SONY

Compact and powerful

VPL-PHZ10 and VPL-PWZ10 Laser Projectors

Excellent picture quality with up to 20,000 hours operation.

Sony's 4th generation Z-Phosphor laser light source is combined with BrightEra inorganic 3LCD technology, delivering 5000 lumens colour brightness with WUXGA or WXGA resolution.

Images are analysed and processed using Reality Creation, a proprietary pattern recognition algorithm that enhances resolution and colour purity.

The Z-Phosphor laser light source and inorganic 3LCD panels also allow up to 20,000 hours* of virtually zero-maintenance operation without the worry of premature colour fading, brightness loss or sudden lamp failures. An automated filter system cuts the hassle of regular cleaning.

Sony Technology

- Z-Phosphor Laser Technology
- BrightEra 3LCD Panel Technology
- Reality Creation
- Contrast Enhancer
- Constant Brightness

Key Features

- 5000 lm Colour Brightness
- WUXGA / WXGA Resolution
- 500,000:1 Dynamic Contrast
- HDBaseT Connection
- 20,000 hours virtually maintenance free operation

HDBT BrightEra Long Lasting Optics HDMI Z-Phosphor 3LCD

Cost effective laser projectors with rich user features
designed for education and business environments

The **VPL-PHZ10** & **VPL-PWZ10** laser projectors are a versatile, affordable choice for medium to small size classroom or corporate meeting rooms.

Features like full brightness start up, instant shut down, no warm up or cool down, Picture Mute, Auto Dimming, Auto Brightness, Standby and Direct power ON/OFF put users in control of every presentation - while reducing energy consumption and driving down overall running costs.

Bright, Beautiful Images with Low Running Costs, Minimal Maintenance and Flexible Installation
These groundbreaking projectors offer a compelling opportunity to explore the benefits of laser projection in a market currently dominated by lamp-based solutions. With simplified installation and easy lens shift operation they're ideal for a wide range of business and academic environments.
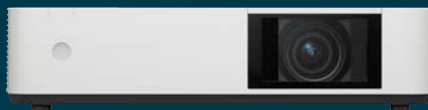
For corporate and business environments

For education and academic applications

Compact and Quiet design
With their stylish blend-in design and low fan noise, P-series projectors fit unobtrusively into any small to mid size environment.
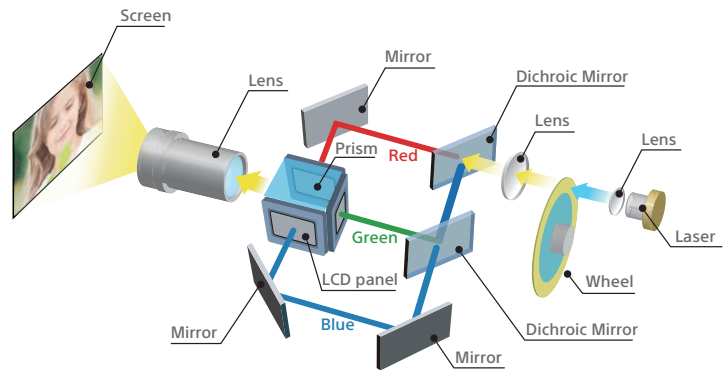
High image quality

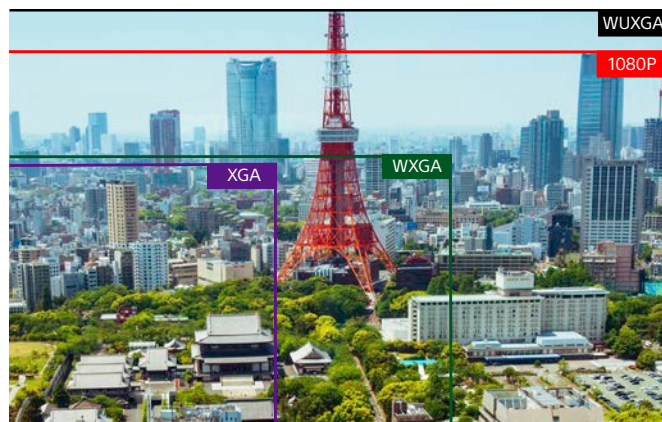### High image quality with 3LCD projection and laser light source technology

Combining a Z-Phosphor laser light source with a 3LCD optical system, the VPL-PHZ10 and VPL-PWZ10 projectors generate powerful, bright images with vivid colour and consistency, with 5,000 lumens brightness and a choice of WUXGA or WXGA resolution.

Each projector's light engine uses a blue laser as its light source, which excites a phosphorus material that in turn creates white light. This white light is delivered to the 3LCD optical system, generating constant, vibrant RGB colour through a colour-splitting process. This produces brightness sufficient for a broad range of commercial, academic, and large scale applications.

Detail-packed WUXGA resolution images

The VPL-PHZ10 projector offers WUXGA resolution (1920 x 1200). Exceeding Full HD resolution (1920 x 1080), this enables more information to be displayed on screen, allowing the whole image to be seen clearly with exceptional detail.

Analyse every pixel in any direction
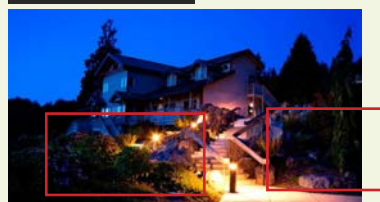
Sony's proprietary algorithm

"Reality Creation" pixel mapping

Input signal

Get the best possible images

Simulated images

Contrast Enhancer
High
Middle
Low
Off
Sel:↑↓ Set:⊞

Contrast Enhancer
High
Middle
Low
Off
Sel:↑↓ Set:⊞

Advanced picture refinement technologies

Originally developed for Sony's home cinema projectors, Reality Creation technology now features in our projectors for corporate and educational applications.

Powerful processing compares signals pixel-by-pixel with a pattern matching database, accurately reproducing fine details, texture and colour of the original by restoring information that's been lost from lower-resolution content.
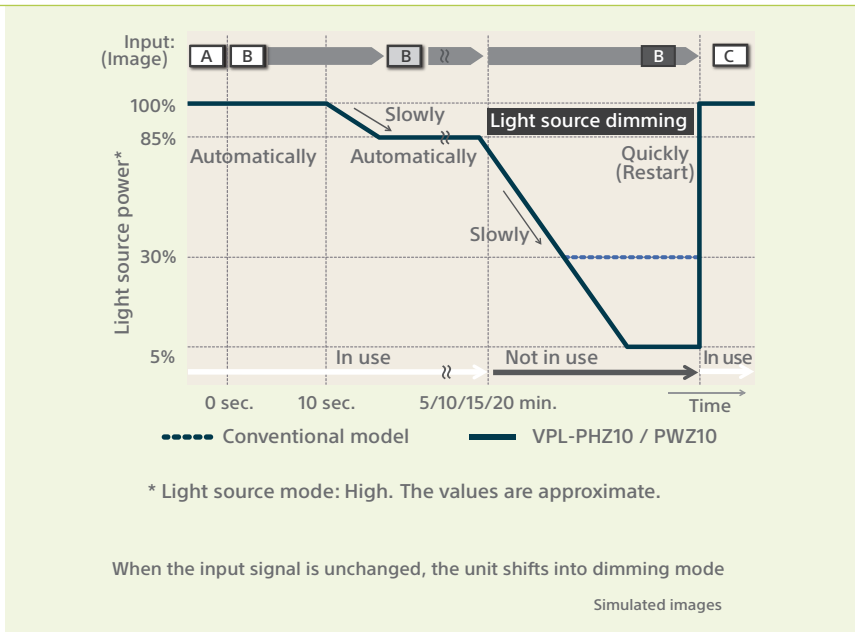
Enhanced contrast for optimised viewing

Our P-series projectors always give your audience a clearer picture. Contrast Enhancer, another proprietary algorithm signal processing, expands the dynamic contrast range allowing for greater detail in range of signals for punchy, high-contrast images.

Energy-efficient functions
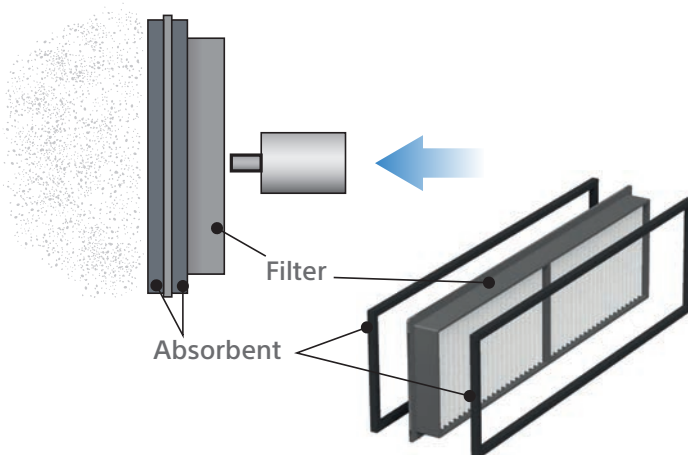
Auto dimming mode

Our P-series laser projectors are equipped with an auto brightness dimming function. After 10 seconds of a static signal feed, image brightness automatically dims by approximately 15% which is unlikely to be noticed by the audience. If left powered on while not being used, projector brightness is gradually dimmed to approximately 5% of original levels to significantly reduce energy consumption. The time period this occurs over can be set by the user.

Any detection of a new signal instantly returns the projector to full brightness.

Input:
(Image) | A | B | B | B | C

100%
85%
30%
5%

Light source power*

Slowly
Automatically   Automatically   Light source dimming   Quickly (Restart)
Slowly

In use   Not in use   In use

0 sec.   10 sec.   5/10/15/20 min.   Time

••••• Conventional model   ——— VPL-PHZ10 / PWZ10

* Light source mode: High. The values are approximate.

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

Simulated images

Up to 20,000 hours of virtually Automatic filter cleaning

The automated cleaning system reduces routine maintenance needs, removing dust from the filter every 100 hours when the projector is powered off.

Filter

Absorbent

Key features

Very high image quality
The Z-Phosphor laser light source is coupled with Sony's acclaimed BrightEra 3LCD projection engine to ensure high 5000 lumen image brightness with vivid, natural colour reproduction.

Constant Brightness
Constant Bright maintains the same brightness throughout the 20,000 hours (at light output mode "Middle") recommended life span.

Advanced picture refinement technologies
Picture quality is boosted by advanced processing featured on Sony's home cinema projectors. Reality Creation uses a powerful pattern-matching database to optimise every pixel. Contrast Enhancer actively analyses and refines dark and light image areas for sparkling highlights and rich, deep blacks.

Crisp, detail-packed WUXGA resolution images*
See fine detail in PC presentations, videos or multimedia signage with WUXGA (1920 x 1200) 16:10 resolution.

*VPL-PHZ10 model only

Up to 20,000 hours* operation with virtually no maintenance
The advanced laser light source offers up to 20,000 hours* operation without lamp exchange, reducing lifetime running costs compared with traditional projectors.

*Actual hours may vary depending on usage environment.

Hassle-free automatic filter cleaning
Focus on great-looking images instead of arduous maintenance tasks: new automated filter cleaning system removes dust every 100 hours.

Energy saving features
Reduce running costs even further with convenient energy-saving features: Picture Mute and Auto Dimming.

Save time with every presentation
Quick power On/Off dramatically cuts warm-up time after switch-on before you can start presenting at full brightness.

360° free-angle installation capability
Enjoy greater installation flexibility: position the projector freely at any angle – on its side or even upside down.

Supports HDBaseT
Simpler, more cost-effective installation and connectivity with digital transmission of video, audio and networking/control over a single Ethernet cable.

Quiet operation
Low fan noise ensures discreet, unobtrusive operation in quiet environments for academic and corporate use.

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.

Picture Mode
Picture Mode ensures great-looking pictures in any presentation condition. Select Standard, Dynamic, or Brightness Priority mode for optimised image quality, with any source and in every room.
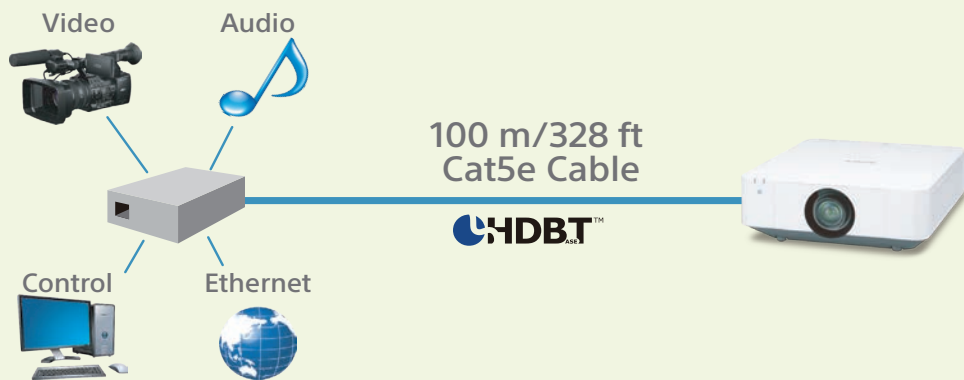
Installation Advantages

Installation Flexibility

360° Angle free installation, horizontal and vertical lens shift, horizontal and vertical keystone correction, 1.28 to 1.88:1 Throw distance, 1.45 times (X) lens zoom, 1.02m to 7.62m screen size capability and blend-in design makes these projectors ideal for the most demanding installation in any classroom or corporate meeting room.

Simple installation with HDBaseT

HDBaseT is a multi-signal transmission system that uses a single cable to simplify installation. This cuts total system cost by reducing not just cabling requirements but also the number of required signal extenders and receiver boxes.

Video   Audio

100 m/328 ft Cat5e Cable

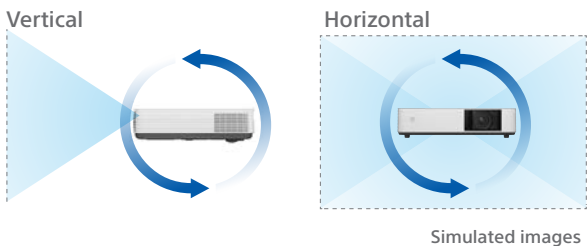**HDBT**

Control   Ethernet

Wide lens shift range

A generous powered lens shift adjustment range gives more flexibility for installing the projector wherever you need it: close to ceilings or horizontally offset.

10%
10%
20%~55%

Install at any angle

Other projectors can be fussy with their installation requirements. Freely position P-series projectors at any angle - even on their side or upside down.

Vertical   Horizontal

Simulated images

Specifications

		VPL-PHZ10	VPL-PWZ10
Display system		3 LCD system	
Display device	Size of effective display area	0.76" (19.3 mm) x 3 BrightEra LCD Panel	
	Number of pixels	WUXGA: 6,912,000 (1920 x 1200 x 3) pixels	WXGA: 3,072,000 (1280 x 800 x 3) pixels
	Aspect ratio	16 : 10	
Projection lens	Zoom	Manual (Ratio: Approx. x 1.45)	
	Focus	Manual	
	Lens Shift	Manual (Vertical: +20%~+55%, Horizontal: +10%)	
	Throw Ratio	1.28–1.88:1	
	Focal length(mm) / Aperture	f=21.37mm - 31.25mm f/ 1.50-1.95	
Light source		Laser+Phospher	
Recommended light replacement time *3 (Standard/Middle/Low)		>20,000 H / >20,000 H / 100,000 H	
Filter cleaning / replacement cycle (Max.)		20,000 H (service maintenance)	
Light/ Colour output (Mode: Standard/Middle/Low)		5,000 lm / 4,000 lm / 3,000 lm	
Contrast ratio (full white / full black)		500,000:1	
Operating temperature /Operating humidity		0°C to 40°C (32°F to 104°F)/20-80% (no condensation)	
Storage temperature /Storage humidity		-10 °C to +60°C (-4°F to +140°F) /20-80% (no condensation)	
Power requirements		AC 100 V to 240 V, 4.3 A to 1.7 A, 50 Hz / 60 Hz	
Speaker		16W (monaural)	
Displayable scanning frequency		Horizontal: 15 kHz to 92 kHz Vertical: 48 Hz to 92 Hz	
Display resolution	Computer signal input	Maximum display resolution: 1920 x 1200 dots	
	Video signal input	NTSC, PAL, SECAM, 480/60i, 576/50i, 480/60p, 575/50p, 720/60p, 720/50p, 1080/60i, 1080/50i, 1080/60p, 1080/50p	
Color system		NTSC3.58, PAL, SECAM, NTSC4.43, PAL-M, PAL-N,PAL-60	
Key stone correction (Max) *4		Horizontal: +/-30 degrees Vertical: +/-20 degrees	
OSD language		27-language (English, French, German, Italian, Spanish, Portuguese, Japanese, Chinese(簡・繁）, Korean, Russian, Dutch, Norwegian, Swedish, Thai, Arabic ,Turkish, Polish, Vietnamese, Farsi, Finnish, Indonesian, Hungary, Gleek,Czech,Slovakia,Romania)	
Operating Instructions languages (Note 1)		'English, Germany, French, Italy, Spanish, Russian, Simplified Chinese, Japanese, Arabic	
INPUT OUTPUT (Computer/Video/ Control)	INPUT A	RGB / Y PB PR input connector: Mini D-sub 15 pin female Audio input connector: Stereo mini jack	
	INPUT B	HDMI input connector: HDMI 19-pin, Digital RGB/YPBPR, HDCP support, HDMI audio support	
	INPUT C	HDMI input connector: HDMI 19-pin, Digital RGB/YPBPR, HDCP support, 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	RJ45,100BASE-TX (Shared with HDBaseT)	
	USB	TYPE-A / TYPE-B	
Acoustic Noise *5	Light output mode: Standard/ Middle/ Low	36dB / 28dB / 25dB	
Power consumption(Lamp mode: Standard / Middle / Low)	AC 100 V to 120 V	424W / 287W / 217W	399W / 266W / 198W
	AC 220 V to 240 V	403W / 279W / 211W	377W / 256W / 193W
Power Consumption (Standby Mode)	AC 100 V to 120 V	0.5W (when "Standby mode" is set to "Low")	
	AC 220 V to 240 V	0.5W (when "Standby mode" is set to "Low")	
Power Consumption (Networked Standby Mode)	AC 100 V to 120 V	12.5W(LAN) / 13.2W (optional WLAN module) / 16.8W(HDBaseT)/17.4W (ALL Terminals and Networks Connected, when "Standby Mode" is set to "Standard")	
	AC 220 V to 240 V	11.9W(LAN) / 12.6W (optional WLAN module) / 17.0W(HDBaseT)/17.6W (ALL Terminals and Networks Connected, when "Standby Mode" is set to "Standard")	
On mode power consumption	AC 100 V to 120 V	369W	342W
	AC 220 V to 240 V	353W	328W
Heat dissipation	AC 100 V to 120 V	1446BTU	1361BTU
	AC 220 V to 240 V	1374BTU	1286BTU
MTBF （故障間隔時間）		TBD	
Body Colour (Color Code)		White/Gray	
Dimensions (W x H x D)		Approx. 510 x128.5 x 354.6mm	
Dimensions (W x H x D) (without protrusions)		Approx. 510 x 113 x 354.6 mm	
Mass		Approx. 8.7 kg	
Supplied accessories	Remote commander	RM-PJ8	
	Size Battery	CR2025	
	AC power cord	Yes	
	Operating Instructions (CD-ROM)	Yes	
	Quick Reference Manual	Yes	
	Warranty card	Yes	
	Security label	Yes	
	flyers (Warning)	Yes	
	flyers (WEEE) / flyers (EU Battery direction)	Yes(SYQ)	
	Application Software (CD-ROM)	Yes	
Battery for the remote commander of the projector	Category / Type/ Number of batteries \ per package	Lithium Battery / CR2025 / 1	
Optional Accessories	Optional Lamp	-	
	Other Accessories	IFU-WLM3 (WLAN module)	

PAM-0.5M
Extension pole & ceiling plate

PAM-1.0M
Extension pole & ceiling plate
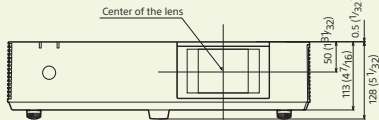
PAM-1.5M
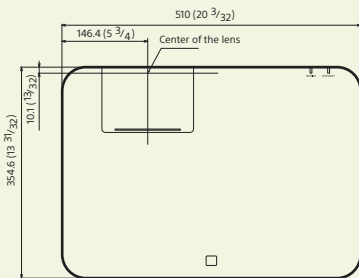Extension pole & ceiling plate

PAM-310
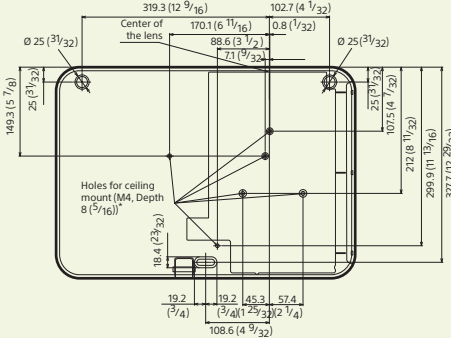Ceiling mount

Dimensions

Connector Panel

Front

Center of the lens

Unit: mm (inches)

50 (1 31/32)
113 (4 7/16)
0.5 (1/32)
128 (5 3/32)

Top

510 (20 3/32)
146.4 (5 3/4)
Center of the lens
354.6 (13 31/32)
101.1 (13/32)

Bottom

319.3 (12 9/16)
102.7 (4 1/32)
Center of the lens
170.1 (6 11/16)
0.8 (1/32)
88.6 (3 1/2)
7.1 (9/32)
Ø 25 (31/32)
Ø 25(31/32)
149.3 (5 7/8)
25 (31/32)
25 (31/32)
107.5 (4 7/32)
212 (8 11/16)
299.9 (11 13/16)
327.7 (12 29/32)
Holes for ceiling mount (M4, Depth 8 (5/16))
18.4 (23/32)
19.2 (3/4)
19.2 (3/4)
45.3 (1 25/32)
57.4 (2 1/4)
108.6 (4 9/32)

LASER NOTICES
For the U. S. A.

LASER RADIATION   IEC60825-1:2007
AVOID DIRECT EYE EXPOSURE
CLASS 3R LASER PRODUCT
WAVE LENGTH:450-460nm
MAX OUTPUT < 230mW

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

RG2

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

PrimeSupportPro
PrimeSupportElite

Our **PrimeSupportPro** and **PrimeSupportElite** packages go beyond standard levels of warranty with varying support options either at no extra cost or optional upgrade. **PrimeSupportPro** gives you free initial access to expert technical assistance from our multilingual helpdesk while optional **PrimeSupportElite** upgrades go further with our fast-track repair service and – depending on your product - a replacement loan unit†. Both packages include free shipping and no hidden costs so we'll always keep you up and running.

	PrimeSupportPro		PrimeSupportElite					
Service reference	Included Service PS.LASERPROJ.5		PSP.LPROJHVY.5		PSP.LPROJ.5YL		PSP.LPROJHVY.5YL	
Scope of support	Projector	Laser	Projector	Laser	Projector	Laser	Projector	Laser
Duration	5 years	12000 hours	5 years	20000 hours	5 years	12,000 hours with loan unit	5 years	20,000 hours with loan unit

For full product specifications and features please visit pro.sony.eu/p-series

SONY