

VPL-EW295 VPL-EW255 VPL-EW235

VPL-EX295 VPL-EX290

VPL-EX255 VPL-EX250

VPL-EX235 VPL-EX230



BrightEra.. HDMI



# Bring learning to life with this bright, energyefficient, wireless-ready portable projector designed in consultation with teachers and made for today's classrooms

Combining superb image quality with smart energy-saving features, the VPL-E200 Series portable projector enhances learning by delivering powerful presentations that really stand out. Simple to use and wireless-ready, this projector is ideal for maximizing student engagement in today's networked classrooms, making it your ideal partner throughout the busy school day. Sony BrightEra™ panel technology assures clear pictures in any conditions, from daylight to darkened classrooms. Plenty of interfaces allow easy connection, while the choice of picture modes can optimize viewing with any source – slide presentations, PC document, pictures, videos (and more) web-sites, and more. Adding an optional USB wireless LAN module lets students and teachers wirelessly share homework, images, and graphics from mobile devices like smartphones and tablets. There's a wide built-in range of smart energy-saving features and, with a recommended lamp replacement time of 10,000 hours, downtime and maintenance costs are minimized.

### **FEATURES**

# Good TCO, Energy-efficient Design

## Energy Efficient With Long-Lasting Lamp Replacement Time (10,000 hours)

The lamp driver optimally controls the wattage of the lamp and achieves a long-lasting lamp replacement time of 10,000 hours with lamp brightness set to low. This extends the lamp replacement time by more than 43% compared with the previous model.



Lamp mode: low Complies with IEC61947 standard

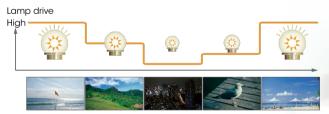
- \*Usage condition example: 8 hours per day x 5 times per week x 5 years
- \*\*The figures are the expected maintenance time and not guaranteed

  They will depend on the environment or how the projector is used

#### **Auto Power Saving Function**

Auto Mode (Auto Brightness Adjustment Function)

The brightness of the lamp's output is automatically adjusted depending on the brightness of the projected image, to avoid unnecessary power consumption. When showing darker images that don't require high brightness, lamp output decreases.



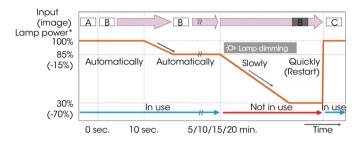
#### Blank

The VPL-E200 Series projectors can temporarily disable video signal output. This function can be easily operated with just the touch of a button on the supplied Remote Commander™ unit. In addition, this function allows blank image projection with low power consumption using lamp control technology.



#### Lamp Dimming Function

The VPL-E200 Series projectors are equipped with a lamp dimming function. After 10 seconds of a static signal feed, the lamp dims by approximate 15% which is hardly noticeable. If one of these projectors is left powered on while not in use, after a set period of time it will automatically detect no change of signal input and will dim the lamp to as low as approximate 30% of original brightness to significantly reduce energy consumption.



#### **ECO MODE Key**

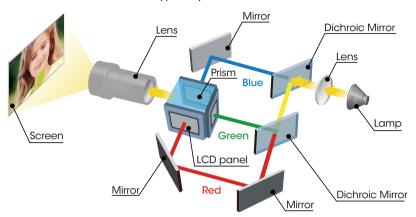
With a single push of the ECO MODE key on either the projector or the supplied Remote Commander unit, users can select an energy-saving setting from the ECO Mode menu.



# **High Image Quality**

#### 3LCD BrightEra™ Natural and Vivid Color Images

Thanks to the optical system constantly projecting three basic colors, the projector offers excellent light efficiency and this, ensures colorful and bright images. Sony's BrightEra<sup>TM</sup> panels deliver improved panel light resistance, higher resolution, high brightness, and increased panel reliability. High color reproducibility is important especially when using colorful content, such as materials typically used in classrooms.



**3LCD Projection System** 

#### Various Picture Modes for Optimal Picture Quality

The projector has six available picture modes for correct picture quality: Dynamic, Standard, Presentation, Blackboard, Game, and Cinema. With six picture modes and three brightness modes combined, the user can select the most suitable picture / brightness combination according to the picture source and environment, to create the optimal image.

#### **Dynamic**



Optimized for presenting in a bright environment, with bright and colorful text, graphics, and images.

#### Standard



The picture is ideal to deliver a presentation under fluorescent lights in offices and class-rooms.

#### Presentation



This setting delivers the greatest light output, ideal in a bright environment, both inside and outside.

#### Blackboard



Optimized to deliver clear images on a blackboard in the classroom, supporting teaching where there is no projection screen.

#### Game

Ideal to enjoy games in a living room with lots of ambient light.

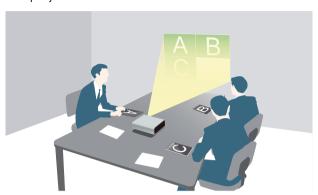
#### Cinema

Fine tuned to enjoy movies in a room with indirect lights

#### Ease of Use

#### Network Presentation (LAN)

When the projector is installed in a LAN, presentations can be projected from any PC and Mac on the network. A tablet or smart phone can be connected at the same time. You can project jpg, pdf, and other supported formats. Up to four users can project PC / Mac images simultaneously, while up to eight\*1 users can connect to one projector.



# PC Tablet Smartphone IFU-WLM3

#### **Wireless Presentation Software**

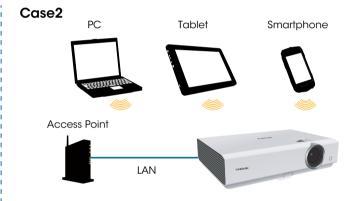
For MS Windows / Mac OS: Projector Station for Network Presentation

For iOS / Android OS: VueMagic\*2

- \*1 Up to seven users for wireless.
- \*2 The application for tablets and smartphones is provided by Pixelworks. For details, please visit the following website: http://PWPresenter.pixelworks.com



VueMagic



#### Remote Control for iPhone/iPad

Projector Remote is a simple remote control application for Sony's projectors. Networked projectors can be controlled by this remote application, and remote control allows you to operate the projector using simple and easy-to-read buttons.

\* Projector Remote Application Scan the QR code. Download FREE today.



Projector Remote



For wireless connection, the IFU-WLM3 is required.

# USB Display

The projector allows you to display pictures and audio\* with one USB cable. You do not need to install any driver for this function. This is a convenient and very easy way to connect to the projector.

\* There is a time lag in video and audio. Beyond basic usage, Line-in or HDMI-in is recommended.

#### Input Label

Input label which appear in the input menu on screen can be customized. This gives users a clear understanding of which equipment is connected.



#### **Other Features**

#### **Closed Captioning**

Official teletext broadcasting, developed by the NCI, USA

#### Network and Control

Controls and monitors projector status Compatible with various control systems

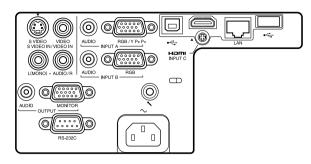




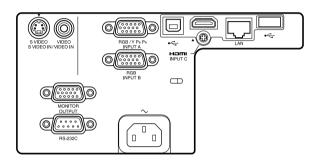


# **CONNECTOR PANELS**

VPL-EW295 / VPL-EW255 / VPL-EW235 VPL-EX295 / VPL-EX255 / VPL-EX235



#### VPL-EX290 / VPL-EX250 / VPL-EX230



# **OPTIONAL ACCESSORIES**



LMP-E212 Projector Lamp (for replacement)

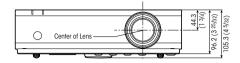


**IFU-WLM3**USB wireless LAN module

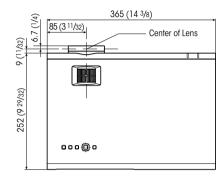
# **DIMENSIONS**

Unit: mm (inches)

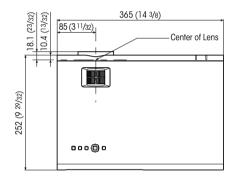
Front



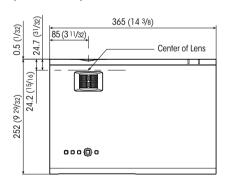
Top
VPL-EW295



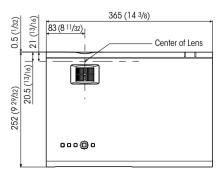
#### VPL-EW255 / VPL-EX295 / VPL-EX290 / VPL-EX255



#### VPL-EW235 / VPL-EX250 / VPL-EX235



#### VPL-EX230



# **SPECIFICATIONS**

		VPL-EW295	VPL-EW255	VPL-EW235	VPL-EX295	VPL-EX255	VPL-EX235		
Display system		3 LCD system							
Display device	Size of effective display area	0.75" (19 mm) x 3			0.63" (16 mm) x 3 BrightEra Aspect ratio: 4:3				
	Number of pixels	3,072,000 (1280 x 800 x 3) pixels			2,359,296 (1024 x 768 x 3) pixels				
Projection lone	Zoom	3,072,000 (1280 X 800	x 3) pixeis	Optical: Manual	Optical: Manual				
Projection lens		Optical: Manual (Approx. x 1.6)		(Approx. x 1.3)	Optical: Manual (Approx. x 1.6) Optical: Manual (Approx. x 1.3)				
	Focus	Manual					Т		
	Throw ratio	1.10:1 to 1.79:1   1.40:1 to 2.27:1   1.37:1 to 1.80:1			1.40:1 to 2.27:1		1.37:1 to 1.80:1		
ight source		Ultra high pressure mercury lamp 210 W type							
Recommended lamp replacement time*1		4000H / 6000H / 10000H (Lamp mode: High / Standard / Low) 3000H / 5000H / 10000H (Lamp mode: High / Standard / Low)							
Filter cleaning cycle*1		Max. 7000 H							
Screen size		30" to 300" (0.76 m to 7.62 m)							
ight output		3800 lm / 2700 lm*2 /	3200 lm / 2000 lm*2 /	2700 lm / 1900 lm*2 /	3800 lm / 2700 lm*2 /	3300 lm / 2200 lm*2 /	2800 lm / 2100 lm*2		
Lamp mode: High / Star	ndard / Low)	2100 lm*2	1500 lm*2	1500 lm*2	2100 lm*2	1700 lm*2	1600 lm*2		
Color light output (Lamp mode: High / Standard / Low)		3800 lm / 2700 lm*2 / 2100 lm*2	3200 lm / 2000 lm*2 / 1500 lm*2	2700 lm / 1900 lm*2 / 1500 lm*2	3800 lm / 2700 lm*2 / 2100 lm*2	3300 lm / 2200 lm*2 / 1700 lm*2	2800 lm / 2100 lm*2 1600 lm*2		
Contrast ratio (full white / full black)*3		3700:1	2700:1	1000 IIII	3300:1	1700 IIII	1000 1111		
Displayable scanning	Horizontal	14 kHz to 93 kHz	2,00.1		0000.1				
requency	Vertical	47 Hz to 93 Hz							
· · · · · ·									
Display resolution	Computer signal input		tion: UXGA 1600 x 1200	uois	TB 1 2 1 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1004 7/0 11			
		Panel display resolution			Panel display resolution				
	Video signal input	NTSC, PAL, SECAM, 480/60i, 576/50i, 480/60p, 576/50p, 720/60p, 720/50p, 1080/60i, 1080/50i, 1080/60p, 1080/50p							
Color system		NTSC3.58, PAL, SECAM, NTSC4.43, PAL-M, PAL-N							
Keystone correction		Vertical: Max. +/- 20 degrees Vertical: Max/- 30 degrees							
OSD language		24-languages (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)							
Computer and video	INPUT A	RGB/YPB PR input connector: Mini D-sub 15-pin (female), Audio input connector: Stereo mini jack							
signal input/output	INPUT B	RGB input connector: Mini D-sub 15-pin (female), Audio input connector: Stereo mini jack							
	INPUT C	HDMI input connector: HDMI 19-pin, HDCP support							
		Audio input connector: HDMI audio 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 SVIDEO IN)							
	OUTPUT	Monitor output connector.* Mini D-sub 15-pin (female), Audio output connector* Stereo mini jack (variable out)							
Control signal input/out		RS-232C connector: D-sub 9-pin (male)							
Control signal inpul/output, Offices		LAN connector: RJ-45, 10BASE-T/100BASE-TX USB: Type-A, Type-B							
Pnogkor		Microphone input: Mini jack							
Speaker		16 W x 1 (monaural)	740E (2E0/ +c 0E0/	undonastion)					
Operating temperature (Operating humidity)		0°C to 40°C / 32°F to 104°F (35% to 85%; no condensation) -20°C to +60°C / -4°F to +140°F (10% to 90%)							
Storage temperature (St	orage numidity)			1.0.2.00.//	10100		1.0.1.00.//		
Power requirements		AC 100 V to 240 V, 3.2 A to 1.4 A, 50 Hz / 60 Hz		AC 100 V to 240 V, 3.0 A to 1.3 A, 50 Hz / 60 Hz	AC 100 V to 240 V, AC 100 V to 240 V, 3.2 A to 1.4 A, 3.0 A to 1.3 A, 50 Hz / 60 Hz 50 Hz		3.0 A to 1.3 A,		
Power consumption (Lamp mode: High / Standard / Low)	AC 100 V to 120 V	309 W / 250 W*2 / 219 W*2	314 W / 250 W*2 / 219 W*2	289 W / 250 W*2 / 219 W*2	310 W / 250 W*2 / 219 W*2	314 W / 250 W*2 / 219 W*2	297 W / 250 W*2 / 219 W*2		
	AC 220 V to 240 V	298 W / 240 W*2 / 212 W*2	301 W / 240 W*2 / 212 W*2	278 W / 240 W*2 / 212 W*2	299 W / 240 W*2 / 212 W*2	301 W / 240 W*2 / 212 W*2	286 W / 240 W*2 / 212 W*2		
Standby mode power consumption (Standby	AC 100 V to 120 V	4.9 W / 0.5 W							
node: Standard / Low)	AC 220 V to 240 V	5.1 W/0.5 W							
Heat dissipation	AC 100 V to 120 V	1054 BTU	1071 BTU	986 BTU	1058 BTU	1071 BTU	1013 BTU		
	AC 220 V to 240 V	1017 BTU	1027 BTU	949 BTU	1020 BTU	1027 BTU	976 BTU		
Outside dimensions	AU 22U V IU 24U V					102/ 010	7/0010		
Outside dimensions			W 365 x H 96.2 x D 252 mm (W 14 3/8 x H 3 25/32 x D 9 29/32 inches) (without protrusions)						
Mass		1	4.1 kg/9 lb 3.9 kg/8 lb 3.9 kg/8 lb 3.9 kg/8 lb 3.9 kg/8 lb						
Supplied accessories	pplied accessories RM-PJ8 Remote Commander (1), Lithium battery: CR2025 (1), AC Power Cord (1), Operating Instructions (CD-ROM) (1), Quick Refe Mini D-sub 15-pin cable (1), Projector Station for Network Presentation application (CD-ROM) (1)					(Reference Manual (1)			
Replacement lamp		LMP-E212							

<sup>\*1</sup> The figures are the expected maintenance time and not guaranteed. They will depend on the environment or how the projector is used.
\*2 The values are estimate.
\*3 This value is average.
\*4 Available for the VESA Reduced Blanking signal.
\*5 Not available in standby. From INPUT A and INPUT B.
\*6 Works as an audio switcher function. Output from a selected channel; not available in standby.

# **SPECIFICATIONS**

		VPL-EX290	VPL-EX250	VPL-EX230				
Display system		3 LCD system						
Display device	Size of effective	0.63" (16 mm) x 3						
. ,	display area	BrightEra						
		Aspect ratio: 4:3						
	Number of pixels	2,359,296 (1024 x 768 x 3) pixels						
Projection lens	Zoom	Optical: Manual (Approx. x 1.6) Optical: Manual (Approx. x 1.3) Optical: Manual (Approx. x 1.2)						
	Focus	Manual						
	Throw ratio	1.40:1 to 2.27:1   1.37:1 to 1.80:1   1.47:1 to 1.77:1						
Light source		Ultra high pressure mercury lamp 210 W type						
Recommended lamp replacement time*1		4000H / 6000H / 10000H (Lamp mode: High / Standard / Low) 3000H / 5000H / 10000H (Lamp mode: High / Standard / Low)						
Filter cleaning cycle*1		Max. 7000 H						
Screen size		30" to 300" (0.76 m to 7.62 m)						
Light output (Lamp mode: High / Standard / Low)		3800 lm / 2700 lm*2 / 2100 lm*2	3300 lm / 2200 lm*2 / 1700 lm*2	2800 lm / 2100 lm*2 / 1600 lm*2				
Color light output (Lamp mode: High / Standard / Low)		3800 lm / 2700 lm*2 / 2100 lm*2	3300 lm / 2200 lm*2 / 1700 lm*2	2800 lm / 2100 lm*2 / 1600 lm*2				
Contrast ratio (full white / full black)*3		3300:1						
Displayable scanning	Horizontal	14 kHz to 93 kHz						
requency	Vertical	47 Hz to 93 Hz						
Display resolution	Computer signal	Maximum display resolution: UXGA 1600 x 1200 dots*4						
	input	Panel display resolution: 1024 x 768 dots						
	Video signal input	NTSC, PAL, SECAM, 480/60i, 576/50i, 480/60p, 576/50p, 720/60p, 720/50p, 1080/60i, 1080/50i, 1080/60p, 1080/50p						
Color system		NTSC3.58, PAL, SECAM, NTSC4.43, PAL-M, PAL-N						
Keystone correction		Verlical: Max. +/- 30 degrees						
OSD language		24-languages (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)						
Computer and video	INPUT A	RGB / Y PB PR input connector: Mini D-sub 15-pin (female)						
ignal input/output	INPUT B	RGB input connector: Mini D-sub 15-pin (female)						
	INPUT C	HDMI input connector: HDMI 19-pin, HDCP support						
	S VIDEO IN	S video input connector: Mini DIN 4-pin						
	VIDEO IN	Video input connector: Pin jack						
	OUTPUT	Monitor output connector*5: Mini D-sub 15-pin (female)						
Control signal input/output, Others		RS-232C connector: D-sub 9-pin (male) LAN connector: RJ-45, 10BASE-T/100BASE-TX						
		USB: Type-A, Type-B						
Operating temperature (Operating humidity)		0°C to 40°C/32°F to 104°F (35% to 85%; no condensation)						
Storage temperature (Sto	rage humidity)	-20°C to +60°C / -4°F to +140°F (10% to 90%)						
Power requirements		AC 100 V to 240 V, 2.8 A to 1.2 A, 50 Hz / 60 Hz						
Power consumption	AC 100 V to 120 V	278 W / 220 W* / 189*	277 W / 220 W* / 189*	272 W / 220 W* / 189*				
Lamp mode: High / Standard / Low)	AC 220 V to 240 V	269 W / 210 W* / 183*	269 W / 210 W* / 183*	261 W / 210 W* / 183*				
standby mode power consumption (Standby								
node: Standard / Low)	AC 220 V to 240 V	5.1 W/0.5 W						
Heat dissipation	AC 100 V to 120 V	949 BTU 945 BTU 928 BTU						
	AC 220 V to 240 V	918 BTU 918 BTU 891 BTU						
Outside dimensions		W 365 x H 96.2 x D 252 mm (W 14 3/8 x H 3 25/32 x D 9 29/32 inches) (without protrusions)						
Mass		3.8 kg / 8 lb						
Supplied accessories		RM-PJ8 Remote Commander (1), Lithium battery: CR2025 (1), AC Power Cord (1), Operating Instructions (CD-ROM) (1), Quick Reference Manual (1 Mini D-sub 15-pin cable (1), Projector Station for Network Presentation application (CD-ROM) (1)						
Replacement lamp		LMP-E212						

<sup>\*1</sup> The figures are the expected maintenance time and not guaranteed. They will depend on the environment or how the projector is used.

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<sup>\*2</sup> The values are estimate.

<sup>\*3</sup> This value is average.

<sup>\*4</sup> Available for the VESA Reduced Blanking signal.

<sup>\*5</sup> Not available in standby. From INPUT A and INPUT B.