Applications –
Projectors Suited to Every Needs

Showrooms and Exhibitions
A projector delivering true-to-life color images coupled with explanatory panels allow more dynamic presentations to be staged to achieve greater impact at events such as product introductions in showrooms or exhibition halls.

Advertising and Cinema-Adverts
Advertisement images with accurate color reproduction can win over new customers. For example, facial skin tones can be faithfully reproduced for a cosmetic ad.

Educational Use
LCD projectors are being increasingly used to show students more accurate colors in art classes of elementary schools.

Product Planning for Design Divisions
In many cases, the design division of an automobile manufacturer uses projectors for design and simulation applications. These design divisions would prefer to use a LCD projector because the designers know a LCD ensures a faithful color reproduction.

Event and Amusement
Application to interactive attractions, such as projecting onto ceilings and floors in a shopping mall.
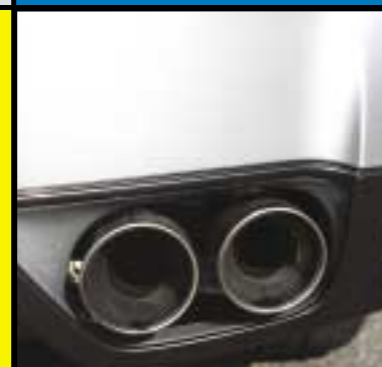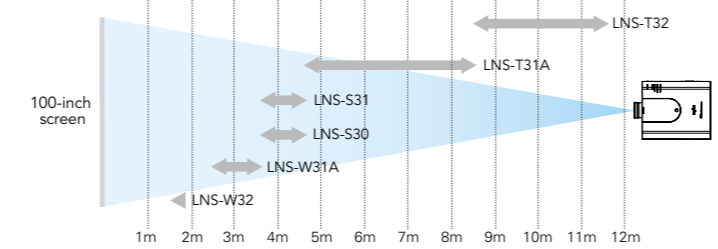

**QUADRIVE**
PLC-XP200L
XGA 7000 lumens

Major Options
Optional Lenses

Part Number	LNS-W32	LNS-W31A	LNS-S30	LNS-S31	LNS-T31A	LNS-T32
Type	Short Fixed Lens	Wide Zoom Lens	Standard Zoom Lens	Standard Zoom Lens	Long Zoom Lens	Ultra Long Zoom Lens
Image						
Throw Distance	0.8 : 1	1.3 - 1.8:1	1.8 - 2.3 : 1	1.8 - 2.3 : 1	2.3 - 4.2 : 1	4.2 - 5.8 : 1
Focal Length	22.33 mm	34 – 48 mm	48.4 – 62.8 mm	48.2 – 62.6 mm	64 – 112 mm	108.2 – 151.4 mm
Lens Shift U/D	1 : 1	10 : 0 – 1 : 1	10 : 0 – 1 : 1	10 : 0 – 1 : 1	10 : 0 – 1 : 1	10 : 0 – 1 : 1
Motor Driven	No	Yes	Yes	Yes	Yes	Yes
F Value	2.5	2.5 - 3.1	1.8 - 2.1	1.7 - 2.0	2.0 - 2.9	2.1 - 2.8
Net Weight	1.5 kg	1.8 kg	0.84 kg	1.3 kg	1.8 kg	1.51 kg

100-inch screen

LNS-T32
LNS-T31A
LNS-S31
LNS-S30
LNS-W31A
LNS-W32

1m 2m 3m 4m 5m 6m 7m 8m 9m 10m 11m 12m

Throw distance

Unit: m	LNS-W32	LNS-W31A		LNS-S30		LNS-S31		LNS-T31A		LNS-T32	
	Fixed	Wide	Tele	Wide	Tele	Wide	Tele	Wide	Tele	Wide	Tele
40"	-	1.0	1.4	1.4	1.8	1.4	1.8	1.8	3.3	3.5	4.8
60"	-	1.5	2.2	2.1	2.8	2.1	2.8	2.7	5.0	5.1	7.1
80"	1.3	2.0	2.9	2.9	3.8	2.9	3.7	3.7	6.8	6.8	9.4
100"	1.6	2.5	3.6	3.6	4.7	3.6	4.7	4.6	8.5	8.4	11.7
150"	-	3.8	5.5	5.4	7.2	5.5	7.1	7.0	12.8	12.6	17.5
200"	-	5.1	7.4	7.3	9.6	7.3	9.5	9.4	17.1	16.7	23.3
250"	-	6.4	9.2	9.1	12.0	9.2	11.8	11.8	21.4	20.8	29.1
300"	-	7.7	11.1	11.0	14.4	11.0	14.2	14.2	25.7	25.0	34.9

External dimensions (unit: mm)

Air Intake Vent
Exhaust Vent
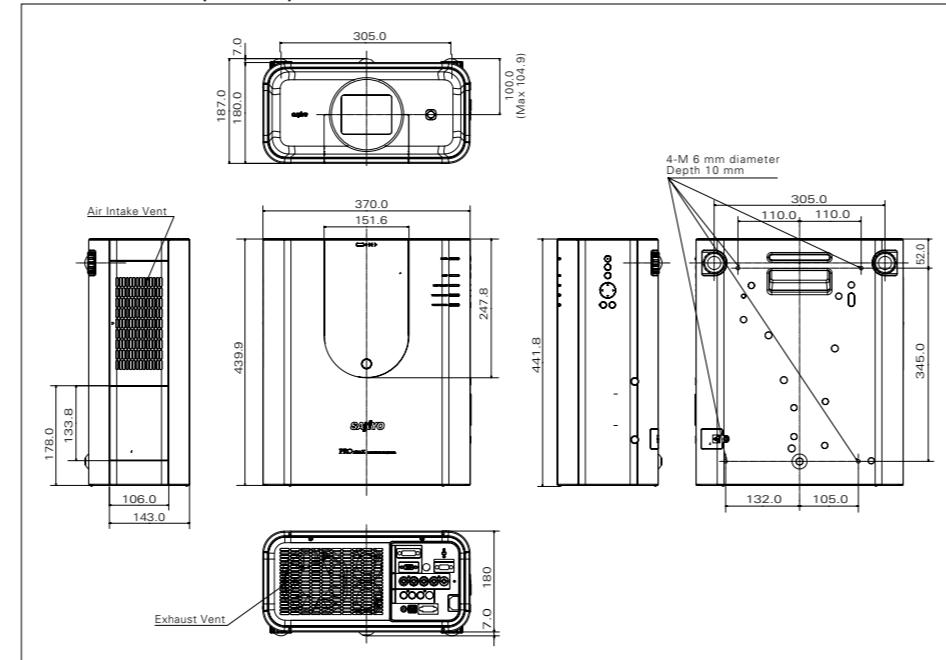
All products manufactured by the Projector Division of SANYO's Digital System Company employ a quality management system that has undergone the inspection and registration process of the ISO 9001:2000 international standard.

SANYO's Digital System Company has received ISO 14001 certification for the environmental management system used in its factory.

http://www.sanyo-lcdp.com/english/

Caution: Please consult the instruction manual to ensure safe and proper operation of the product.

pixelworks Pixelworks ICs are used in this projector

Specifications

Model number	PLC-XP200L
System	RGB liquid crystal shutter protection system
LCD panel — Size	1.3 inch x 3, Aspect Ratio 4:3
LCD panel — Number of pixels	786,432 (1024 x 768) x 3 ; Total pixels 2,359,296
Color Control Device	1
Lens	Sold Separately
Lamp	330 W NSHA Lamp
Projection size	31 to 400 inches (projection distance differs by lens)
Throw distance	Differs depending on installed lens
Color reproduction	Full color (1.07 billion colors) *when in using with video
Brightness[1]	7,000 lumens
Uniformity[1]	90 %
Contrast ratio[1]	2,200:1 (full on / full off)
Scanning frequency	Horizontal: 15-100 KHz, Vertical: 48-100 Hz, Dot Clock: 180 MHz or less
Resolution RGB	1024 x 768 dots (WUXGA resizing display possible)
Computer compatibility	WUXGA / UXGA / SXGA+ / SXGA / WXGA (Compression) XGA / SVGA / VGA
Color system	PAL / SECAM / NTSC / NTSC 4.43 / PAL-M / PAL-N
Input terminals — Input 1	Image: DVI-D x 1 (HDCP compatible[2]), mini D-sub 15pin x 1
Input terminals — Input 2	Image: BNC x 5 (RGBHV/ Y,Pb/Cb,Pr/Cr/ Video)
Input terminals — Input 3	Image: RCA x 3 (Y,Pb/Cb,Pr/Cr/ Video), S-Video x 1
Communication terminals	AUDIO IN: Stereo mini-jack x 2, AUDIO OUT: Stereo mini- jack x 1 USB port[3]: type B x 1, Serial port: D-sub 9-pin x 1 PJ-Net Organizer port: D-sub 24pin x 1 Wired remote jack: Stereo mini jack x 1
Output terminals	Image: mini D-sub 15-pin x 1 (analog RGB)
Fan noise	35.0 dBA (Eco1 mode)
Operating temperature	5 – 40 °C
Power supply	AC 100 V - 240 V (auto voltage), 50/ 60 Hz
Power consumption	499 W (Standby:24.5 W)
Dimensions (W x H x D)	370.0 (W) x 187.0 (H) x 439.9 (D)
Weight	11.4 kg (without lens)
Standard accessories	Owner's manual(CD-ROM), AC power cord (x 1), wireless / wired remote control (x 1), AAA-size dry batteries (x 2) supplied, USB cable (x 1), D-sub15 to D-sub15 cable, PIN code label, lens attachment (x 1), light shield (x 2), lens spacer

*1 The figures are averages of all products at the time of shipment, and are indicated in accordance with JIS X6911: 2003 Data Projector Specifications Format. The measurement method and conditions are described in Appendix 2.
*2 DVI input images may not appear depending on the change of HDCP specifications.
*3 The USB interface cannot be guaranteed to operate with all USB equipment.
Replacement Lamp type No: POA-LMP124(610 341 1941)
All trademarks and registered trademarks are the property of their respective trademark owners.

Terminals

XGA Multimedia Projector   PLC-XP200L
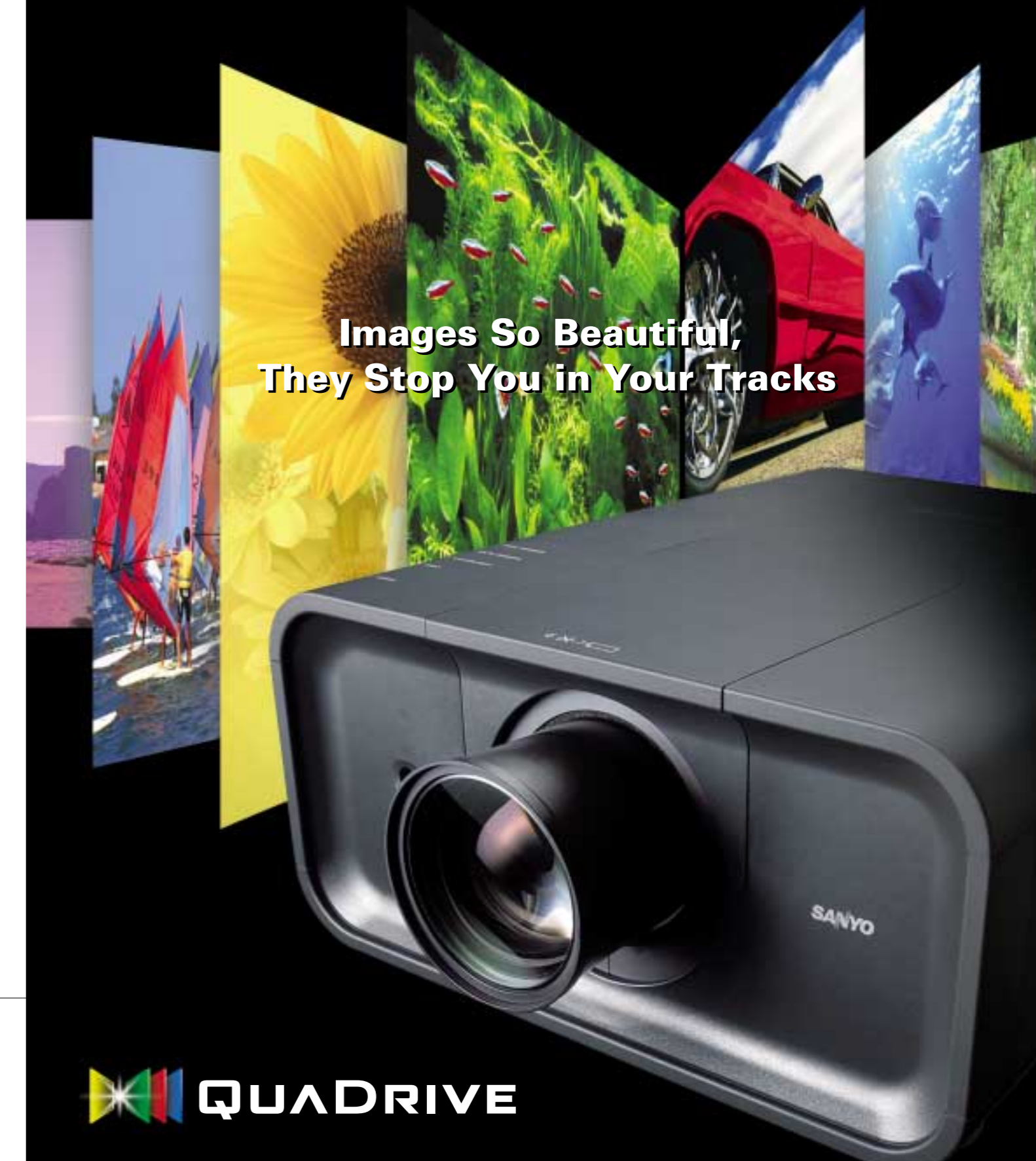
Images So Beautiful,
They Stop You in Your Tracks

QUADRIVE
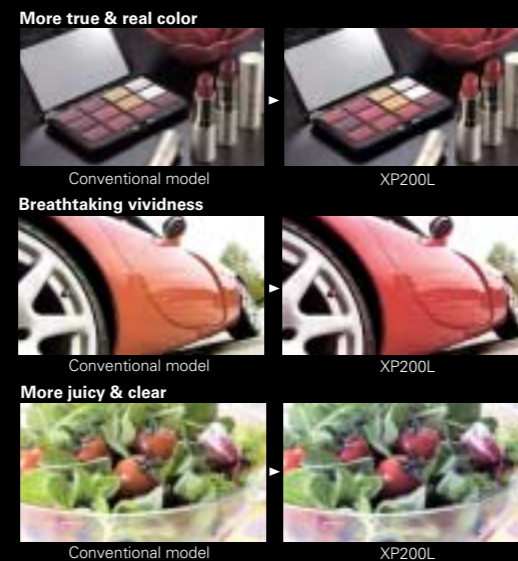
Advanced Technologies Designed for the Professional
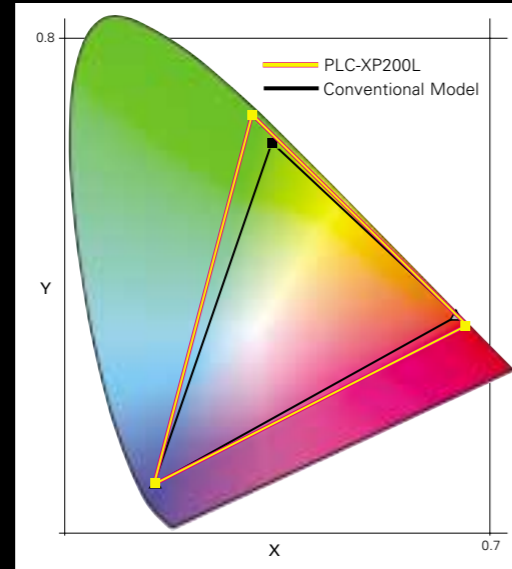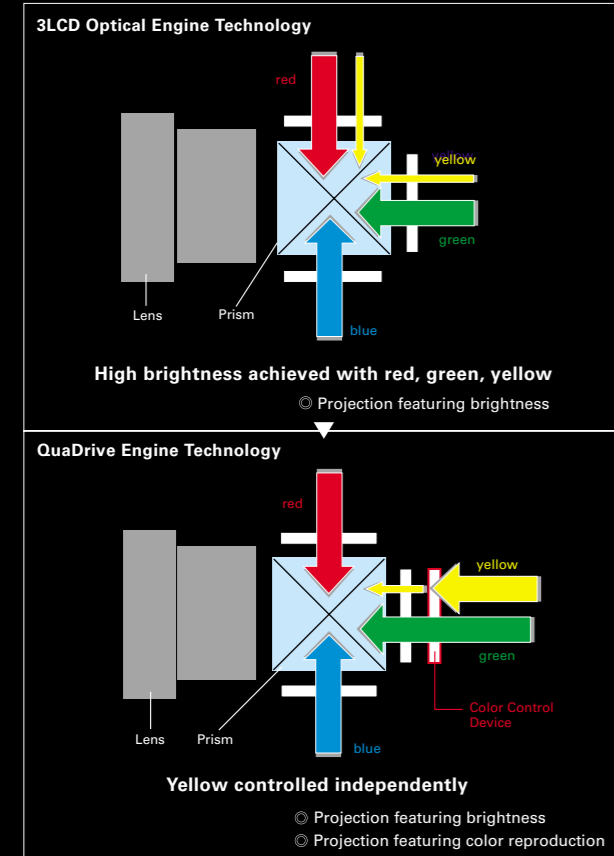
The stunning images produced by the QuaDrive engine willhold the attention of everyone in the room.
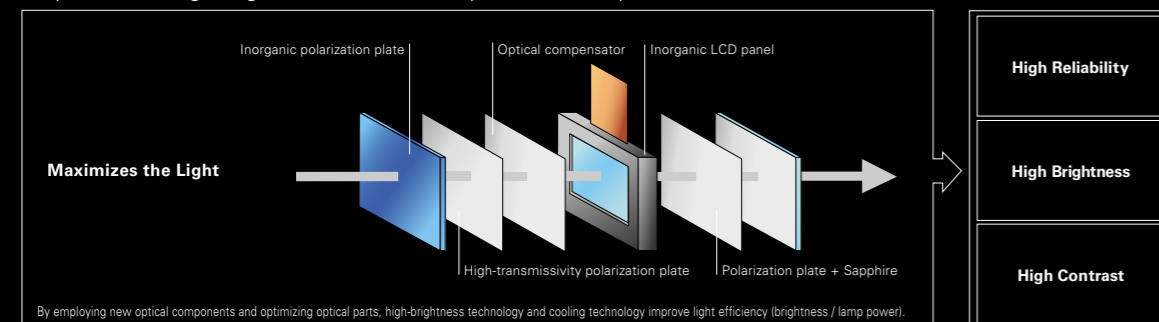
QUADRIVE

■ World's first*[1] QuaDrive Engine

The world's first*[1] "QuaDrive" optical engine in the XP200L is a newly developed and highly advanced version of the conventional 3LCD system, and features an additional Color Control Device. By controlling the amount of yellow light, the Color Control Device increases the level of color purity by approximately 20% compared with our previous model.*[2] This gives images remarkable levels of both brightness and color.
*[1] As of June 18. 2008 for projector *[2] PLC-XP100L

3LCD Optical Engine Technology

Lens Prism

High brightness achieved with red, green, yellow
○ Projection featuring brightness

QuaDrive Engine Technology

Lens Prism Color Control Device

Yellow controlled independently
○ Projection featuring brightness
○ Projection featuring color reproduction

We enhanced brightness by combining advanced optical components under optimal conditions. We also maximized cooling technology to increase light efficiency factors such as luminance and lamp output. Together, they achieve a high brightness level and low power consumption.

Maximizes the Light

Inorganic polarization plate Optical compensator Inorganic LCD panel

High-transmissivity polarization plate Polarization plate + Sapphire

By employing new optical components and optimizing optical parts, high-brightness technology and cooling technology improve light efficiency (brightness / lamp power).

High Reliability

High Brightness

High Contrast

PLC-XP200L
Conventional Model

More true & real color
Conventional model XP200L

Breathtaking vividness
Conventional model XP200L

More juicy & clear
Conventional model XP200L

■ Higher Brightness and Superior Images

Class-Leading 7,000 Lumens Brightness Excels in Large-Screen Projection

A bright 330-watt lamp (NSHA measurement) gives the PLC-XP200L a full 7,000 lumens of brightness, the highest in its class.* This makes it ideal for use in large halls, conference rooms and classrooms, as well as in digital signage applications.
* For transmissive LCD projectors weighing 12 kg or less, as of June 18. 2008.

High Contrast Produces Superb Images with Crisp Blacks
Newly developed LCD panels work together with a high-contrast optical system to produce a contrast ratio of 2,200:1.

Realistic Image Reproduction with 10-Bit Signal Processing and a 12-Bit Gamma Circuit

Images are powerfully expressed with approximately 1.07 billion colors, thanks to 10-bit (1,024-step gradation) digital processing for each of the red, green and blue signals. The 12-bit gamma IC also renders every detail and nuance contained in high-definition images.

Automatic Image Compensation with Auto Picutre Control Capability

■ **Dynamic Auto Gamma Processing**
Achieving Impressive Contrast and Depth Enhancement: The PLC-XP200L brings the most appropriate contrast and sharpness to an image according to the image characteristics by optimizing the dynamic range of luminance signals and reflecting gamma setting and offset in a timely fashion.The result is a remarkable and outstanding depth in the image.

Conventional model XP200L

■ **Vertical and Horizontal Edge Enhancement Process Delivers Natural Sharpness**

Minimizing granular noise and enhancing only image outlines, the PLC-XP200L provides crisp and sharp images. Also, interaction with the image characteristics and timely effect modification allow this model to provide natural and seamless edge enhancement.
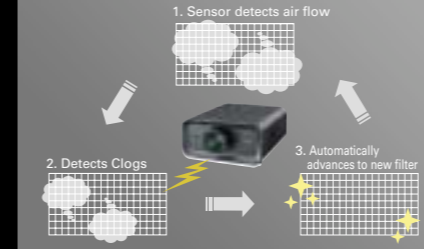
Conventional model XP200L

■ Easy Maintenance

Active Maintenance Filter (AMF)
The filter sensor detects the intake airflow volume, and advances a clean filter surface when the filter becomes soiled.

Detects clogs·Controlled Scrolling
1. Sensor detects air flow
2. Detects Clogs
3. Automatically advances to new filter

Easier Lamp Replacement
Lamp replacement has been simplified to make maintenance easier.
Easy removal and replacement of the lamp from the side.

One-Way Cooling Mechanism (Intake x1, Exhaust x1)
Intake and exhaust ports have been eliminated from various places on the projector (such as the bottom surface) and concentrated into one intake and one exhaust, both on the side, to solve dust-related problems (and improve cooling reliability).

Intake (one place)
Exhaust (one place)

Filter Clogging Detection Function
When it becomes time to clean the filter, or when the filter is clogged, the operator is informed by LED indicators and a message on the on-screen display (reducing heat damage to the interior).
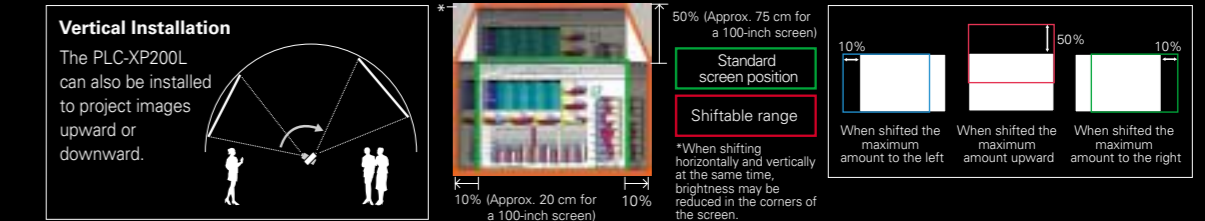*Cleaning time indication: Turn on Clog warning: Blink

Cabinet LED indicators

■ Versatile Installation

Power Vertical / Horizontal Lens Shift
Featuring both vertical and horizontal lens shift (vertical: 0 to 50 %, horizontal: ±10 % (maximum)), the PLC-XP200L enables intuitive operation for easy on-site setup.

Vertical Installation
The PLC-XP200L can also be installed to project images upward or downward.

Standard screen position
Shiftable range
*When shifting horizontally and vertically at the same time, brightness may be reduced in the corners of the screen.

50% (Approx. 75 cm for a 100-inch screen)
10% 50% 10%
10% (Approx. 20 cm for a 100-inch screen) 10%

When shifted the maximum amount to the left
When shifted the maximum amount upward
When shifted the maximum amount to the right

Interchangeable Lenses (Optional)
The existing XP-series lenses can be used just as they are. Lens removal and attachment are also very easy.

LNS-W32 LNS-W31A LNS-S30 LNS-S31 LNS-T31A LNS-T32
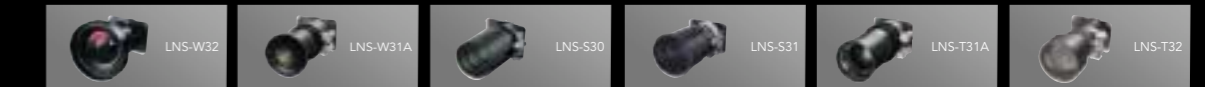
*Lenses are sold as options.

■ Network Control

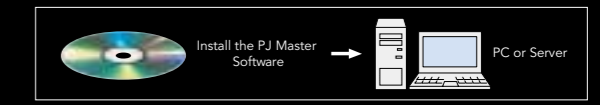### PJ-Net Organizer (option)
To use the PJ-Net technology, simply attach the PJ-Net Organizer to the projector

POA-PN03C (optional)

PJ Master (option)
The PJ Master software allows centralized control of PJ-Net Organizer-mounted projectors over a network. Install PJ Master on your PC or server.

Install the PJ Master Software PC or Server

PJ-Net Organizer Usage Example
Projectors connected by the PJ-Net Organizer let you access the following advanced centralized control functions.

*Monitoring the internal temperature of the projector *Notification of lamp-related information (e.g. malfunction, operating hours, etc.) *Comprehensive management of network-connected projectors *Database applications for all acquired data
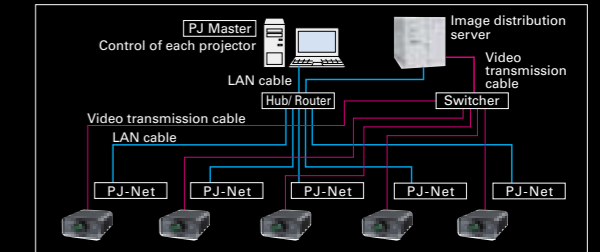
Network Capture Function
Web-based Management
Network Viewer Function
E-mail Alert Function Sends Messages

Control of each projector
PJ Master
LAN cable
Hub/ Router
Video transmission cable
LAN cable
Image distribution server
Video transmission cable
Switcher
PJ-Net PJ-Net PJ-Net PJ-Net PJ-Net

■ Useful Features

Mechanical shutter
There's also a Mechanical Shutter System which is popular for a variety of elite professional uses. The amazing XP200L fills the needs of a host of demanding business venues including meeting, entertainment and promotional applications. It's a super nova in a star-studded selection of SANYO Portable projectors.

(ex) closing of a presentation

Silence Design (35.0 dB, in ECO mode)
The operating noise is hardly noticeable even in quiet settings like conference or AV rooms.

Built-in Test Pattern
Makes on-site setup easier by serving as a guide for setting adjustments. (Includes a total of 8 built-in patterns.)

QUADRIVE

XGA Multimedia Projector
PLC-XP200L
Brightness of 7,000 lumens