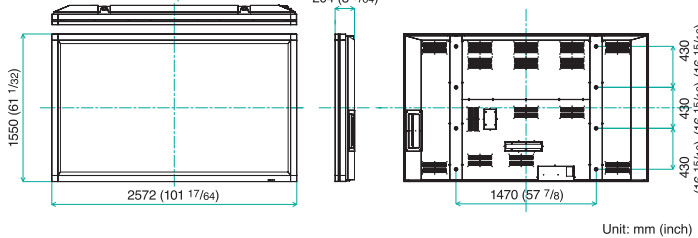
■ Check the connection operations between the unit and PC before prior to installation without fail. ■ There may be cases in which images are not displayed correctly depending on the computer in use, even if the display mode is within the range of supported display mode. ■ All figures are estimation. ■ VGA and XGA are registered trademarks of International Business Machines Corp.

>>> Terminals



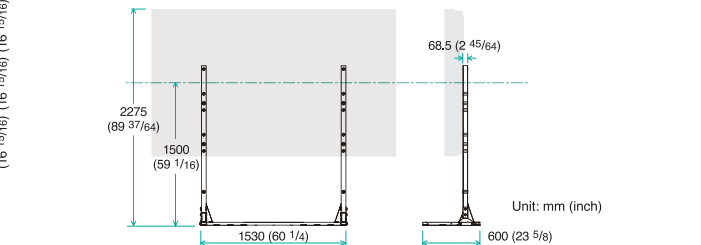
>>> Dimensions Chart

■ LB-1085



■ Stand * Stand installation (with the height of the screen center at 1,500 mm (59 1/16 inch) from the floor.)

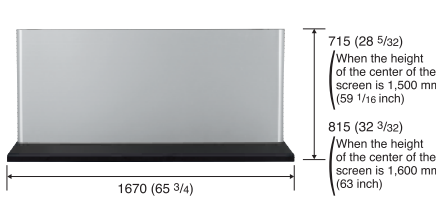
- Height of the screen center (2 steps): 1,500 mm (59 1/16 inch)/1,600 mm (63 inch) (Height from the floor to the screen center.)
- Dimensions of footprint contact with the floor: Width approx. 1,530 mm (60 1/4 inch) x Depth approx. 600 mm (23 5/8 inch)
- *Weight: Approximately 55 kg (121.3 lbs.)



*Either the PN-ZS1P or PN-ZS1C is required to install the display at the 1,500 mm (59 1/16 inch)/1,600 mm (63 inch) height.

>>> Peripheral Equipment

■ Stand Cover: PN-ZS1C



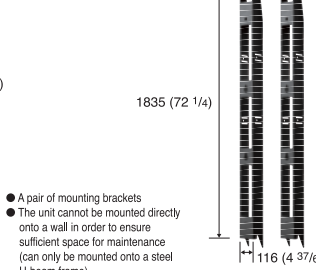
- Stand Cover
- Supports center of the screen heights of 1,500 mm (59 1/16 inch) and 1,600 mm (63 inch)
- Vertical Part: Stainless steel/silver color, Base: Steel/black color
- Extension Support is included
- *Weight Approx. 77 kg (169.8 lbs.), Package size 1,785 mm (70 3/32 inch) x 790 mm (31 1/64 inch) x (H) 400 mm (15 3/4 inch)
- (The black extension support is installed between the vertical part and the base when the screen center height is adjusted to be 1,600 mm (63 inch))

■ Protection Panel: PN-ZH10



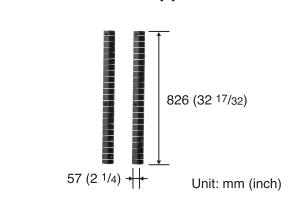
- AR coated tempered glass
- Glass Thickness: 5 mm (13/64 inch)
- Frame Color: Black (mat)
- *Weight Approx. 98 kg (216 lbs.), Package size 2,755 mm (108 15/32 inch) x 745 mm (29 11/32 inch) x (H) 1,850 mm (72 27/32 inch)
- (The ambient temperature around the monitor must be within a range of 0°(+32°F) to 35°C (+95°F) when the protective panel is attached.)

■ Mounting Bracket: PN-ZK10



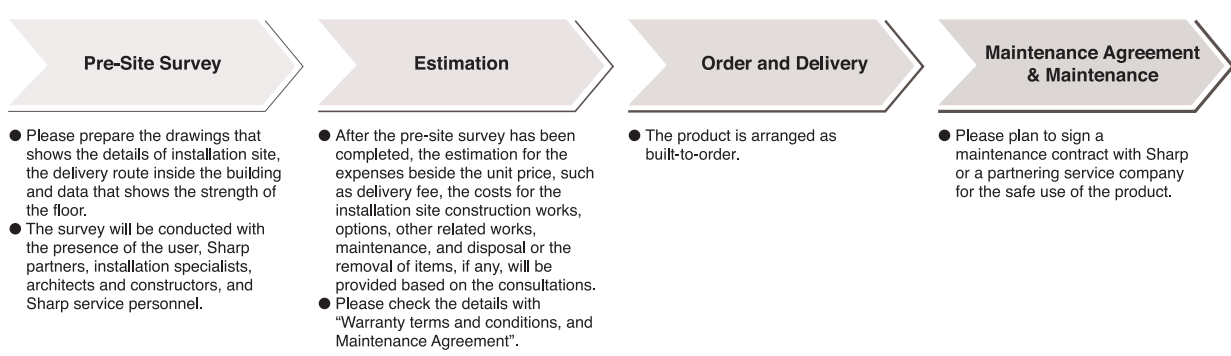
- A pair of mounting brackets
- The unit cannot be mounted directly onto a wall in order to ensure sufficient space for maintenance (can only be mounted onto a steel H-beam frame).
- *Weight Approx. 23 kg (50.7 lbs.), Package size 2,040 mm (80 21/64 inch) x 305 mm (12 1/64 inch) x (H) 145 mm (5 23/32 inch)

■ Extension Support: PN-ZS1P



- This is required for the installation with the center of the screen 1,500 mm (59 1/16 inch) to 1,600 mm (63 inch) from the floor in case of the PN-ZS1C stand cover not in use.
- *Weight Approx. 6.5 kg (14.3 lbs.), Package size 920 mm (36 15/64 inch) x 200 mm (7 7/8 inch) x (H) 95 mm (3 3/4 inch)

>>> From Purchasing to Installation of the product



Notice

- Before the purchase, Sharp or partnering company will conduct a pre-site survey to verify the delivery route and to check the detail conditions of the installation site.
- In case the delivery route is not secured or the condition at the installation site is found not suitable for the installation of the product, such as for the safety reason, then Sharp / Sharp partnering company may ask to reconsider the purchase of the product.
- There may be cases in which reinforcement work (floor and walls) and power supply installation (AC200-240V (Single-phase, 3-wire type) 50/60Hz) are necessary depending on conditions at the installation site.
- A standard stand or mounting bracket (sold separately) will be necessary for installation. When the standard stand is used, anchor bolts should be required to fix the stand to the floor in order to prevent the unit from toppling over.
- The LB-1085 has been designed for horizontal placement (landscape orientation) in an indoor environment. It cannot be installed vertically (portrait orientation), suspended from the ceiling, tilted or laid flat.
- Sufficient work space for maintenance and an open route to carry the unit out from the installation site must be maintained after installation.
- The TFT color LCD panel is made utilizing high precision technology. However, there may be minute points on the screen where pixels may be inactive or permanently lit. If viewed at an acute angle, there additionally may appear to be uneven brightness or color. These are not malfunctions, but common phenomena, and will not affect the performance of the LCD monitor.
- The backlight used in the LB-1085 has a life of approximately 24,000 hours (this will differ in accordance with conditions of usage.) Backlights are replaceable for a fee.
- The LB-1085 is built to order.
- Other precautions and points to note will be explained and confirmed during the pre-installation checks.

■ More About the Products

- Using the product
- Mounting the monitor on the wall requires special expertise and the work must be performed by an authorized SHARP dealer. You should never attempt to perform any of this work yourself. Our company will bear no responsibility for accidents or injuries caused by improper mounting or mishandling.
- The TFT color LCD panel used in this monitor is made with the application of high precision technology. However, there may be minute points on the screen where pixels never light or are permanently lit. Also, if the screen is viewed from an acute angle there may be uneven colors or brightness. Please note that these are not malfunctions but common phenomena of LCDs and will not affect the performance of the monitor.
- Continuous display of static images may result in temporary image memory effect on the screen.
- Using this monitor's screen-size switching or dual-screen display functions to compress or expand the screen for commercial or public viewing in establishments like café or hotels may infringe on the rights of the creators, as protected by Copyright Law, so please be careful.
- Catalog Notes
- Product specifications are subject to change without notice. Colors of products shown in this catalog may differ slightly from actual colors due to the limitations of the printing process.
- The displays shown on the LCD monitors appearing in photographs in this catalog are simulated images.

SHARP

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