

VPL-VW790ES

4K SXRD Home Cinema Projector with laser light source, 2,000 lumen brightness, ∞ :1 contrast and HDR compatibility



Overview

An ideal choice to fit in your home cinema room, the VPL-VW790ES brings movies to life with extraordinary cinematic detail, colour and contrast. This compact size home projector combines an advanced laser light source with the same Sony 4K SXRD panel technology that's found in our professional cinema projectors.

Crisply detailed native 4K images (4096 x 2160) offer four times the resolution of Full HD, pulling you right into the heart of the action with unprecedented clarity. An aspherical front lens is mounted on the VPL-VW790ES, allowing for a larger area of focus range, expressing precise details in every corner of the screen.

You'll experience fabulously rich cinematic colours, smooth motion and spectacular contrast. Savour the action with 2,000 lumens brightness and see vibrant images.

You're fully prepared with compatibility for the latest 4K standards, including High Frame Rates and HDR (High Dynamic Range) - so you'll get the very best out of today's content, and tomorrow's.

Features

The VPL-VW790ES uses an ultra-pure and reliable Z-PhosphorTM laser light source. This Sony developed light source offers bright images for up to 20,000 hours of uninterrupted operation - no lamp replacement, and virtually zero maintenance.

Featured in Sony's digital cinema projectors, advanced SXRD (Silicon X-tal Reflective Display) panel technology delivers native 4K (4096 x 2160) resolution images, with more than four times the detail of Full HD. Fine details are wonderfully clear and natural, without jagged edges or visible pixels.

Latest SXRD 4K panels deliver even better contrast, as well as native 4K resolution. SXRD projection offers rich, inky blacks, as well as clear cinematic motion and image smoothness. Improvements to the panel's reflective silicon layer now mean even better light control, for precisely reproduced shadows and blacks.

In addition to the dynamically-controlled laser light output, an Advanced Iris is also incorporated. Both the iris control and laser can be adjusted independently, and dynamically, to optimise light output for both dark and bright well-lit scenes. The result

is deeper blacks than ever, as well as bright, vibrant colours where needed. The infinite dynamic contrast makes every scene spring to life with detail and realism.

Optimum focus is achieved, not only optically but digitally, by the Digital Focus Optimiser. It compensates the possible optical degradation of the lens in advance then outputs the optimum corrected images, so that even the focus in the corners is better than ever.

Exclusive Reality Creation technology analyses images right down to the pixel level. It uses powerful pattern-matching algorithms developed over years of movie production to enhance image crispness without increasing digital picture noise. It also upscales existing full HD Blu-ray Disc™ and DVD movies to near 4K quality.

Get the most from today's UHD Blu-ray and streaming services with High Dynamic Range. HDR video offers an expanded brightness range that delivers more realistic, high-contrast images and brilliant colours. Compatible with both HDR10 and HLG (Hybrid Log-Gamma) formats. Sony's home cinema projectors reproduce colour and contrast that's faithful to the creator's intention.

With an increase in 4K HDR 60P content, the VPL -VW790ES is now HDMI 18 Gbps compatible for smoother expressions of gradations.

The powerful video processor in the VPL-VW790ES offers Motionflow™ for smooth and clear motion, even when viewing 4K content. Motionflow adds frames to reduce blur, while maintaining brightness, making it ideal for fast-moving sports content. Cinema purists can choose True Theatre mode to retain the original 24fps.

Enjoy the action with up to 2,000 lumens brightness from the laser light source, for vibrant images on screens.

Store lens, zoom, and shift settings for up to five screen formats for easy recall. Picture Position Memory remembers key settings so you can quickly watch movies in the ideal format. Match aspect ratios, including 16:9 and Cinemascope, and store these settings in the projector.

Quickly set the picture to what you're watching or playing. Select from nine calibrated picture modes, including two theatre film modes, cinema digital, reference, TV, photo, game, bright cinema, and bright TV. An advanced HSV (Hue Saturation Value) colour tuning tool gives you even more control.

Specifications

Display System

Display System 4K SXRD panel, projection system

Display device

Size of effective display area 0.74" x 3

Number of pixels	26,542,080 (4096 x 2160 x 3) pixels
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Projection lens

Focus	Powered
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Zoom	Powered (Approx. x2.06)
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Lens shift	Powered Vertical: +85% -80% Horizontal: +/-31%
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Throw ratio*1	1:38 : 1 to 2:83 : 1
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Light source

Light source	Laser diode
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Screen size

Screen size	60" to 300" (1,524 mm to 7,620 mm)
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Light output

Light output	2,000 lm
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Colour light output

Colour light output	2,000 lm
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Dynamic contrast

Dynamic contrast	∞:1
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Displayable scanning frequency

Horizontal	19 kHz to 72 kHz
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Vertical	48 Hz to 92 Hz
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Accepted digital signals

Accepted digital signals	720 x 576/50p, 720 x 480/60p, 1280 x 720/50p, 1280 x 720/60p, 1920 x 1080/50i, 1920 x 1080/60i, 1920 x 1080/24p, 1920 x 1080/50p, 1920 x 1080/60p, 3840 x 2160/24p, 3840 x 2160/25p, 3840 x 2160/30p, 3840 x 2160/50p, 3840 x 2160/60p, 4096 x 2160/24p, 4096 x 2160/25p, 4096 x 2160/30p, 4096 x 2160/50p, 4096 x 2160/60p
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OSD language

OSD language	18-languages (English, Dutch, French, Italian, German, Spanish, Portuguese, Turkish, Polish, Russian, Swedish, Norwegian, Japanese, Simplified Chinese, Traditional Chinese, Korean, Thai, Arabic)
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INPUT OUTPUT (Computer / Video / Control)

HDMI1 / HDMI2 *2	Digital (RGB/Y Pb/Cb Pr/Cr)
Trigger	Minijack, DC 12 V Max. 100 mA
Remote	RS-232C, D-sub 9-pin (male)
LAN	RJ45, 10Base-T/100BASE-TX
IR IN	Mini Jack
USB	DC 5 V, Max. 500 mA

Picture processor

Picture processor	X1 for projector
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Acoustic noise

Acoustic noise	24 dB *3
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Operating temperature / Operating humidity

Operating temperature / Operating humidity	5°C to 35°C (41°F to 95°F) / 35% to 85% (no condensation)
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Storage temperature / Storage humidity

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

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

Power consumption	430 W
Standby	0.4 W (when "Remote Start" is set to "Off")
Networked Standby	1.0W (LAN) (when "Remote Start" is set to "On") When a LAN terminal is not connected, it becomes a low power consumption mode (0.5 W).

Standby Mode / Networked Standby Mode Activated

Standby Mode / Networked Standby Mode Activated	After about 10 Minutes
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3D

3D capability	Yes
3D emitter	Built-in RF emitter

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

Dimensions (W x H x D) (without protrusions)	560 x 223 x 496 mm 22 1/16 x 8 25/32 x 19 17/32 inches
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Mass

Mass	Approx. 20 kg / 44 lb
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Supplied accessories

Supplied accessories	RM-PJ24 Remote Commander (1) Size AA (R6) Manganese Batteries (2) Lens Cap (1) AC Power Cord (1) Operating Instructions (CD-ROM) (1) Quick Reference Manual (1) Safety Regulations (1)
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Notes

*1	Display size : 16:9
*2	Both HDMI inputs are compatible with HDCP 2.2.
*3	This value is approximate. Depends on the projector setting condition and usage environment.

Gallery

