SONY_®

Data Projector **VPL-PX40**



a brilliant performance every time

The Key to Smart Presentations

...the Sony VPL-PX40 Projector

Visuals

Leave a lasting impression. With its brightness of 3500 ANSI lumens* and a high contrast level, the VPL-PX40 is the easy and effective way to view presentations in any environment or lighting condition. Its 3D Gamma Correction and 3D Digital Comb Filter features, plus an RGB Enhancer for RGB and DDE for video, combine to make pictures always look their best.

*ANSI lumens is a measurement unit defined by the American National Standards Institute IT7.228. Since there is no uniform method of measuring brightness, specifications may vary among manufacturers.

Audio

Complete the experience. An integrated stereospeaker system delivers audio to support the presentation visuals for even greater impact.

Presentation Tools

A laser-pointer, mouse function and 4-times Digital Zoom – all included on the supplied remotecontrol unit – help to make presentations run smoothly and keep the audience enthralled. The projector itself – the main presentation tool – goes virtually unnoticed, because of near-silent operation.

Flexibility

The broad installation capabilities of the VPL-PX40 enable the projector to be mounted on the ceiling or floor, or installed in a rear-projection system. Installation flexibility is further enhanced by the choice of two optional lenses. With the Direct Power-On function, the projector can be turned on or off quickly using a circuit-breaker switch on a switchboard, and, for added security, the VPL-PX40 incorporates a password-authentication system.

For Powerful Presentations ... the VPL-PX40



Picture Quality

High Brightness and Contrast

With a new optical system incorporating Sony LCD panels and a 265 W UHP lamp,the VPL-PX40 offers an outstanding brightness of 3500 ANSI lumens. High-quality images can be projected even in high ambient-light conditions, producing an extremely highcontrast ratio.

High Resolution

......

By utilizing three 0.99-inch XGA LCD panels, the VPL-PX40 provides a clean and detailed reproduction of all images.



Digital Signal Processing

The VPL-PX40 achieves high picture quality with Sony original Digital Signal Processing technology. The VPL-PX40 provides digital signal processing by adopting a newly developed driver for the LCD panel that directly accepts digital signals; thus the projector is capable of projecting images with high accuracy.

Smart APA

Dot phase and image size or shift can be automatically adjusted to their optimal settings according to input signals.

3D Gamma Correction

The 3D Digital Gamma Correction circuit simultaneously provides superb grayscale reproduction and helps to improve overall picture uniformity.

Dynamic Detail Enhancer (DDE)

This unique Sony technology generates high quality images through the Interlace/Progressive conversion processor. Signals of film-originated sources converted through 2-3 and 2-2 pull down process are detected, resulting in extremely accurate image reproduction.

RGB Enhancer

For a crisper RGB image, the VPL-PX40 is equipped with an RGB Enhancer function. A simple adjustment provides heightened image quality to match any image source – whether text, photos, or graphics.

Presentation Effectiveness

4-times Digital Zoom

To help convey a clear message, the 4-times Digital Zoom function allows users to zoom in on any part of the projected image during a presentation.

Stereo Sound

Users can improve the impact and effectiveness of presentations with stereo audio output from the built-in stereo-speaker system.

Useful Remote-Control Unit

The supplied remote-control unit is equipped with keys to control various projector functions, for smooth, persuasive presentations every time. It has an integrated mouse function for point-and-click control of a USB-connected computer, and it can work as a laser pointer to direct the audience's attention and guide them through the presentation.



Input Versatility

Multiple Inputs

Using a built-in high-performance scan converter, the VPL-PX40 accepts a wide range of input signals: composite video, S-Video, Y/R-Y/B-Y, Y/PB/PR and RGB video, as well as analog and digital computer signals. A variety of DTV signals (480/60i,575/50i,540/60p,480/60p,575/50p,720/60p, 720/50p, 1080/60i, and 1080/50i) are also fully supported, extending its potential even further.

DVI interface

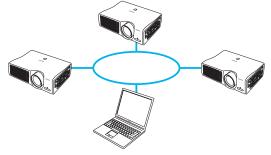
The VPL-PX40 accepts digital signals directly thanks to its DVI interface.



Flexibility

The Benefits of Networking

The VPL-PX40 can even be controlled via a TCP/IP-based network connection, which also enables users to receive maintenance information. This functionality is ideal for offices and schools equipped with a Local Area Network (LAN).



Back-to-Front Tilt

The VPL-PX40 can be tilted upwards or downwards by 90 degrees. This flexibility greatly expands the projector's application possibilities.

Digital Keystone Adjustment

Keystone distortion, caused when the projection angle is not properly calibrated, can be easily corrected within a wide adjustment range of +/- 20 degrees. The necessary adjustments can be easily made via the On-Screen Display.



On-Screen Display (OSD)

The OSD, which provides easy projector control, is available in a choice of nine languages: English, French, Spanish, German, Italian, Japanese, Chinese, Portuguese, or Korean.



Direct Power On and Off

With this function, standby mode can be skipped over to activate the VPL-PX40 immediately. And thanks to a cooling fan with drive circuitry that works even after the power has been cut, the projector can be turned on or off using a circuit-breaker switch on a switchboard.

Password-Authentication System

This function restricts unauthorized use of the projector. Once a password has been set, the VPL-PX40 cannot be used without it

Optional Lenses

Two optional lenses are available, giving users the ability to customize the VPL-PX40 to perfectly suit any projection environment.





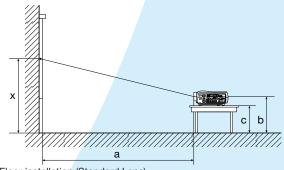
VPLL-FM22 VPLL-ZM102 Fixed short-focus lens Throw ratio*: 0.9:1

■ 1.5-times zoom long-focus lens ■ Throw ratio*: 3.35-4.9:1

*Throw ratio is the distance between the center of the projector lens and the screen, divided by the screen width.

Throwing Distance

Floor Installation



Floor installation (Standard Lens)

a: distance between the screen to the center of the lens

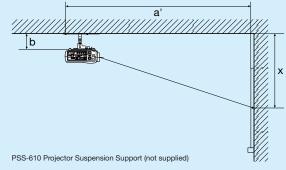
b: distance between the floor and the center of the lens

c: distance between the floor and the bottom of the adjusters of the projector x: free

*: Viewable area, measured diagonally

_			<u></u>							
S	Screen Size		40	80	100	150	180	200	250	300
а		Minimum	1490	3040	3820	5750	6920	7690	9630	11570
			58 7/8	119 7/8	150 3/8	226 5/8	272 3/8	302 7/8	379 1/8	455 1/2
6	1	Maximum	1890	3830	4800	7220	8680	9650	12070	14500
			74 3/8	150 3/4	189	284 1/2	341 3/4	380	475 1/2	571
ł	<u> </u>		x-305	x-610	x-762	x-1143	x-1372	x-1524	x-1905	x-2286
Ľ	,		x-12	x-24	x-30	x-45	x-54	x-60	x-75 1/8	x-90 1/8
			x-392	x-697	x-849	x-1230	x-1459	x-1611	x-1992	x-2373
Ľ			x-15 1/2	x-27 1/2	x-33 1/2	x-48 1/2	x-57 1/2	x-63 1/2	x-78 1/2	x-93 1/2

Ceiling Installation



Ceiling installation using the PSS-610

Projector Suspension Support (Standard Lens)

a': distance from the center of the upper ceiling mount bracket hole (rear) to the screen b: distance between the ceiling and the surface of the mounting bracket

x: distance between the ceiling and the center of the screen *: Viewable area,measured diagonally

Screen Size*		80	100	120	150	180	200	250	300
	Minimum	3350	4130	4900	6070	7230	8000	9940	11880
a'		132 1/8	162 5/8	193 1/8	238 7/8	284 5/8	315 1/8	391 3/8	467 5/8
a	Maximum	4140	5110	6080	7530	8990	9960	12380	14810
		163	201 1/4	239 3/8	296 3/4	354	392 1/4	487 3/4	583 1/4
x		b+693	b+846	b+998	b+1227	b+1455	b+1608	b+1989	b+2370
^		b+27 3/8	b+33 3/8	b+39 3/8	b+48 3/8	b+57 3/8	b+63 3/8	b+78 3/8	b+93 3/8
b		150/175/20	0/250/275/30	00mm (6, 7, 7	7/8,97/8,10	7/8, 11 7/8 ind	ches) adjustal	ble when usin	ig PSS-610

Specifications

Model		VPL-PX40
Optica	Projection system	3 LCD panels, 1 lens projection system
	LCD panel	0.99-inchp-Si TFT Sony LCD panel with Micro Lens Array
		2,359,296 pixels (786,432 pixels x 3)
	Projection lens	Approx. 1.3 times zoom lens, F1.7 to 2.3, f37.6 to 48.8 mm
	Lamp	265 W UHP Lamp
	Screen coverage	40 to 300 inches (viewable area, measured diagonally)
	Light output	3500 ANSI lumens*1
Signals	Color system	BTSC, PAL, SECAM, NTSC4.43, PAL-M, PAL-N (automatically/manually selected
	Resolution	Video: 750 TV lines, RGB: 1024 x 768 pixels
	Acceptable signals	RGB (fH 19 to 92 kHz, fV: 48 to 92 Hz (up to UXGA), 15 kHz RGB Component
		50/60 Hz, Progressive component 50/60 Hz, DTV (480/60i, 575/50i, 480/60p, 540/60
		575/50p, 720/60p,720/50p, 1080/60i, 1080/50i) Composite video, Y/C video
General	Cabinet color	White
action di	Speaker	Stereo speakers system 40 x 70 mm (1 5/8 x 2 7/8 inches) Max. 2W x 2
	Power requirements	100 to 240 V, 50/60 Hz
	Power consumption	Max. 365 W, Standby 6 W
	Operating temperature	0 to 35°C (32 to 95°F)
	Operating humidity	35 to 85%
	Dimensions	420 (W) x 115 (H) x 316 (D) mm (16 5/8 x 4 5/8 x 12 1/2 inches)
	Mass	Approx. 7.5 kg (16 lb 10 oz)
	Heat dissipation	1246 BTU
puts/Outputs	ribat alcolpation	1210 510
VIDEO IN	Composite	Phono type, 1.0 Vp-p ± 2 dB sync negative, 75 Ω
VIDEO IN		
	Y/C IN	Mini DIN 4-pin
	Y	1.0 Vp-p ± 2 dB sync negative, 75 Ω
	C	Burst 0.286 Vp-p ±2 dB (NTSC), 75Ω or 0.3 Vp-p ±2 dB (PAL), 75Ω
INPUT A	Analog RGB	HD D-sub 15-pin (female)
	R	0.7 Vp-p ±2 dB positive, 75Ω
	G	0.7 Vp-p ± 2 dB positive, 75 Ω
	G with Sync	1.0 Vp-p \pm 2dB sync negative, 75 Ω
	B	$0.7 \text{ Vp-p} \pm 2 \text{dB}$ positive, 75Ω
		0.7 VP-P ± 20D positive, 7522
	SYNC/HD	
	Composite sync	1.0 to 5.0 Vp-p, high impedance positive/negative
	Horizontal sync	1.0 to 5.0 Vp-p, high impedance positive/negative
	VD	
	Vertical sync	1.0 to 5.0 Vp-p, high impedance positive/negative
	AUDIO IN	Stereo mini jack, 500 mV rms, impedance more than 47 k Ω
INPUT B	Analog RGB	HD D-sub 15-pin (female)
IN OID	R	$0.7 \text{ Vp-p} \pm 2 \text{ dB positive}, 75\Omega$
	G	$0.7 \text{ Vp-p} \pm 2 \text{ dB positive, } 75\Omega$
	G with Sync	1.0 Vp-p \pm 2dB sync negative, 75 Ω
	В	0.7 Vp-p ±2 dB positive, 75Ω
	SYNC/HD	
	Composite sync	1.0 to 5.0 Vp-p, high impedance positive/negative
	Horizontal sync	1.0 to 5.0 Vp-p, high impedance positive/negative
	VD	
	Vertical sync	1.0 to 5.0 Vp-p, high impedance positive/negative
	AUDIO IN	Stereo mini jack, 500 mV rms, impedance more than 47 k Ω (Shared by INPUT B/
INPUT C	Digital RGB	DVI-D (TMDS)
	AUDIO IN	Stereo mini jack, 500 mV rms, impedance more than 47 k Ω (Shared by INPUT B/
INPUT D	Analog RGB/Component	5 BNC (Female)
	R/R-Y	0.7 Vp-p ±2 dB positive, 75Ω
	G	0.7 Vp-p ± 2 dB positive, 75 Ω
	G with Sync/Y	1.0 Vp-p \pm 2 dB sync negative, 75 Ω
	B/B-Y	$0.7 \text{ Vp-p} \pm 2 \text{ dB positive, } 75\Omega$
	SYNC/HD	
	Composite sync	1.0 to 5.0 Vp-p, high impedance positive/negative
	Horizontal sync	1.0 to 5.0 Vp-p, high impedance positive/negative
	VD	
	Vertical sync	1.0 to 5.0 Vp-p, high impedance positive/negative
	AUDIO IN	Stereo mini jack, 500 mV rms, impedance more than 47 k Ω
USB		Up (female) x 1 (Shared by INPUT A/B/C/D)
OUTPUT	MONITOR OUT*2	HD D-sub 15-pin (female) R/R-Y, G/Y, B/B-Y: Gain Unity, 75Ω SYNC/HD, VD: 4.0 Vp-p (open), 1.0 Vp-p (75
001101	AUDIO OUT (Variable out)	Stereo mini jack, max. 1 V rms, when the input siginal is 500 mV rms, impedance less than 5 kΩ
DEMOTE		
REMOTE	RS-232C	D-sub 9-pin (female)
	ETHERNET port	RJ-45: 10 BASE-T/100 BASE-TX
CONTROL S IN/	/	Stereo mini jack
PLUG IN POWE	R	5.0 Vp-p, plug in power, DC 5V
afety regulation		UL, CUL, DHHS, FCC Class A, IC Class A, NEMKO, CE (LVD), CE (EMC), C-Tick, CCC, VCCI class B, JEI
aser beam	Laser type	Class II
	Wavelength	645 nm
	Output	1 mW
ا معالم ما		
Supplied	nemote commanuer, MONIC	or Cable (2 m): HD D-sub 15-pin to HD D-sub 15-pin, USB Cable A type to B type (2 i

 Supplied
 Remote commander, Monitor Cable (2 m): HD D-sub 15-pin to HD D-sub 15-pin, USB Cable A type to B type (2 m), accessories

 AA size Battery (x 2), Lens Cap, Air Filter, Operating Manual, Installation Manual for dealers

*¹ ANSI lumens is a measuring method of the American National Standards Instisute IT7. 228. Since there is no uniform method of measuring brightness, specifications will vary among manufactures. *² DIGITAL RGB and Component signals are not output from the MONITOR OUT terminal.

Input Signal Preset Data

	J				
No.		reset Signal	fH (kHz)	fV (Hz)	H/V
1	VIDEO/60 6	0Hz		59.940	
2	VIDEO/50 5	0Hz		50.000	
3	480/60i		15.734	59.940	SonG/Y
4	575/50i		15.625	50.000	or
5	HDTV 1035	/60i, 1080/60i	33.750	60.000	Composite
6*	640x350	VGA-1(VGA350)	31.469	70.086	P/N
7*		VESA 85(VGA350)	37.861	85.080	P/N
8*	640x400	NEC PC98	24.823	56.416	N/N
9*		VGA-2(TEXT)/VESA70	31.469	70.086	N/P
10*		VESA 85(VGA400)	37.861	85.080	N/P
11*	640x480	VESA 60	31.469	59.940	N/N
12*		Mac 13	35.000	66.667	N/N
13*		VESA 72	37.861	72.809	N/N
14*		VESA 75(IBM M3)		75.000	
15*		VESA 85(IBM M4)		85.008	
16*	800x600	VESA 56		56.250	
17*		VESA 60		60.317	
18*		VESA 72		72.188	
19*		VESA 75(IBM M5)		75.000	
20*		VESA 85		85.061	
21*	832x624	Mac 16		74.550	
22*	1024x768	VESA 43(8514)		86.958	
23*	10247100	VESA 60		60.004	
24*		VESA 70		69.955	
25*		VESA 75		75.029	
26*		VESA 85		84.997	
27*	1152x864	VESA 70		70.019	
28	TIOEXOOT	VESA 75		75.000	
29		VESA 85		85.057	
30*	1152x900	SUN LO		65.960	
31	1152,500	SUN HI		76.047	
32*	1280x960	VESA 60		60.000	
33	1200,300	VEGA 00 VESA 75		75.000	
34*	1280x1024			86.872	
35	120021024	SGI-5		50.062	
36*		VESA 60		60.002	
37		SXGA VESA75		75.025	
37 38		SXGA VESA75		85.023	
30 39	1600-1200	UXGA VESA60		60.000	
		uble frequency of NTSC)			
43		uble frequency of NTSC)		60.000 50.000	
44		uble frequency of PAL)			Solic
45	1080/50i			50.000	
47	720/60p			60.000	
48	720/50p			50.000	<u> </u>
50	540/60p	01/04		60.000	N1/N1
52	1400x1050	SXGA+	63.981	60.020	N/N

When the signal other than ones in "Preset Signals" are input, the picture may not display correctly. When the aspect ratio of an input signal is other than 4:3, a part of the screen is displayed in black. The UXGA signal can be projected only when user set the frequency of a computer 60Hz. The digital input compiles with the signals marked with asterisks(') on the table. When the digital signal output from a computer is a signal other than the signals marked with asterisks(') among the memory numbers 6 to 39, it is automatically output according to the specifications of the projector. The memory numbers 22 and 34 are the interface signals.

Optional Accessories

Projector Lamp LMP-P260 (for replacement)

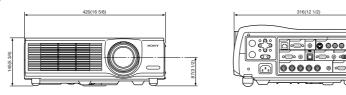


LMP-P260 Suspension Support PSS-610

Signal Cables SMF-400 (HD D-sub 15-pin to 5 BNC, for RGB signal) SMF-410 (HD D-sub 15-pin to HD D-sub 15-pin, for RGB signal)

Optional Lenses VPLL-FM22 (Fixed short-focus lens) VPLL-ZM102 (Long-focus zoom lens)

Dimensions



Unit:mm (inches)

Distributed by

eco

15(4 5/8)

Power consumption during standby 6.0W or less. Halogenated flame retardant is not used in cabinets. Lead-free solder is used for soldering. Polystyrene form for cushioning has been eliminated and corrugated paper is used as buffer materials.

©2002 Sony Corporation. All rights reserved. Reproduction in whole or in part without permission is prohibited. Features and specifications are subject to change without notice. All non-metric weights and measures are approximate. Sony is a registered trademark of Sony Corporation. Mac is registered trademark of Apple Computer, Inc.

