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# VPL-FH60

### 5,000 lumens WUXGA 3LCD installation projector



### Overview

Bring presentations to life with impressive brightness and picture quality - plus easy, flexible integration and powerful picture features.

The VPL-FH60 installation projector is ideal for a wide range of business, education and entertainment applications. The energy-efficient High Pressure Mercury (HPM) lamp source is teamed with Sony's advanced BrightEra 3LCD projection engine, delivering extremely bright, detail-packed WUXGA resolution images with generous 5000 lumens brightness and rich, stable colours. Reality Creation and Contrast Enhancer technologes fine-tune image quality even further to assure exceptional clarity, realism and punch with every presentation.

With a stylish blend-in design, neat cable management and low fan noise, the VPL-FH60 integrates smoothly into almost any environment – from academic institutions, corporate, medical training and public sector organisations to visitor attractions and retail spaces. Easy set-up's assisted by a friendly new installation menu.

Lensless models available in Europe; please check for local availability.

VPL-FH60



### **Features**

### Very high image quality with BrightEra 3LCD projection engine

The energy-efficient High Pressure Mercury (HPM) lamp source is coupled with Sony's acclaimed BrightEra 3LCD projection engine to ensure high 5000 lumen image brightness with vivid, natural colour reproduction.

### 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.

### Hassle-free automatic filter cleaning

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

#### 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.

### Choice of Picture Modes

New Picture Mode ensures great-looking presentations in a wide range of operating conditions. Select

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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 image 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) pixe	ls	
Projection lens *1			
• Focus		Powered	
Zoom - Powered/Manual		Powered (Approx. 1.6 x)	
Throw ratio		1.39:1 to 2.23:1	
Lens shift - Powered/Manual		Powered	
Lens shift - Range Vertical		-5.0%, +60%	
Lens shift - Range Horizontal		+/- 32%	
ight source			
<ul> <li>Type</li> </ul>	Ultra high pressure mercury lamp		
Wattage	280 W type		
Recommended lamp replacement time *2			
Lamp mode: High		3000 H	
Lamp mode: Low		4000 H	
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)		
ight output			
Lamp mode: High		5000 lm	
Lamp mode: Standard		3200 lm	
Color light output			
Lamp mode: High		5000 lm	
Lamp mode: Standard		3200 lm	
Contrast ratio (full white / full black) *3			
Contrast ratio (full white / full black)		2000:1	
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	
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 digital signal (HDMI input) only; 1080/60P, 1080/50p, 1080/24p	

Color system	
Color system	NTSC3.58, PAL, SECAM, NTSC4.43, PAL-M, PAL-N, PAL60

Keystone correction (Max.)	
Horizontal	+/- 30 degrees
Vertical	+/- 30 degrees

## OSD language

• OSD 24-language (English, Dutch, French, Italian, German, Spanish, Portuguese, Turkish, Polish, Russian, Swedish, Norwegian, Japanese, Simplified Chinese, Traditional Chinese, Korean, Thai, Vietnamese, Arabic, Farsi, Finnish, Indonesian, Hungarian, Greek)

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	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: DVD-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	

Acoustic Noise	
Lamp mode: Standard	28 dB

Operating temperature / Operating humidity	
Operating temperature / Operating humidity	0°C to 40°C (32°F to 104°F) / 20% to 80% (no condensation)

Storage temperature / Storage humidity	
Storage temperature / Storage humidity	-10 $^{\circ}$ C to +60 $^{\circ}$ C (14 $^{\circ}$ F to +140 $^{\circ}$ F) / 20% to 80% (no condensation)

Power requirements		
Power requirements	AC 100 V to 240 V, 4.3 A to 1.8 A, 50 Hz / 60 Hz	
Daway concumution		

Power	consumption	
• AC	C 100 V to 120 V	Lamp mode: High: 429 W
• AC	C 220 V to 240 V	Lamp mode: High: 416 W



Standby Mode / Networked Standby Mode Activated

AC 220 V to 240 V

Power Consumption (Standby Mode)		
• AC 100 V to 120 V	0.5 W (when "Standby mode" is set to "Low")	
<ul> <li>AC 220 V to 240 V</li> </ul>	0.5 W (when "Standby mode" is set to "Low")	

Power Consumption (Networked Standby Mode)		
• 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")	
• AC 220 V to 240 V	13.3 W (LAN) 13.3 W (HDBaseT) 13.3 W (All Terminals and Networks Connected) (when "Standby Mode" is set to "Standard")	

Standby Mode / Networked Standby Mode Activated	Approx. 10 Minutes
Heat dissipation	
• AC 100 V to 120 V	1464 BTU/h

1419 BTU/h

Dimensions (W x H x D)	
Dimensions (W x H x D) (without protrusions)	460 x 169 x 515 mm 18 1/8 x 6 21/32 x 20 9/32 inches

- 1	Mass	
	Mass	Approx. 13 kg (28 lb)

Supplied accessories	
Remote commander	RM-PJ27

ı	Optional accessories	
	Projection Lens	VPLL3007 / Z3009/ Z3024 / Z3032
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1	Notes	

Notes	
• *1	With supplied standard lens.
• *2	This figure is expected maintenance time, not guaranteed time. The actual value depends on the environment and how the projector is used.
• *3	The value is average.
• *4	Available for VESA Reduced Blanking signal.

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### **Accessories**

# **Ceiling Brackets**



PAM-310

Projector Ceiling Mount for Installation Projector



PSS-650

Projector Ceiling Bracket for Installation



PSS-650P

Projector Ceiling Bracket for Installation





LMP-F280

Replacement Lamp for the VPL-F Series

### Lenses



#### VPLL-3003

Projection Lens for the VPL-F Series



VPLL-3007

Projection Lens for the VPL-F Series



VPLL-Z3032

Long focus zoom lens

## **Other Accessories**



#### 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

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VPLL-Z3009

Short focus zoom lens



### 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





Projection Lens for the VPL-F Series