

## VPL-FHZ60

5,000 lumens WUXGA laser light source projector



### Overview

#### **Bright, beautiful images with low running costs, minimal maintenance and flexible installation**

The VPL-FHZ60 laser projector is ideal for a wide range of business, education and entertainment applications. The powerful Z-Phosphor laser light source is teamed with Sony's advanced BrightEra 3LCD projection engine to deliver extremely bright, detail-packed WUXGA resolution images with generous 5000 lumens brightness and rich, stable colours. Constant Bright Maintains the same brightness throughout the 20,000 hours recommended life span.

The laser light source allows up to 20,000 hours\* of virtually zero maintenance operation without the worry of sudden lamp failures. A new automated filter system cuts the hassle of regular dust cleaning. Near-zero maintenance needs are complemented by a range of energy-saving feature, significantly driving down total lifetime ownership costs.

Offering a stylish new blend-in design, tidy cable management and low fan noise, the VPL-FHZ60 fits smoothly into almost any environment – from academic institutions, corporate, medical training and public sector organisations to visitor attractions and retail spaces. Seamlessly blend images from multiple projectors to create super-sized displays, or project accurately proportioned images onto angled or curved surfaces. Mount the projector at any angle, even on its side or upside down. Set-up's easier than ever with a friendly new installation menu.

\*Actual hours may vary depending on usage environment.

## Features

- **Very high image quality with Sony's advanced BrightEra 3LCD projection engine and Z-Phosphor laser light source**

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 recommended life span.

- **Advanced picture refinement technologies**

Picture quality is boosted by advanced processing featured on Sony 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 the finest detail in PC presentations, videos or multimedia signage with WUXGA (1920 x 1200) 16:10 resolution.

- **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 – or its side or even upside down.

- **Powered Wide Lens Shift**

Generous lens shift adjustments give more flexibility for positioning the projector where you need it: close to ceilings or even horizontally offset.

- **Included powered standard zoom lens plus wide choice of lens options**

Installation flexibility is increased by a wide range of compatible lens options to suit virtually any size of room and throw requirements. New quick-release bayonet mount simplifies quick lens exchange.

- **Supports HDBaseT**

Simpler, more cost-effective installation and connectivity with digital transmission of HD video, audio and

networking/control over a single Ethernet cable.

- **Create super-size displays with Edge Blending**

Seamlessly join accurately colour-matched images from multiple projectors, simplifying creation of stunning super-size displays for corporate and education.

- **Project onto non-flat surfaces with Image Warping**

Easily correct image geometry for natural-looking projections – even on convex or concave surfaces. Corner and edge correction can be easily adjusted with the supplied remote and on-screen menu.

- **Quiet operation**

Low fan noise ensures discreet, unobtrusive operation in quiet environments from museums and galleries to lecture theatres.

- **Slim, attractive new blend-in design**

The slim, stylish case design features a flat top surface that blends in discreetly when the projector is ceiling mounted. The clean appearance is accentuated by a new terminal cover that reduces cable clutter.

- **Picture Mode**

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

- **Simple set-up with friendly new Installation menu**

Easily adjust projector settings with remote commander, including warping and edge blending.

- **Project Side by Side**

Project images from two inputs at the same time: ideal for applications such as video conferencing and medical training where two images need to be seen simultaneously.

## Technical Specifications

Display system	
● Display system	3 LCD system

Display device	
● Size of effective display area	0.76" (19 mm) x 3 BrightEra LCD Panel, Aspect ratio: 16:10
● Number of pixels	6,912,000 (1920 x 1200 x 3) pixels

Projection lens *1	
● Focus	Powered
● Zoom - Powered/Manual	Powered
● Zoom - Ratio	Approx. x 1.6
● Throw ratio	1.39:1 to 2.23:1
● Lens shift - Powered/Manual	Powered
● Lens shift - Range Vertical	-5%, +60%
● Lens shift - Range Horizontal	+/- 32%

Light source	
● Type	Laser diode

Filter cleaning / replacement cycle (Max.)*2	
● Filter cleaning / replacement cycle (Max.)	20000 H (service maintenance)

Screen size	
● Screen size	40" to 600" (1.02 m to 15.24 m) (measured diagonally)

Light output	
● Mode: High	5000 lm
● Mode: Standard	3500 lm

Color light output	
● Mode: High	5000 lm
● Mode: Standard	3500 lm

Contrast ratio (full white / full black) *3	
● Contrast ratio (full white / full black)	10000:1

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 *4
	NTSC, PAL, SECAM, 480/60i, 576/50i, 480/60p, 576/50p, 720/60p, 720/50p, 1080/60i, 1080/50i

● Video signal input	The following items are available for digital signal (HDMI input) only; 1080/60P, 1080/50p, 1080/24p	
<b>Color system</b>		
● Color system	NTSC3.58, PAL, SECAM, NTSC4.43, PAL-M, PAL-N, PAL60	
<b>Keystone correction (Max.)</b>		
● Horizontal	+/- 30 degrees	
● Vertical	+/- 30 degrees	
<b>INPUT OUTPUT (Computer/Video/Control)</b>		
● INPUT A	RGB / Y PB PR input connector: Mini D-sub 15 pin (female) Audio input connector: Stereo mini jack	
● INPUT B	DVI input connector: DVI-D 24-pin (single link), HDCP support Audio input connector: Shared with input A	
● 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, Control)	
● VIDEO IN	Video input connector: BNC Audio input connector: Shared with input A	
● OUTPUT A	Monitor output for Input A Connector: Mini D-sub 15-pin (female) Audio output connector: Stereo mini jack	
● OUTPUT B	Monitor output for Input B Connector: DVI-D 24-pin (single link), HDCP not supported Audio output, Monitor out connector: Stereo mini jack	
● REMOTE	D-sub 9-pin (male) / RS232C	
● LAN	RJ45, 10BASE-T/100BASE-TX	
● IR (Control S)	Stereo mini jack, Plug in power DC5V	
<b>Acoustic Noise</b>		
● Lamp mode: Standard	28 dB	
<b>Operating temperature / Operating humidity</b>		
● Operating temperature / Operating humidity	0°C to 40°C (32°F to 104°F) / 20% to 80% (no condensation)	
<b>Storage temperature / Storage humidity</b>		
● Storage temperature / Storage humidity	-10°C to +60°C (14°F to +140°F) / 20% to 80% (no condensation)	
<b>Power requirements</b>		
● Power requirements	AC 100 V to 240 V, 4.5 A to 1.9 A, 50 Hz / 60 Hz	
<b>Power consumption</b>		
● AC 100 V to 120 V	Mode: High: 420 W	
● AC 220 V to 240 V	Mode: High: 408 W	
<b>Power Consumption (Standby Mode)</b>		
● 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")	
<b>Power Consumption (Networked Standby Mode)</b>		
● AC 100 V to 120 V	15.0 W (LAN) 15.0 W (HDBaseT) 15.0 W (All Terminals and Networks Connected) (when "Standby Mode" is set to "Standard")	

<ul style="list-style-type: none"> <li>AC 220 V to 240 V</li> </ul>	13.3 W (LAN) 13.3 W (HDBaseT) 13.3 W (All Terminals and Networks Connected) (when "Standby Mode" is set to "Standard")
<b>Standby Mode / Networked Standby Mode Activated</b>	
<ul style="list-style-type: none"> <li>Standby Mode / Networked Standby Mode Activated</li> </ul>	Approx. 10 Minutes
<b>Heat dissipation</b>	
<ul style="list-style-type: none"> <li>AC 100 V to 120 V</li> </ul>	1433 BTU/h
<ul style="list-style-type: none"> <li>AC 220 V to 240 V</li> </ul>	1393 BTU/h
<b>Dimensions (W x H x D)</b>	
<ul style="list-style-type: none"> <li>Dimensions (W x H x D) (without protrusions)</li> </ul>	460 x 169 x 515 mm 18 1/8 x 6 21/32 x 20 9/32 inches
<b>Mass</b>	
<ul style="list-style-type: none"> <li>Mass</li> </ul>	16 kg (34 lb)
<b>Supplied accessories</b>	
<ul style="list-style-type: none"> <li>Remote commander</li> </ul>	RM-PJ27
<b>Optional accessories</b>	
<ul style="list-style-type: none"> <li>Projection Lens</li> </ul>	VPLL-3007 / Z3009 / Z3024 / Z3032
<b>Notes</b>	
<ul style="list-style-type: none"> <li>*1 With supplied standard lens</li> </ul>	
<ul style="list-style-type: none"> <li>*2 This figure is expected maintenance time, not guaranteed time. The actual value depends on the environment and how the projector is used.</li> </ul>	
<ul style="list-style-type: none"> <li>*3 The value is average.</li> </ul>	
<ul style="list-style-type: none"> <li>*4 Available for VESA Reduced Blanking signal.</li> </ul>	

### Ceiling Brackets



**PSS-650**  
Projector Ceiling Bracket for Installation



**PSS-650P**  
Projector Ceiling Bracket for Installation

### Lenses



**VPLL-3003**  
Projection Lens for the VPL-F Series



**VPLL-3007**  
Projection Lens for the VPL-F Series



**VPLL-Z3009**  
Short focus zoom lens



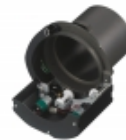
**VPLL-Z3024**  
Projection Lens for the VPL-F Series



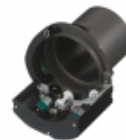
**LKRA-FL1**  
Optical Filter for 3D projection



**LKRA-FL2**  
Optical Filter for angular projection



**PK-F60LA1**  
Lens Adaptor for the discontinued VPLL-1032 optional Lens to use with the VPL-FHZ57, FHZ60, FHZ65, FH60, FH65, VPL-FWZ65, FWZ60 FW65 and FW60 Installation Projectors



**PK-F60LA2**  
Lens Adaptor for the discontinued VPLL-1024 optional Lens to use with the VPL-FHZ57, FHZ60, FHZ65, FH60, FH65, VPL-FWZ65, FWZ60 FW65 and FW60 Installation Projectors



**PK-F60LA3**  
Lens Adaptor for the discontinued VPLL-Z2009 optional Lens to use with the VPL-FHZ57, FHZ60, FHZ65, FH60, FH65, VPL-FWZ65, FWZ60 FW65 and FW60 Installation Projectors



**PK-F60LA4**  
Lens Adaptor for the discontinued VPLL-2007 optional Lens to use with the VPL-FHZ57, FHZ60, FHZ65, FH60, FH65, VPL-FWZ65, FWZ60, FW65 and FW60 Installation Projectors



VPLL-Z3032

Long focus zoom lens

Other Accessories