

## VPL-FHZ90L

9,000 lm (9,800 lm center) laser light source projector (colour availability may vary by country)



### Overview

**These high-brightness 3LCD laser projectors offer stunning image quality with excellent reliability. Ideal for auditoriums, lecture theatres, halls and larger venues, they're also great for teaching in brightly-lit classrooms.**

#### **A bright and vibrant image**

Grab their attention – and keep it. The projectors' very high light output (9,000 lumens) ensures presentations with extra presence. You'll impress audiences in larger venues, from conference halls and lecture theatres to galleries, museums and visitor attractions.

#### **Unforgettable images**

Secure your competitive edge with visibly superior pictures – thanks to the combination of a newly developed 1-inch 3LCD panel and optical compensator with our unique Z-Phosphor Laser Light Source. It adds up to bright, beautiful images, bursting with fine detail and rich, sumptuous colours.

#### **Made for flexible installation**

Don't restrict your thinking. You'll appreciate the flexibility of industry-leading lens shift adjustment range and a wide choice of interchangeable lenses – giving more options to install the projector in any space, including classrooms and halls with high ceilings.

## Features

### **With normal lens shift**

The projector requires a mounting bracket, which obscures the audience's view.

### **With wide lens shift**

Lens shift gives greater installation flexibility, even in rooms with high ceilings.

### **Deliver your message**

Make sure your audience is always in the picture. Directly present HTML content – like corporate logos, images or information notices – over the network or from removable USB memory.

### **Beautifully consistent**

Auto calibration maintains precise colour consistency over extended operating periods. It's especially valuable for environments like museums and galleries where you can't afford to compromise the artist's original vision.

### **Don't keep them waiting**

Quick start-up saves time with every presentation. Switch on the VPL-FHZ90L and you're ready to start projecting at full brightness in moments. So you won't keep a room full of students waiting to see your point.

### **Instant recall**

Memorise and instantly recall up to six projector settings for image size, position and aspect ratio, saving valuable time for different environments and applications. (Requires optional VPLL-Z4111 lens)

### **Get closer to reality**

Sony's advanced Reality Creation technology analyses the input signal right down to the pixel level. Powerful pattern matching enhances crispness of on-screen images and text without adding

digital picture noise.

## Specifications

### Display System

Display System	3 LCD system
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### Display Device

Size of Effective Display Area	1" x 3 BrightEra LCD Panel, Aspect ratio: 16:10
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Number of Pixels	6,912,000 (1920 x 1200 x 3) pixels
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Aspect Ratio	16:10
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Resolution	WUXGA (1920 x 1200 pixels)
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### Projection Lens

Focus	Powered / Manual (Depend on lens)
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Zoom - Powered / Manual	Powered / Manual (Depend on lens)
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Zoom - Ratio	Depend on Lens
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Throw Ratio	Depend on Lens
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Lens shift - Powered / Manual	Powered
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Lens shift - Range Vertical / Horizontal	Range Vertical: Depend on Lens Range Horizontal: Depend on Lens
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## Light Source

Type	Laser diode
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## Filter Replacement Cycle (Max.)

Filter Replacement Cycle (Max.)	10,000 H
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## Screen Size

Screen Size	Depend on Lens
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## Light Output \*1

Mode: Standard	9,000lm*2
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Mode: Standard (Centre)	9,800 lm*3
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Mode: Middle	8,000 lm
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## Colour Light Output \*1

Mode: Standard	9,000 lm
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Mode: Middle	8,000 lm
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## Contrast Ratio \*1

Contrast Ratio (full white / full black)	Contrast ratio (full white / full black) : $\infty$ : 1
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## Displayable Scanning Frequency

Horizontal	15 kHz to 92 kHz
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Vertical	48 Hz to 92 Hz
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## Accepted Signal Resolution

Computer Signal Input	Maximum signal resolution: 1920 x 1200
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Video Signal Input	480/60i, 576/50i, 480/60p, 576/50p, 720/60p, 720/50p, 1080/60i, 1080/50i The following items are available for digital signal only; 1080/60P, 1080/50p, 1080/24p
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## Keystone Correction (Max.)

Horizontal	+/- 30 degrees
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Vertical +/- 30 degrees

## INPUT OUTPUT (Computer/Video/Control)

INPUT A	RGB / Y PB PR input connector: 5 BNC (female)
INPUT B	RGB input connector: Mini D-sub 15-pin (female)
INPUT C	DVI input connector: DVI-D 24-pin (single link), HDCP support HDCP: v1.4
INPUT D	HDMI input connector: HDMI 19-pin, HDCP support HDCP: v1.4
INPUT E	HDBaseT interface connector: RJ45, 3 play
INPUT G	HTML Viewer
OUTPUT 1	Monitor output for Input A/Input B Connector: Mini D-sub 15-pin (female)

## INPUT OUTPUT (Others)

USB-1	Type-A x 1
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## Control signal input/output

REMOTE	D-sub9pin male/RS232C
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LAN	RJ45, 10BASE-T/100BASE-TX/1000BASE-T
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## Acoustic Noise \*1

Light Output Mode: Standard	39dB
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Light Output Mode: Middle	39dB
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## Operating Temperature / Operating Humidity

Operating Temperature / Operating Humidity	0°C to 45°C (32°F to 109°F) / 20% to 80% (no condensation)
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## Storage Temperature / Storage Humidity

Storage Temperature / Storage Humidity	-10°C to +60°C (14°F to +140°F) / 20% to 80% (no condensation)
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## Power Requirements

AC 100 V to 240 V, 8.4 A to 3.4 A, 50

Power Requirements      Hz / 60 Hz

## Power Consumption

AC 100 V to 120 V      840 W

AC 220 V to 240 V      814 W

## Power Consumption (Standby Mode)

AC 100 V to 120 V      0.50W (when “Standby mode” is set to “Low”)

AC 220 V to 240 V      0.50W (when “Standby mode” is set to “Low”)

## Power Consumption (Networked Standby Mode)

AC 100 V to 120 V      21.6W (LAN)  
26.5W (HDBT)  
26.6W (ALL Terminals and Networks Connected, when "Standby Mode" is set to "Standard")

21.3W (LAN)  
26.5W (HDBT)  
26.6W (ALL Terminals and



AC 220 V to 240 V

Networks Connected, when "Standby Mode" is set to "Standard")

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## Dimensions (W x H x D) (without protrusions)

Dimensions (W x H x D) (without protrusions)    Approx. 544 x 205 x 564 mm  
(21 13/32 x 8 1/16 x 22 7/32 inches)

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## Mass

Mass    Approx. 26 kg (58 lb)

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## Supplied Accessories

Remote Commander    RM-PJ30

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## Projection Lens

Projection Lens    VPLL-4008, Z4111, Z4015, Z4019,  
Z4025, Z4045

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## Optional Projection Lens

VPLL-4008    Throw Ratio: 1:00:1  
Lens Shift - Range Vertical: +/-32%  
Lens Shift - Range Horizontal:

+/-15%

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VPLL-Z4111

Throw Ratio: 1:30:1 to 1:96:1  
Lens Shift - Range Vertical: +/-99%  
Lens Shift - Range Horizontal:  
+/-51%

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VPLL-Z4015

Throw Ratio: 1:85:1 to 2:44:1  
Lens Shift - Range Vertical: +/-98%  
Lens Shift - Range Horizontal:  
+/-51%

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VPLL-Z4019

Throw Ratio: 2:41:1 to 3:07:1  
Lens Shift - Range Vertical:  
+/-107%  
Lens Shift - Range Horizontal:  
+/-57%

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VPLL-Z4025

Throw Ratio: 3:02:1 to 5:58:1  
Lens Shift - Range Vertical:  
+/-107%  
Lens Shift - Range Horizontal:  
+/-57%

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VPLL-Z4045

Throw Ratio: 5.56:1 to 7.5:1  
Lens Shift - Range Vertical:  
+/-107%  
Lens Shift - Range Horizontal:  
+/-57%

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## Notes

*1	The figures are approximate. They vary depending on the environment or how the projector is used.
*2	The value is in accordance with ISO 21118, and may differ depending on the actual unit. Brightness and contrast vary depending on use conditions and environments.
*3	The value is light output measured at center area of screen in Standard mode, and average of all products shipped.

## Gallery

