

VPL-VW590ES

4K SXR D Home Cinema Projector
with 1,800 lumen brightness and
Picture Position Memory



Overview

Bring incredible 4K detail to your favourite movies

Imagine bringing the truly cinematic quality of 4K into your own home. Now you can make this a reality with our VPL-VW590ES Home Cinema projector.

The VPL-VW590ES produces true 4K resolution images with our native 4K (4096 x 2160) SXR D panels – that's over four times the quality of Full HD.

Designed for your home cinema room and living room, the VPL-VW590ES delivers stunning, detail-packed images and incredibly lifelike colour like never before. And with 1,800 lm high brightness, you're guaranteed an exceptional picture.

The VPL-VW590ES achieves high dynamic contrast with advanced Iris, and installed Picture Position Memory for true cinema lovers.

Colour availability may vary by country

Features

Native 4K SXR D™ panel

Featured in Sony's digital cinema projectors, advanced SXR D (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.

See richer, deeper blacks

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.

350,000:1 dynamic contrast for stunning realism

A dynamic contrast of 350,000:1 makes every scene spring to life with fine detail and realism. The powerful video processor is combined with lens iris control to achieve both deep, inky blacks and vibrant colour.

Super-resolution Reality Creation

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.

Colours come alive with TRILUMINOS™

Discover true-to life colours and tones. The VPL-VW590ES incorporates TRILUMINOS colour, reproducing more tones and textures than standard projectors. Hard-to-reproduce crimson reds, aqua blues, and emerald greens are displayed beautifully so landscapes and seascapes look more vivid. Faces look better, too, with faithfully reproduced skin tones.

HDR compatibility: every image comes to life

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.

HDMI 18 Gbps compatibility

With an increase in 4K HDR 60P content, the VPL-VW590ES is now HDMI 18 Gbps compatible for smoother expressions of gradations.

4K Motionflow™

The powerful video processor in the VPL-VW590ES 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.

1,800 lumens for high brightness

Enjoy the action with high brightness and high contrast. A 280W lamp generates the brightness required for vibrant images on screens.

Watch for longer with a 280W ultra high pressure lamp

Enjoy up to 6000 hours* of viewing time (in low mode) from a long-lasting mercury lamp. This means fewer lamp swaps, simpler maintenance, and lower running costs.

*Approximate recommended period, in low mode.

Picture Position Memory stores your settings

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.

Select from nine calibrated picture modes

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
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Display device

Size of effective display area	0.74" x 3
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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	1.38 : 1 to 2.83 : 1
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Light source

Light source	High-pressure mercury lamp, 280 W type
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Recommended lamp replacement time

Recommended lamp replacement time	6,000 H (Lamp mode: Low)
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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	1800 lm (Lamp mode: High) *2
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Colour light output

Colour light output	1,800 lm (Lamp mode: High) *2
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Dynamic contrast

Dynamic contrast	350,000: 1
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Displayable scanning frequency

Horizontal	19 kHz to 72 kHz
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FUNCTION	DESCRIPTION
Vertical	48 Hz to 92 Hz

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, Russian, Swedish, Norwegian, Japanese, Simplified Chinese, Traditional Chinese, Korean, Thai, Arabic, Polish)
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Input Output (Computer / Video / Control)

HDMI1/HDMI2 *3	Digital (RGB/Y Pb/Cb Pr/Cr)
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Trigger1 / Trigger2	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	X 1 for projector
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Acoustic noise

Acoustic noise	26 dB *4
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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, 4.6 A to 2.0 A, 50/60Hz
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Power consumption

Power consumption	460 W
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Standby	0.4 W (when "Remote Start" is set to "Off")
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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)
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Standby Mode / Networked Standby Mode Activated

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

3D capability	Yes
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3D emitter	Built-in RD emitter
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Dimensions (W x H x D) (without protrusions)

Dimensions (W x H x D) 496 x 205 x 464 mm
(without protrusions) 19 1/2 x 8 3/32 x 18 1/4 inches

Mass

Mass Approx. 14 kg / 31 lb

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)

Replacement lamp

Replacement lamp LMP-H280

Notes

The figures are expected

*1	maintenance time and not guaranteed. They will depend on the environment or how the projector is used.
*2	The values are estimate.
*3	HDMI Input2 is compatible with HDCP 2.2.
*4	They will depend on the environment or how the projectors is used. When under normal environment.
Environmental notice for customers in the USA	Lamp in this product contains mercury. Disposal of these materials may be regulated due to environmental considerations. For disposal or recycling information, please contact your local authorities or see www.sony.com/mercury for additional information.

Gallery

