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# VPL-FH31

### 4,300 lumens WUXGA 3LCD Installation projector



#### Overview

High brightness and low maintenance - great performance for any environment The VPL-FH31 is designed to fit smoothly into almost any environment where a high-quality projector is required. Its brightness, zoom and throw range, coupled with its wide lens shift range, mean it can perform where other projectors would struggle - even in high ambient light.

Once installed, the VPL-FH31 has excellent image capabilities and a long lifespan that delivers low Total Cost of Ownership. Sony's BrightEra technology improves and maintains colour purity throughout the life of the system by protecting the LCD panels against harmful ultra violet light. Clever features such as synchronised lamp and filter replacement cycles reduce costs and downtime.

Featuring the usual wide range of features, the VPL-FH31 also allows for edge blend (multiple projectors with seamless connection), warping and Portrait mode installation for retail, corporate signage applications. Other features include advanced projection capabilities such as side-by-side image projection and DICOM medical training, the VPL-FH31 is an obvious projector choice for venues that demand quality, unique installation locations and practicality.

VPL-FH31



#### **Features**

#### 3 LCD WUXGA BrightEra Panel Technology

Sony's BrightEra Panel Technology gives more accurate colour rendition, higher brightness and longer lifespan for a lower Total Cost of Ownership.

#### Ultra High Resolution

The VPL-FH31's WUXGA (1920x1200) 16:10 format resolution delivers absolute best image quality.

#### Very High Brightness: 4,300 Lumens Colour Light Output

With very high brightness of 4,300 Lumens Colour Light Output, the VPL-FH31 gives a clearer image in high ambient light, making it highly suitable for larger venues.

#### • Wide Zoom Range (x1.6) and Throw Ratio (1.4 to 2.3) as standard

The standard lens has a wide zoom capability and throw ratio, offering more flexibility over the positioning of the projector, which can be installed closer to or further away from the screen

#### Wide Lens Shift Range: Vertical: +60%, Horizontal: +/- 32%

The VPL-FH31's wide lens shift range means that the projector can be positioned closer to the ceiling, or horizontally offset to avoid ceiling obstacles.

#### Long Lamp Replacement Time: 3,000-4,000 hours (High/Std)

Longer lamp life means fewer visits by maintenance personnel and lower Total Cost of Ownership.

#### Lamp/Filter Replacement Cycles Synchronised

Synchronised lamp and filter replacement effectively halves the number of visits needed to maintain the projector in peak operating condition.

#### • Interchangeable Lenses: Z1024, Z1032

The VPL-FH31 allows you to choose different lenses for increased flexibility.

## Edge Blend

Multiple VPL-FH31 projectors have the ability to project a single seamless image onto a screen (wall) creating an exciting visual event, or retail or corporate signage application.

#### Warping Projection

Warping projection allows the customer to adjust the corners and sides of a VPL-FH31 projected image to any convex or concave screen set up or wall for dynamic signage displays.

#### Portrait Mode

The VPL-FH31 can be installed on its side (fan side down) for any portrait signage application.

#### Side by Side Image Projection

Side by side twin image gives you the ability to project from two inputs (RGB + any other Input) at the same time, making the projector ideal for applications like video conferencing and DICOM medical training.

#### DICOM GSDF Simulation

The VPL-FH31 offers DICOM GSDF Simulation (HDMI with computer signals), which conforms to GSDF (Grayscale Standard Display Function) of medical standards for DICOM (Digital Imaging and



Communication in Medicine).

#### Wide Range of Image Adjustments

This wide range of image adjustments allows the projector to be installed in almost any location. Where equipment is being upgraded, installers are more likely to be able to use existing mounts. In new installations, they are more likely to be able to work around existing obstructions.

#### User Panel Alignment

Pixel alignment shifts the entire image or desired range (H: 16 X V: 10 pixels) for complete colour correction.

#### Colour Matching

The VPL-FH31 offers brightness and colour matching adjustment to the original image for complete image accuracy.

#### Lower Operating Power Consumption than Previous Models

Lower operating power consumption helps reduce energy consumption and lowers running costs.



## **Technical Specifications**

Display system	
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
Number of pixels	6,912,000 (1920 x 1200 x 3) pixels
Projection lens*1	
• Focus	Manual
Zoom - Powered/Manual	Manual
Zoom - Ratio	Approx. x 1.6
Throw ratio	1.39:1 to 2.23:1
Lens shift - Powered/Manual	Manual
Lens shift - Range Vertical	+60%
Lens shift - Range Horizontal	+/- 32%
Light source	
• Type	Ultra high pressure mercury lamp
Wattage	330 W type
Recommended lamp replacement time*2	
Lamp mode: High	3000 H
Lamp mode: Standard	4000 H
Filter cleaning / replacement cycle*2 (Max.)*2	
Filter cleaning / replacement cycle*2 (Max.)	15000 H (Cleaning) Same as the lamp replacement is recommended
Screen size*1	
• Screen size 40" to 6	600" (1.02 m to 15.24 m) (measured diagonally)
Light output	
Lamp mode: High	4300 lm
Lamp mode: Standard	3400 lm
Color light output	
Lamp mode: High	4300 lm
Lamp mode: Standard	3400 lm
Contrast ratio (full white / full black)*3	
Contrast ratio (full white / full black)*3	2000:1
Displayable scanning frequency	



Horizontal	14 kHz to 93 kHz	
Vertical	47 Hz to 93 Hz	

Display resolution	
<ul> <li>Computer signal input</li> </ul>	Maximum display resolution: 1920 x 1200 dots *4
<ul> <li>Video signal input</li> </ul>	NTSC, PAL, SECAM, 480/60i, 576/50i, 480/60p, 576/50p, 720/60p, 720/50p, 1080/60i, 1080/50i, 1080/60p, 1080/50p, 1080/24p

Color system	
<ul> <li>Color system</li> </ul>	NTSC3.58, PAL, SECAM, NTSC4.43, PAL-M, PAL-N, PAL60

Keystone correction (Max.)*8		
Vertical	+/- 30 degrees	
Horizontal	+/- 30 degrees	

# • OSD language 23-languages (English, Dutch, French, Italian, German, Spanish, Portuguese, Turkish, Polish, Russian, Swedish, Norwegian, Japanese, Simplified Chinese, Traditional Chinese, Korean, Thai, Vietnamese, Arabic, Farsi, Indonesian, Finnish, Hungarian)

INPUT OUTPUT (Computer/Video/Control)		
INPUT A	RGB / YPbPr input connector: 5BNC (female) Audio input connector: Stereo mini jack	
INPUT B	RGB input connector: Mini D-sub 15-pin (female) Audio input connector: Stereo mini jack (shared with INPUT C)	
• INPUT C	DVI-D input connector: DVI-D 24-pin (Single link), HDCP support Audio input connector: Stereo mini jack (shared with INPUT B)	
INPUT D	HDMI input connector: HDMI 19-pin, HDCP support	
S VIDEO IN	S video input connector: Mini DIN 4-pin Audio input connector: Pin jack (x2) (shared with VIDEO IN)	
• VIDEO IN	Video input connector: Pin jack Audio input connector: Pin jack (x2) (shared with S VIDEO IN)	
• OUTPUT	Monitor output connector*5: Mini D-sub 15-pin (female) Audio output connector*6: Stereo mini jack (variable out)	
• REMOTE	RS-232C connector: D-sub 9-pin (female)	
• LAN	RJ-45, 10BASE-T/100BASE-TX	
IR (Control S)	Control S input connector: Stereo mini jack	

Acoustic noise	
Lamp mode: Standard	30 dB

Operating temperature / Operating humidity	
Operating temperature / Operating humidity	$0^{\circ}\text{C}$ to $40^{\circ}\text{C}$ (32 $^{\circ}\text{F}$ to $104^{\circ}\text{F})$ / 35% to 85% (no condensation

Storage temperature / Storage humidity	
Storage temperature / Storage humidity	-20°C to +60°C (-4°F to +140°F) / 10% to 90% (no condensation)

Power requirements	
Power requirements	AC 100 V to 240 V, 4.0 A to 1.6 A, 50/60 Hz

Power consumption		
• AC 100 V to 120 V	Lamp mode: High: 400 W	



• AC 100 V to 120 V Lamp mode: High: 380 W

Power Consumption (Standby Mode)

AC 100 V to 120 V
 0.2 W (when "Standby mode" is set to "Low)

AC 220 V to 240 V
 0.3 W (when "Standby mode" is set to "Low")

Power Consumption (Networked Standby Mode)

• AC 100 V to 120 V 9.2 W (LAN) (when "Standby Mode" is set to "Standard")

AC 220 V to 240 V
 10.4 W (LAN) (when "Standby Mode" is set to "Standard")

Standby Mode / Networked Standby Mode Activated

Standby Mode / Networked Standby Mode Activated
 After about 10 Minutes

Heat dissipation

• AC 100 V to 120 V 1365 BTU/h

AC 220 V to 240 V
 1297 BTU/h

Dimensions (W x H x D)

Dimensions (W x H x D) (without protrusions)
 Approx. 390 x 134 x 463 mm (15 11/32 x 5 9/32 x 18 7/32 inches)

Mass

Mass
 Approx. 8.3 kg (18 lb)

Supplied accessories

Remote commander
 RM-PJ19

Optional accessories

Replacement lamp
 LMP-F272

Projection lenses
 VPLL-Z2009/Z1024/Z1032/2007

Projection lens adapter
 PK-F30LA1

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.

\*5 From INPUT A and INPUT B.

\*6 Works as an audio switcher function. Output from a selected channel; not available in standby.

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#### **Accessories**

## Lenses



#### VPLL-2007

Projection Lens for the VPL-F Series



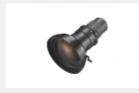
#### VPLL-Z1024

Projection Lens for the VPL-F Series



#### VPLL-Z1032

Projection Lens for the VPL-F Series



#### VPLL-Z2009

Projection Lens for the VPL-F Series