marantz®

High Definition DLP Projector VP-12S2

Out Of This World!

Marantz set the standard in Home Theater video projection with the revolutionary VP-12S1. Now, we raise the bar with the introduction of the incredible VP-12S2. While physically similar to the VP-12S1, under the skin this new projector is worlds apart from everything else. With digital input capability, full Faroudja DCDi™ video processing, custom ground Minolta optics, and an amazing 2600:1 contrast ratio, the VP-12S2 will project an image that is out of this world.

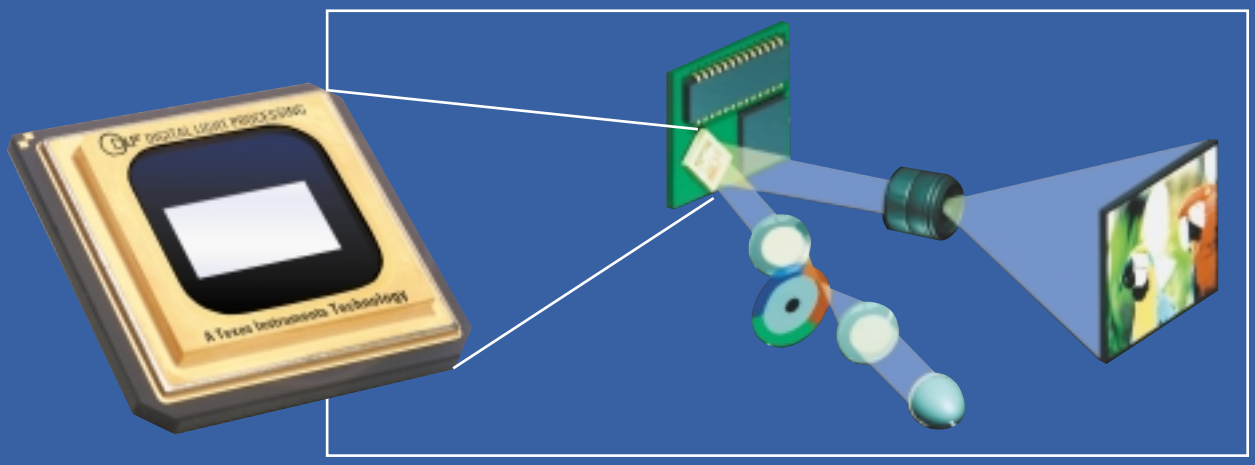
DCDi™ by FAROUDJA

DLP™ A TEXAS INSTRUMENTS TECHNOLOGY

VP-12S2 Video Projector

Marantz Raises the Bar…Again!

Through improved design techniques and the introduction of the new HD2 “Mustang” chipset from Texas Instruments, we have achieved what “others” thought impossible. With a measured contrast ratio of 2600:1, Marantz has more than doubled the best contrast of any of the previous generation DLP projectors. The result? Deep rich blacks that rival even the best 3 gun CRTs.



DLP™ Technology

The VP-12S2 is one of the first video projectors in the world to make use of Texas Instruments’ new HD2 1280x720 DMD™ chip in DLP™ technology. This new chip has many benefits over previous attempts at using DLP in home theater. Earlier DLP™ projectors were technically 4:3 devices that were primarily designed for commercial applications. While they had many advantages over LCD, the fact is that they were still 4:3. While this aspect ratio is more than adequate for standard NTSC and PC display, it creates a whole new set of problems when attempting to display widescreen images. By design limitations, a 4:3 DMD™ chip can’t “turn off” all of the unused pixels when displaying 16:9 sources and since the world is moving in a widescreen direction, this resulted in an annoying “halo effect” around the screen when any aspect ratio other than 4:3 was used. The new VP-12S2 with its 921,600 pixels, a color wheel that spins at 5x the 60 Hz video frequency and new internal masking technologies, is more than capable of displaying any NTSC or HD source with breathtaking sharpness, detail, and contrast. And, when you are watching an image that doesn’t require the use of all of the pixels, you will see nothing other than breathtaking artifact-free video.

Faroudja Processing

Today's video sources have two different configurations: interlaced and progressive. They also have many different resolutions: from 702 x 480 pixels of interlaced video in the NTSC format all the way up to 1280 x 780 pixels progressively scanned or 1920 x 1080 pixels displayed in an interlaced fashion for HDTV. In order to fill the screen on a fixed resolution device like the VP-12S2 with its 1280 x 720 pixels, and maintain HD picture quality, extremely high quality video processing is required. For the VP-12S2, Marantz turned to the best: Faroudja Laboratories, the inventor of the first high quality line doubler, the originator of inverse telecine processing (better known as 3:2 pulldown), and three time Emmy® award winner for excellence in video imagery. Suffice it to say that the VP-12S2 has the best video processing available today in an all-in-one product.

How it Works — Incoming video is decoded by a Faroudja video decoder. Faroudja has long been known for offering the best color decoding technology. The VP-12S2 offers patented 10-bit adaptive comb filtering with Cross-Color suppression (rainbow pattern artifact) and a two line Time Base Corrector. Then, Bandwidth Expansion is applied to the color signal for further improvements in color resolution. Finally the signal is deinterlaced and enhanced by their world renowned processing including the patented Directional Correlational Deinterlacing (DCDi™) circuit, which applies new motion adaptive deinterlacing that prevents the introduction of motion artifacts and jagged edges from video signals that originated from video cameras (such as with sporting events, live camera feeds and music videos). Patented 3:2 pull-down circuit with advanced edit detection is used for video signals that originated from film cameras for exact reconstruction of the original film frame without introducing motion artifacts. The advanced edit detection is critical to track today's videos that typically are filled with fast edits that combine both film and video originated sources. Finally the image is scaled to the native 1280 x 720 rate defined by the DMD™ panel. This sophisticated circuitry also offers 4 different aspect ratios, (Full, Normal, Through, Zoom), which will allow any shape of image to be viewed in the best light (no pun intended).

Minolta Optics

All of this excellent picture circuitry won't do any good if you can't get the image to the screen properly. For this reason we chose custom ground optics by Minolta, long known for its incredible lenses in its professional and consumer cameras. These optics feature a sealed light path so that the normal dust and smoke that exist in a typical home environment won't ever intrude on the image. There is even a special long throw version of the VP-12S2 which allows for "back of the room", or even "out-of-the-room" installation options.

The Picture

All of the above amounts to a picture that has to be viewed to be believed. With any source from a VCR up to the best HDTV, the VP-12S2 displays a vivid, accurate image free from visible artifacts. With a bright 700 ANSI lumens and 2600:1 contrast ratio, the picture can even be enjoyed in rooms that have less than ideal lighting control. The VP-12S2 projects an image that is ideal for the new breed of gray screens that are specifically designed for solid state projection.

Calibration and Flexibility

The VP-12S2 is the first DLP front projector that offers a DVI-D input for perfect transmission and display of compatible digital signals from set-top boxes, DVDs or any of the newer digital formats that allows for this type of digital signal path. This results in the elimination of "extra" stages of video processing, yielding an even cleaner more detailed picture. In addition to all of the great custom inspired features of the last generation, the VP-12S2 features a new fine adjustment menu that allows full gray scale adjustments, and complete control over all aspects of the Faroudja processing. This allows the installer or technician to fine tune the picture to an even higher level of performance.

The VP-12S2

To see the best in video projection, quit looking at this brochure and visit an authorized Marantz dealer today.

Optics

- Texas Instruments Digital Light Processing™ Technology
- High Definition (1280 x 720), DMD™ Semiconductor
- Newly Developed Custom Optics by Minolta
- 16:9 Aspect Ratio
- 2600:1 Contrast Ratio
- 700 ANSI Lumens Brightness
- Brightness Uniformity: 90%
- No Halo Effect
- Lens Up/Down Shift Construction
- Sealed Optical Path
- No Light Leakage (Double Sealed Cabinet Structure)
- Extremely Quiet (Noise Cancelling Construction, Sealed Color Wheel Motor)
- Long Life Lamp (Average 2000 Hours)

Electronics & Software

- Full Digital Device
- Video Processing Using Faroudja® Processing with DCDi™ Enhancement
- 3-2 Pulldown Progressive Scan Film Detection
- 10-bit Digital Gamma Processing
- Horizontal and Vertical Keystone Correction
- Accepts All Modes of NTSC, PAL, SECAM, and ATSC Including HDTV
- DVI with HDCP Digital Input
- PC Signal VGA to SXGA
- Four Picture Modes: Theater, Standard, Dynamic/User
- Nine Picture Memories
- 4 Aspect Modes
- Three Color Temperatures
- Black Level Selection
- System Control Through RS232C
- Two Triggers for Powered Screen Control
- Economy Lamp Mode

In/Outputs

Video Inputs

Composite Video	1 (RCA)
Y/C	1 (S-Video)
Component NTSC/ATSC	1 (3x RCA)
RGB/HD	1 (VGA D-Sub 15)
DVI with HDCP	1 (29 Digital Pin)
RS232C	1 (D-Sub 9)
RC-5	1 (3.5 mm mini)

Outputs

DC Trigger	2 (3.5 mm mini)
RC-5	1 (3.5 mm mini)

Specifications

Optical Characteristics	
Panel	0.85 Inch 16:9
	1,280 x 720 Pixels
Lamp	Super High Pressure, 150 W
Lens	f: 26.5 to 30.7 / F: 3.0
Throw Distance	80"-8.6ft, 100"-10.9ft
Projection Size	40 to 250 inches
Light Output	700 ANSI LUMEN Typical
Operating Temperature	5°C to 35°C
Operating Humidity	30% to 85%

Accessories

Lens Cap	1
Remote Control	1
Batteries	2
AC Power Code	1 (Only for 125 V)
User Guide	1
Control Adapter Cable	1 (Mini Jack to RCA)
Ferrite Cores	2

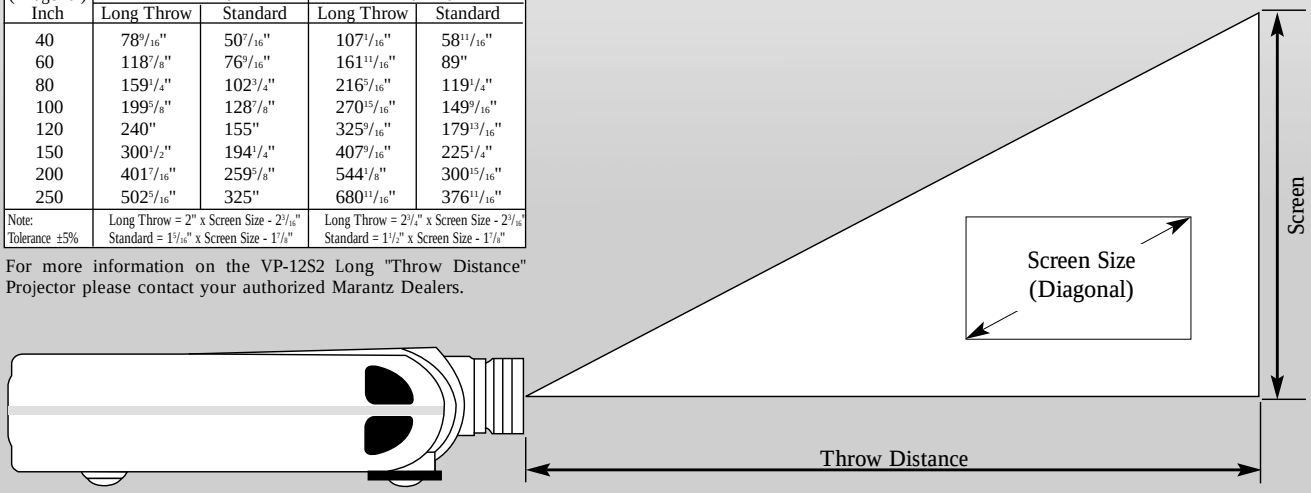
General

Color	Charcoal Grey/Violet
Chassis	Metal
Remote Control	RC-12VPS2
Power Requirement	AC 100-120 V / 220-240 V, 50/60 Hz
Power Consumption	< 250 W
Standby Consumption	< 3.3 W
Dimensions Inches (W x D x H)	$15^{15}/_{16}$" x $18^{9}/_{16}$" x $5^{3}/_{16}$" (excl. Feet)
Feet Adjustment	$^{5}/_{8}$" – $2^{7}/_{16}$"
Weight	26.1 lbs.

Digital Micromirror Device™
Semiconductor www.dlp.com

Screen Size (Diagonal) Inch	Throw Distance			
	Minimum		Maximum	
	Long Throw	Standard	Long Throw	Standard
40	$78^{9}/_{16}$"	$50^{7}/_{16}$"	$107^{1}/_{16}$"	$58^{11}/_{16}$"
60	$118^{7}/_{8}$"	$76^{9}/_{16}$"	$161^{11}/_{16}$"	89"
80	$159^{1}/_{4}$"	$102^{3}/_{4}$"	$216^{5}/_{16}$"	$119^{1}/_{4}$"
100	$199^{5}/_{8}$"	$128^{7}/_{8}$"	$270^{15}/_{16}$"	$149^{9}/_{16}$"
120	240"	155"	$325^{9}/_{16}$"	$179^{13}/_{16}$"
150	$300^{1}/_{2}$"	$194^{1}/_{4}$"	$407^{9}/_{16}$"	$225^{1}/_{4}$"
200	$401^{7}/_{16}$"	$259^{5}/_{8}$"	$544^{1}/_{8}$"	$300^{15}/_{16}$"
250	$502^{5}/_{16}$"	325"	$680^{11}/_{16}$"	$376^{11}/_{16}$"
Note: Tolerance ±5%	Long Throw = 2" x Screen Size - $2^{3}/_{16}$" Standard = $1^{15}/_{16}$" x Screen Size - $1^{7}/_{8}$"		Long Throw = $2^{3}/_{4}$" x Screen Size - $2^{3}/_{16}$" Standard = $1^{1}/_{2}$" x Screen Size - $1^{7}/_{8}$"	

For more information on the VP-12S2 Long "Throw Distance" Projector please contact your authorized Marantz Dealers.



Printed on recycled paper because trees matter.

marantz®
Marantz America, Inc. 1100 Maplewood Dr., Itasca, IL 60143
630-741-0300 Fax: 630-741-0301 www.marantz.com