# SONY



# **3LCD Laser Light Source Projectors**

VPL-PHZ11 | WUXGA VPL-PWZ11 | WXGA











# Bright, Beautiful Images With Low Running Costs, Minimal Maintenance, And Flexible Installation

Sony's growing line of Z-Phosphor<sup>™</sup> laser light source projectors, the VPL-PHZ11 (WUXGA) and VPL-PWZ11 (WXGA) in 5,000 lm, are extremely easy to install. They offer improvements in lens shift range and function over conventional lamp projectors, making them ideal for business and academic use. This class of projector is truly groundbreaking in a market currently dominated by lamp projectors – simplified installation and easy lens shift operation represent a great opportunity to try laser projectors for the first time!







For business

For academic use

For entertainment

## Slim, Attractive, Blend-In Design

The slim, stylish case design features a flat top surface that blends in discreetly when the projector is ceiling mounted.



## **High Image Quality**

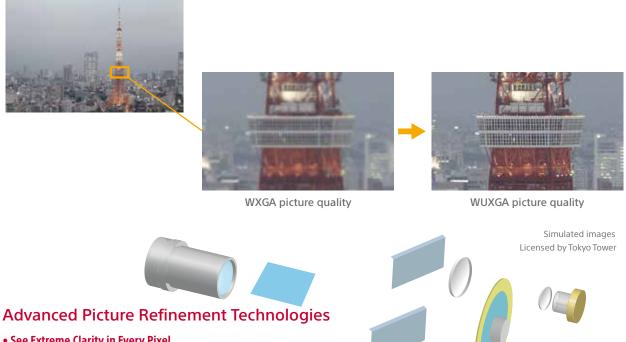
# Very High Image Quality with 3LCD Projection System and Z-Phosphor Laser Light Source

Combining a Z-Phosphor laser light source with a 3LCD optical system, the ground-breaking VPL-PHZ11 and VPL-PWZ11 projectors generate a powerful 5,000 lumens respectively of color light output at WUXGA resolution (VPL-PWZ11 at WXGA resolution). Each projector's light engine uses blue laser as its light source, which excites a phosphorous material that in turn creates white light. The white light is delivered to the 3LCD optical system, which generates constant, vibrant RGB color through a color-splitting process. This produces brightness sufficient for a broad range of commercial, academic, and entertainment applications.



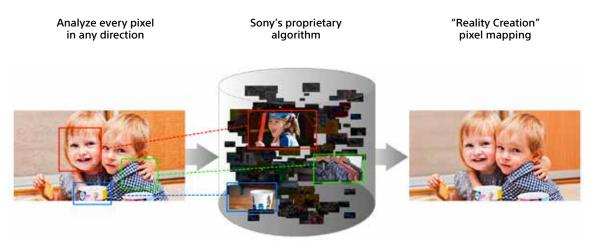
## Crisp, Detail-packed WUXGA Resolution Images

These projectors deliver an amazing WUXGA resolution (1920 x 1200), which exceeds Full-HD resolution (1920 x 1080). It also allows projection in a wider display range. More information can be displayed on screen, so you can see the whole page without scrolling. Extremely clear and detailed high-quality images are projected, even on a large screen, and native Full-HD images can be projected full screen. These ground-breaking projectors are the ultimate tool for projecting images in a range of applications requiring exceptional detail.



#### • See Extreme Clarity in Every Pixel

Developed for Sony's home theater projectors, the Reality Creation function has now been adapted for the VPL-PHZ11 and VPL-PWZ11. It reproduces the texture and color of the original WUXGA (VPL-PWZ11 at WXGA) signal by restoring missing information lost during packaging of the original contents to disk and broadcast transmission.



Picture patterning based on 10 years of accumulated expertise

Simulated images

#### • Dynamic Image with High Contrast

The Contrast Enhancer function automatically adjusts the contrast for optimum viewing. It compensates for dark and bright parts of an image by analyzing the signal component of each scene in real time to enhance contrast.

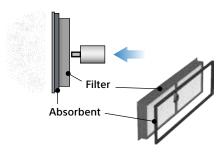
## **Good TCO & Energy Efficient**

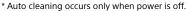
## Up to 20,000 Hours\* of Virtually Zero Maintenance Operation

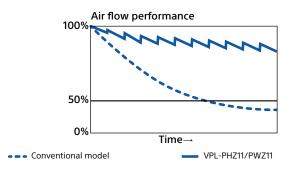
Thanks to its Z-Phosphor laser light source with control technology, long-life LCD panel, and advanced filter system, the laser projectors (VPL-PHZ11/PWZ11) offer up to 20,000 hours\* of operation without maintenance or replacement. Virtually zero maintenance requirements and a range of energy-saving features reduce total lifetime ownership costs compared with conventional projectors.

### Hassle-free Automatic Filter Cleaning

Now you can focus on great-looking images instead of arduous maintenance tasks. A new automated filter cleaning system removes dust every 100 hours\*.





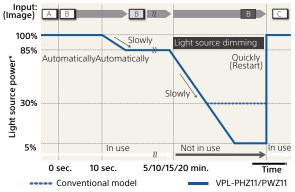


Simulated images

## **Energy-efficient Functions**

#### • Auto Dimming Mode

The laser projectors are equipped with a light source dimming function. After 10 seconds of a static signal feed, the light source dims by approximately 15% which is barely noticeable. If the VPL-PHZ11/PWZ11 are left powered on while not in use, after a set period of time the unit will automatically detect no change of signal input and will dim the light source to as low as approximately 5% of original brightness to significantly reduce energy consumption.



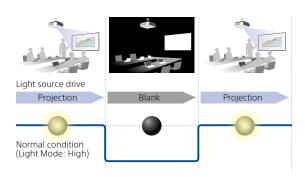
<sup>\*</sup> Light source mode: High. The values are approximate.

When the input signal is unchanged, the unit shifts into dimming mode

Simulated images

#### • Blank (Picture Muting)

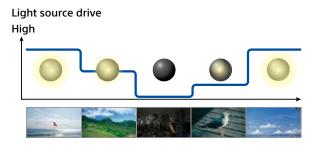
The projectors can temporarily disable video signal output. This function can be easily operated with just the touch of a button on the supplied Remote Commander unit. In addition, this function allows blank image projection with low power consumption using light source control technology.



<sup>\*</sup> Actual hours may vary depending on usage environment.

#### • Auto Light Source Control for Energy Saving

The brightness of the light source's output is automatically adjusted depending on the brightness of the projected image, to avoid unnecessary power consumption. When showing darker images that don't require high brightness, the light source output decreases.



Simulated images

## **Constant Brightness Mode for Stable Projection**

Constant brightness mode allows you to maintain brightness throughout the expected 20,000\* hour life by driving each laser projector at reduced light output. This is useful for applications including museums, conference rooms, or even classrooms where you want to maintain a consistent visual experience for the audience.

\* Actual hours may vary depending on usage environment.

## **Installation Advantages**

## **Easy Lens Shift Operation**

With the isolated vertical and horizontal lens shift tab, it is easy to adjust the position of projected images.

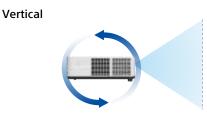




## Tilt Angle-free

Enjoy greater installation flexibility by positioning the projector freely at any angle – on its side or even upside down.

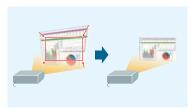




Simulated images

#### **Advanced Geometric Correction**

Each corner and side can be grabbed and fit squarely to the desired position. This feature is useful when an offset projection is necessary.



Four corners adjustment



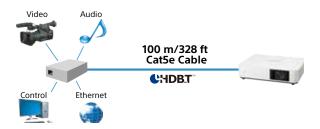
**HV** Keystone adjustment

Simulated images

## Simple Installation with HDBaseT

HDBaseT is a multi-signal transmission system via a single cable, which simplifies the installation task. It cuts total system cost by reducing not just cabling requirements but also the number of required signal extenders and receiver boxes.

One Cat5e/6 cable can run up to 100 meters, reducing the number of cable runs and eliminating the need for signal extenders. And fewer signal extenders and receiver boxes mean fewer potential points of failure. In addition, Cat5e/6 cables are much easier to terminate than cables such as HDMI, and therefore can be simply and quickly terminated even onsite during the installation process.



#### **Professional Calibration**

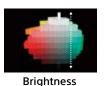
The projectors offer a professional calibration function to adjust the hue, saturation and brightness of each target color to get exactly the picture you want. With this capability, you can tweak the images to perfection.



Hue



Saturation



Simulated images

In addition to that, the projectors adjust the color space for red, green and blue, tweak the images according to installation condition.

### **Super Quiet Operation Noise**

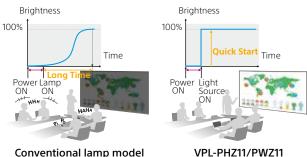
High fan noise is typical in compact projectors. But the VPL-PHZ11 and VPL-PWZ11 offer Sony's blend-in design which combines a compact, slim design with the industry's lowest\*1 fan noise in this class of laser-phosphor 3LCD projector. This ensures discreet, unobtrusive operation in quiet environments, from classrooms to meeting rooms.

\*1 VPL-PHZ11/PWZ11: 36 dB/28 dB/25 dB (Light Mode: Standard/Middle/Low)

## **User Advantages**

## Save Time with Every Presentation

The laser projectors deliver instant on/off. Turn the unit on and you have immediate full brightness. Turn it off and you're done. You're not even limited in the number or duration of on/off cycles. It's the total convenience that today's users expect.



Conventional lamp model

Simulated images

#### Picture Mode

New modes ensure great-looking pictures in any presentation conditions. Select Standard, Dynamic, Brightness Priority, or Multi-screen Picture mode for optimized image quality, with any source and in every room.



Dynamic



Presentation

### **Built-in Auto Calibration**

After extended periods, color can be automatically calibrated to the original factory condition. There's no need for extra calibration equipment or cameras; a built-in color sensor stores all the necessary information.



### **Closed Captioning**

Official teletext broadcasting, developed by the NCI, USA

### **Network and Control**

Controls and monitors projector status Compatible with various control systems

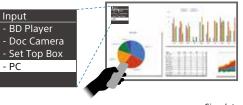






### **Input Label**

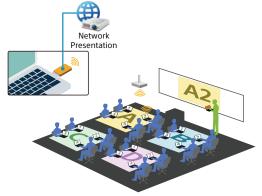
You can customize the input label that appears in the input menu on screen. This gives you a clear understanding of which equipment is connected.



Simulated image

#### **Network Presentation Portable Edition**

The portable edition function allows you to install the Network Presentation application into a general-purpose USB mass storage device. This enables guest users to run the Network Presentation application via the USB device without having to install the app on their own laptop.

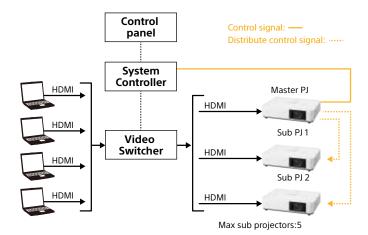


Use Case of "Network Presentation"

Simulated image

## IP Control sync. function

Received control signal (power on/off, select input terminal) of master projector can distribute to additional projectors via network.



## **Three-way Wireless Connection**

These projectors support three different methods of wireless connection, so you can achieve the system best suited to every situation



# **Specifications**

		VPL-PHZ11	VPL-PWZ11
Display system		3 LCD system	
Display device Size of effective display area 0.76" (19.3 mm) x 3 BrightEra LCD Panel, Aspect ratio: 16:10		ect ratio: 16:10	
	Number of pixels	6,912,000 (1920 x 1200 x 3) pixels 3,072,000 (1280 x 800 x 3) pixels	
Projection lens	Zoom	Manual (Approx. x 1.45)	
	Focus	Manual Manual	
	Lens shift	Manual, Vertical: +20% to +55%, Horizontal: +/- 10%	
	Throw ratio	1.28:1 to 1.88:1	
laht samus	THOWTALIO		
Light source Filter cleaning / replacement sycle (Max )*1		Laser diode	
Filter cleaning / replacement cycle (Max.)*1		20,000 H (service maintenance)	
Screen size	<u> </u>	40" to 300" (1.02 m to 7.62 m) (measured di	agonally)
Light output (Mode: Standard)		5,000 lm	
Color light output (Mo	ode: Standard)	5,000 lm	
Contrast ratio (full wh	ite / full black)*²	∞:1	
Speaker		16 W (monaural)	
Displayable scanning	Horizontal	15 kHz to 92 kHz	
frequency			
	Vertical	48 Hz to 92 Hz	
Display resolution	Computer signal input	Maximum display resolution: 1920 x 1200 dots*3	
	Video signal input	NTSC, PAL, SECAM, 480/60i, 576/50i, 480/60p, 576/50p, 720/60p, 720/50p, 1080/60i,	
	-	1080/50i	
		The following items are available for HDMI input only; 1080/60p, 1080/50p,1080/24p	
Color system		NTSC3.58, PAL, SECAM, NTSC4.43, PAL-M, PAL-N, PAL60	
Keystone correction (Max.)		Vertical: +/- 20 degrees	
		Horizontal: +/- 30 degrees	
OSD language		27-language (English, French, German, Italian, Spanish, Portuguese, Japanese, Chinese, Korea Russian, Dutch, Norwegian, Swedish, Thai, Arabic ,Turkish, Polish, Vietnamese, Farsi, Finnish,	
		Indonesian, Hungary, Gleek, Czech, Slovakia, Romania)	
Computer and video signal input/output	INPUT A	RGB / Y PB PR input connector: Mini D-sub 15 pin (female), Audio input connector: Stereo min	
		jack	
	INPUT B	HDMI input connector: HDMI 19-pin, HDCP support, Audio input connector: HDMI audio support	
	INPUT C	HDMI input connector: HDMI 19-pin, HDCP support, Audio input connector: HDMI audio support	
	INPUT D	HDBaseT interface connector: RJ45, 4 play (Video, Audio, LAN (100BASE-TX), RS-232C)	
	VIDEO IN	Video input connector: Phono Jack, Audio input connector: Shared with INPUT A	
	OUTPUT	Audio output connector: Stereo mini jack	
	REMOTE	D-sub 9-pin (male) / RS232C	
	LAN	RI45, 100BASE-TX (Shared HDBaseT)	
	USB	· · · · · · · · · · · · · · · · · · ·	
<b>.</b>		TYPE-A, TYPE-B	
Control signal input/output		RS-232C connector: D-sub 9-pin (male), LAN connector: RJ45,10BASE-T / 100BASE-TX, IR (Control S) connector: Stereo mini jack	
Acoustic Noise (Mode: Standard / Middle / Low)		36 dB / 28 dB / 25 dB	
Operating temperature (Operating humidity)		0°C to 40°C (32°F to 104°F) / 20% to 80% (no condensation)	
Storage temperature (Storage humidity)		-10°C to +60°C (14°F to +140°F) / 20% to 80% (no condensation)	
Power requirements			z AC 100 V to 240 V, 4.0 A to 1.6 A, 50 Hz / 60 Hz
Power consumption (Mode: Standard)	AC 100 V to 120 V	424 W	399 W
	AC 220 V to 240 V	403 W	377 W
Power Consumption (Standby Mode)	AC 100 V to 120 V	0.5 W (when "Standby mode" is set to "Low")	
	AC 220 V to 240 V	0.5 W (when "Standby mode" is set to "Low")	
Power Consumption (Networked Standby Mode)	AC 100 V to 120 V	12.5 W (LAN), 13.2 W (optional WLAN module), 16.8 W (HDBaseT), 17.4 W (ALL Terminals and	
	AC 220 V to 240 V	Networks Connected, when "Standby Mode" is set to "Standard") 11.9W (LAN), 12.6W (optional WLAN module), 17.0W (HDBaseT), 17.6W (ALL Terminals and	
Networks Connected, when "Standby Mode" is set to "Sta		is set to "Standard")	
Standby Mode (Networked Standby Mode Activated)		Networked Standby Mode Activated Approx.	2 Minutes
Heat dissipation	AC 100 V to 120 V	1446 BTU/h	1361 BTU/h
	AC 220 V to 240 V	1374 BTU/h	1286 BTU/h
Dimensions (W x H x I	D) (without protrusions)	Approx. W 510 x H 113 x D 354.6 mm (20 3/32	
Mass		Approx. 8.7kg (19 lb)	
Supplied accessories		RM-PJ8 Remote Commander (1), Lithium bat	tery (CR2025) (1) AC Power Cord (1)
		Quick Reference Manual (1), Operating Instru	
Wireless LAN (Option		IFU-WLM3	ICLIONS (CD-ROW) (1)

<sup>\*1</sup> This figure is the expected maintenance time, not a guaranteed time.
The actual value depends on the environment and how the projector is used.
\*2 The value is average.

LASER NOTICES



For other countries IEC 60825-1:2014 CLASS 1 LASER PRODUCT



As with any bright light source, do not stare into the beam, RG2 IEC 62471-5:2015.

<sup>\*3</sup> Available for VESA reduced blanking signal.