VP-12S4

Optics
- Texas Instruments DLP Technology
- High Definition 720p DarkChip3" DMD Chipset
- New High-Fidelity Video Processing Engine by GENNUM
- GENNUM GF9350 VXP Technology combines 4 technical functions:
  - TruMotionHD: De-interlacing Technology for Full HD Signal
  - FineEdge: Adaptive Edge Correction/ Enhancement Technology
  - Reality Expansion: Advanced Color/Resolution Reproduction Technology by Full 10-Bit Processing and 4:4:4 Sampling
  - FidelityEngine: Noise Reduction and Image Enhancement Technology
- Newly Developed Custom Optics by Konica-Minolta
- Larger Vertical Lens Shift to a Max of 50% of Screen Height Above the Screen
- Exclusive O.R.C.A. Color Corrected Light Source
- >4000:1 Contrast Ratio
- >700 ANSI Lumens Brightness
- Brightness Uniformity: 90%
- Adjustable Iris
- Sealed Optical Path
- No Light Leakage (Double Sealed Cabinet Structure)
- Extremely Quiet (Noise Canceling Construction, Sealed Color Wheel Motor)

Electronics & Software
- Vertical Keystone Correction
- NTSC, PAL, SECAM, and ATSC Compatible
- VGA to SXGA PC Signal Compatible
- 5 Gamma Selections
- Auto Color Temperature Calibration System (tool included)
- 18 Picture Memories
- Black Level Selection
- Blanking options
- Display size fine tuning
- Focus pattern display
- Illuminated I/O Terminal Panel

In/Outputs

Video Inputs	
Composite Video	1 (RCA)
S-Video	1
Component	2 (RCA)
RGB/HD	1 (D-Sub 15-pin)
HDMI	2 (with HDCP)
Others	
D-Bus Remote (RC-5) In/Out	1/1 (3.5 mm mini jacks)
DC Trigger	2 (3.5 mm mini jacks)

Specifications

Optical Characteristics	
Panel	0.81 inch 16:9
Type	HD2+ DC3
Number of pixels	1280 x 720 pixels
Lamp	Super High Pressure, 200 W (DC)
Lens	f: 30.7 to 4.5 / F: 3.0
Zoom ratio	1.45
Throw Distance	1.5 m - 14.0 m
Projection Size	40" to 250"
Light Output	700 ANSI LUMEN
Operating Temperature	5°C to 35°C
Operating Humidity	30% to 85%

Screen Size (Diagonal)	16:9 Screen Throw Distance Minimum	16:9 Screen Throw Distance Maximum	4:3 Screen Throw Distance Minimum	4:3 Screen Throw Distance Maximum
60"	2275 mm	3323 mm	2083 mm	3046 mm
80"	3051 mm	4447 mm	2796 mm	4078 mm
100"	3827 mm	5571 mm	3508 mm	5110 mm
120"	4603 mm	6695 mm	4220 mm	6141 mm
150"	5767 mm	8361 mm	5289 mm	7689 mm
200"	7707 mm	11191 mm	7069 mm	10268 mm
250"	9647 mm	14001 mm	8850 mm	12847 mm
Note: Tolerance ±5%	Min = 38.8 x Screen Size - 53.4 Max = 56.2 x Screen Size - 48.8		Min = 35.61 x Screen Size - 53.4 Max = 51.58 x Screen Size - 48.8	

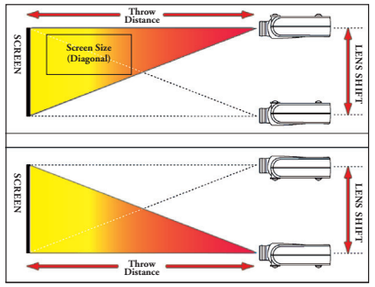
1" = 2.54cm

Accessories

Lens Cap	1
Remote Control	1
Batteries	2
Scart	1
AC Power Cord	1
Color Temperature sensor	1
Control Adapter Cable	1 (Mini Jack to RCA)
User Guide	1

General

Color	Beige / Silver
Chassis	Metal (die-cast)
Remote Control	RC-12VPS4
Power Requirement	220-240 V, 50/60 Hz
Power Consumption	< 320 W
Standby Consumption	< 3.0 W
Dimensions mm (W x D x H)	405 x 481 x 143 (excl. Feet)
Feet Adjustment	15 - 61,8 mm
Weight	13 Kg.



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High Definition DLP Projector VP-12S4

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VP-12S4 High Definition Digital Projector

VP-12S4 High Definition DLP Video Projector

After the continuing evolution and success of the VP-12 series, people were asking, “how much better can it possibly get?” Only after witnessing the VP-12S4 this can be positively answered. The new Marantz VP-12S4 will give the smoothest, most seamless and lifelike image ever delivered from a single chip solid state video projector. Sublime components make this video projector first in his class and will be described below.

Texas Instruments’ HD2+ DLP® Technology

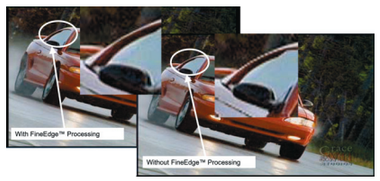
The VP-12S4 projector is supplied with the already proven platform of Texas Instruments’ HD2+ DLP chipset. The performance has been improved by using their DarkChip 3 design, which tightens the space between the mirrors for even less pixelization than before. In addition this chipset operates at a higher speed, reducing dither noise in low light portions of the image.

High-Fidelity Video Processing Engine by GENNUM®

The crowning achievement on this VP-12S4 is a completely new video processing engine. This new processing chip was developed by GENNUM (specifically for the VP-12S4) and is the most powerful video processor ever included in a video display device - consumer or professional. GENNUM’s GF9350 10-bit image processing system-on-a-chip (SoC) sets new benchmarks for video realism and processing flexibility. The GF9350 features GENNUM’s latest de-interlacing algorithms with dynamic edge detection and film mode processing for both HDTV and SDTV interlaced formats. Content adaptive noise reduction & detail enhancement algorithms remove unwanted noise while improving image detail for a cinematic HDTV experience. It offers true motion adaptive de-interlacing of all non-progressive sources - HD included - with inverse telecine (3:2 pull down), jagged edge reduction circuitry, 4:4:4 processing at a true 10 bit color depth (over 1 billion colors displayed) and a new level of flexibility for the installer including sizing and blanking controls. The VP-12S4 is equipped with a special version of the GF9350 bearing the Marantz logo.

GENNUM calls the set of technologies offered by the GF9350 VXP, for Visual eXcellence Processing™. Broadly conceived, VXP combines four technologies.

TruMotionHD: De-interlacing technology that makes input signals progressive, converting them from non-interlaced to interlaced sequentially. It is compatible with High- Definition signals (720p, 1080i) as well, and it preserves the high-resolution effect after progressive conversion. TruMotionHD also reduces chroma upsampling error caused by MPEG decoders of DVD players.



FineEdge: This technology refers to edge enhancement (correction and emphasis) and adaptive processing. This processing smoothes image edges extremely well, especially lines running diagonally.

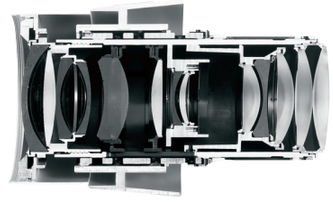
PurePixel: The GF9350 uses 10-bit processing for all signal processing, a technique called PurePixel. 10-bit processing produces exceptionally better gradation than typical 8-bit processing, raising the number of colors to a higher order of magnitude from 16.77 million to more than a billion. Samples are processed so that input signals sampled at Y:Cb:Cr=4:2:2, for example, are all subject to data interpolation to produce an ideal sampling of 4:4:4.

FidelityEngine: Detail emphasis and noise reduction are provided by what is called the FidelityEngine. This technology cuts noise without reducing the sense of picture resolution. For low-resolution images that are not sharp, the Fidelity Engine adds emphasis to details, producing clarity.

GENNUM’s VXP image processors provide stunning image quality by incorporating the world’s most advanced image processing algorithms. This level of smoothness and film-like realism has been previously only reserved for professional 3-chip type devices and of course, film.

New custom optics by Konica-Minolta

Furthermore, a new lens was added to the already legendary and award winning lineup of optics from Konica-Minolta. This new lens is a middle throw distance lens and fits comfortably between the original standard lens (now called the Short Throw) and the Long Throw lens. All lenses are finished by multi-coating treatment, eliminating any excessive glare. The fully sealed optics is assembled in Konica Minolta’s clean room, ensuring consistently high-quality images unaffected by dust throughout a long period of use. The selectable iris is built into the lens of this optical engine. To improve flexibility we increased the amount of vertical lens shift to allow mounting as much as 50% of the screen height above the top of the viewable area.



ORCA Filtering with DC powered 200 watt SHP bulb

Marantz engineers developed a color correction filter called ORCA (the Optical Reproduction of Color Accuracy), that filters out the excess yellow, creating a very neutral white light that passes through the color wheel. This results in the most accurate color palette ever achieved in a video projector and has been balanced to meet the HD color space (ITU-RBT709). This is an industry first and a Marantz exclusive! The light itself is generated by a new bulb that is DC powered. This 200 Watt bulb is brighter and less prone to flicker than any other lighting technology available. It was successfully introduced at the predecessor of the VP-12S4.

Seven segment color wheel

As in the previous generation, it also utilizes the seven segment color wheel. This wheel is used for less dithering of low level signals and keeping colors accurate at low signal levels. This contributes considerably in the rendering of extremely dark signals, which makes for an even more pleasing experience, especially for movies.

High Definition Multimedia Interface (HDMI)

HDMI assures that pristine high-definition images retain the highest video quality from the source all the way to the display. It employs the same copy protection technology as DVI and supports HDCP, only exchanging signals with units certified compatible. The outlets of HDMI terminals are slightly smaller than those of DVI terminals. The HDMI is backward-compatible with DVI. Marantz gives the consumer full digitalized interconnection from source to display.

View it yourself

Reading about it does not do the VP-12S4 justice, so experiencing it yourself, at your nearest authorized Marantz dealer, will give the right credits to this magnificent DLP projector.