Marantz VP-11S2 Single-Chip DLP 1080p Projector - JUNE 12, 2008

John E Johnson, Jr.

Introduction

Remember back a few years when projectors were 720p resolution, had modest brightness, not so great contrast, and you could spend $15,000 to get one?

Well, you can still spend that kind of money and a lot more, but it gets you a lot more too.
The buzzword now of course is 1080p and HDMI all the way. Marantz' latest donation to this category is called the VP-11S2. It has two HDMI inputs, will accept and project native 1080p, has Deep Color capability, and is built like a tank.

It is $14,999, and if you want to have the anamorphic lens so you can watch 2.35:1 movies using the entire DLP panel, you can get one of those too. Speaking of DLP panels, the VP-11S2 sports the latest Texas Instruments Dark Chip 4, and is one of the first projectors to have this chip.

Specifications

- ○ Design: Single-Chip Texas Instruments Dark Chip 4 0.95″ DLP
- ○ Native Resolution: 1920x1080p
- ○ Brightness: 800 Lumens
- ○ Contrast: 15,000:1
- ○ Lens Zoom Range: 1.45x
- ○ Lens Shift: Mechanical Vertical
- ○ Seven Segment Color Wheel, 3 Speeds
- ○ Inputs: 2 HDMI, 1 Component, 1 S-Video, 2 Composite, 1 RGB, 1 RS-232
- ○ Dimensions: 5.4″ H x 15.9″ W x 18.6″ D
- ○ Weight: 28.6 Pounds
- ○ MSRP: $14,999 USA

- Marantz

The Design
The VP-11S2 is a big projector. You could put it on your coffee table, but there would be no room for the coffee. It is meant to be mounted on the ceiling. It's pretty heavy too, so get a sturdy projector mount. If you do decide to put it on your coffee table, you can operate it with the buttons on the top.

Although the projector has all the required inputs, if you use the composite video to watch your movies, please buy a ticket to get on the next space shuttle, because you are no longer acceptable to videophiles here on planet earth. Same for S-Video.

There are two HDMI inputs, but with the way things are going in receiver and processor design, you really only need one, which would be connected to your receiver's HDMI output. If you have an old receiver with no HDMI, then of course, you can connect your Blu-ray player and your high def satellite box to the two projector inputs.

The VP11S2's HDMI inputs meet version 1.3 specifications, which means they will handle deep color. Problem is, there aren't any deep color sources out there, but if and when when they do come, you can watch them with this projector.
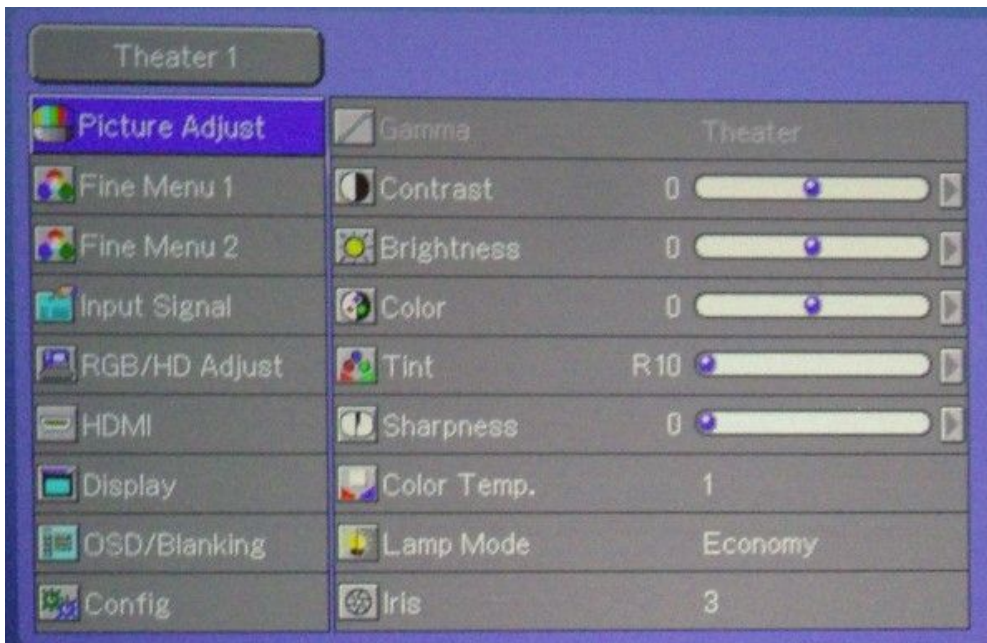

The remote control is very nice and is backlit. I guess it's about time that manufacturers have figured out what we want on these controls: the ability to select the iris setting, lamp brightness, color
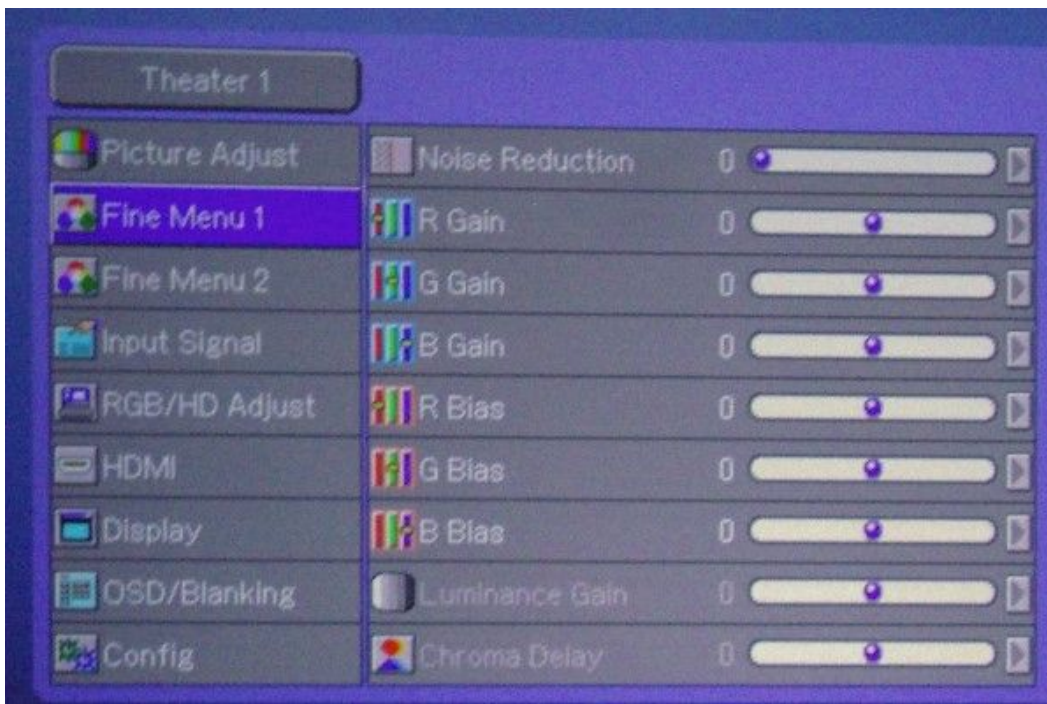
temperature, etc. This remote has lots of selection, but not too much. Like Baby Bear said, "It's just right."
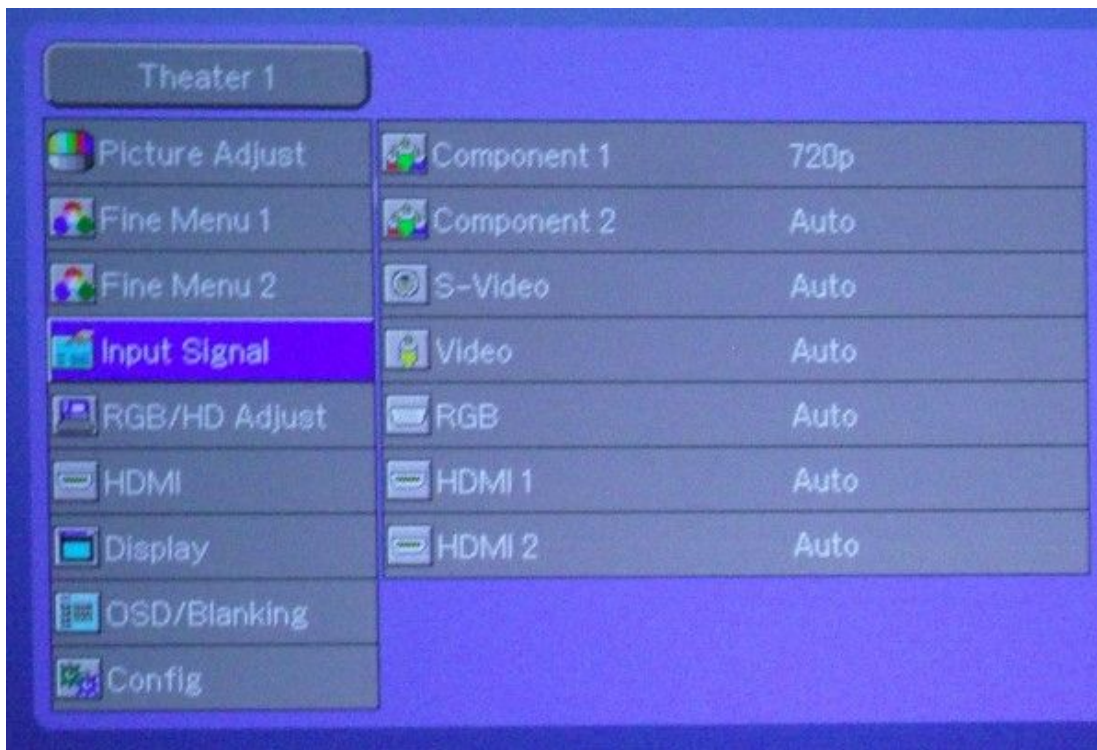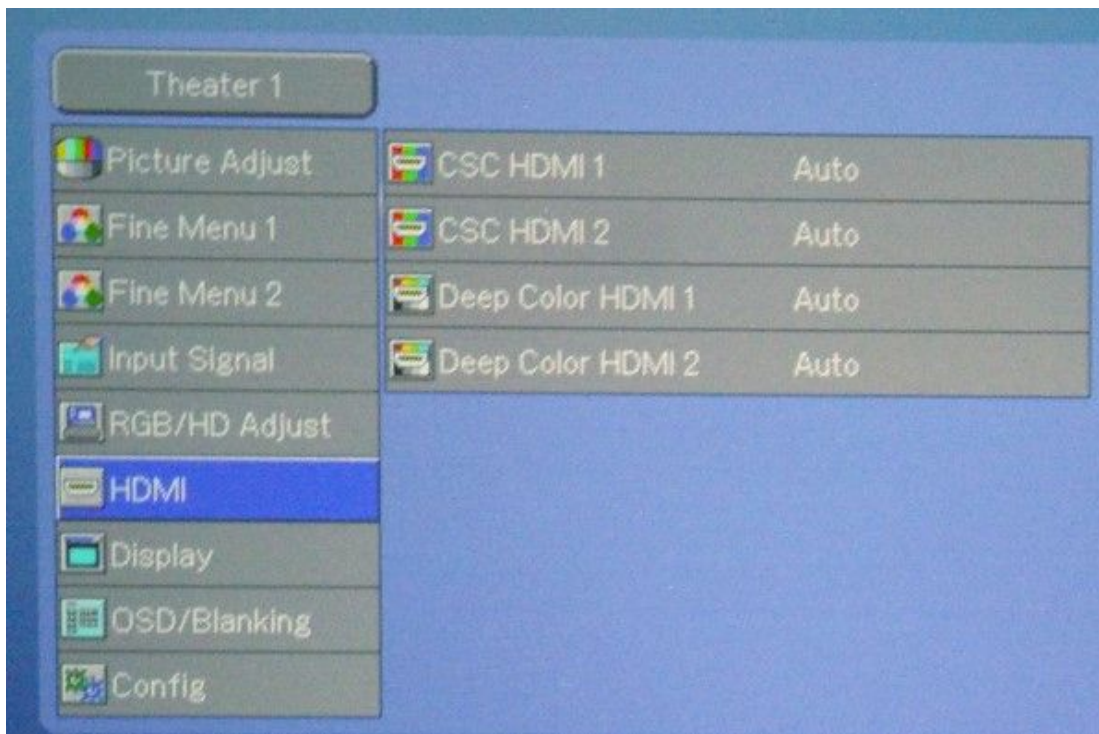

The menu structure is very sophisticated, with lots of control over the image. In the Standard mode, you can't change many of the setup features. It is sort of the "Idiot Proof" mode. In the screenshots below, I had set the projector to Theater 1. You can see that the array of possibilities is enormous. In particular, note Fine Menu 1, where the Gain (upper IRE) and Bias (lower IRE) can be adjusted for the individual primary color output. The HDMI menu shows the Deep Color settings. All in all, the most powerful menu I have yet seen.

Theater 1

Picture Adjust		
Fine Menu 1	Noise Reduction	0
Fine Menu 2	R Gain	0
Input Signal	G Gain	0
RGB/HD Adjust	B Gain	0
HDMI	R Bias	0
Display	G Bias	0
OSD/Blanking	B Bias	0
Config	Luminance Gain	0
	Chroma Delay	0

Theater 1

Picture Adjust		
Fine Menu 1	Aspect	Full
Fine Menu 2	Cinema	Auto
Input Signal	VCR Mode	Off
RGB/HD Adjust	Black Level	Normal
HDMI	FRC	Auto 1
Display	CEC	Off
OSD/Blanking	Picture Shift V	0
Config	Overscan	Enable

Theater 1

Picture Adjust	Component 1	720p
Fine Menu 1	Component 2	Auto
Fine Menu 2	S-Video	Auto
Input Signal	Video	Auto
RGB/HD Adjust	RGB	Auto
HDMI	HDMI 1	Auto
Display	HDMI 2	Auto
OSD/Blanking		
Config		

Theater 1

Picture Adjust	Mode	Auto
Fine Menu 1	Readjust	
Fine Menu 2	Resolution H	0
Input Signal	Resolution V	0
RGB/HD Adjust	Position H	0
HDMI	Position V	0
Display	Phase	0
OSD/Blanking	Clamp Position	0
Config	Clamp Width	0

Theater 1

Menu	Setting	Value
Picture Adjust	CSC HDMI 1	Auto
Fine Menu 1	CSC HDMI 2	Auto
Fine Menu 2	Deep Color HDMI 1	Auto
Input Signal	Deep Color HDMI 2	Auto
RGB/HD Adjust		
HDMI		
Display		
OSD/Blanking		
Config		

Theater 1

Menu	Setting	Value
Picture Adjust	Keystone	0
Fine Menu 1	Scale	0
Fine Menu 2	Width	0
Input Signal	Position H	0
RGB/HD Adjust	Position V	0
HDMI	Color Wheel	x6
Display	Installation	Front
OSD/Blanking		
Config		

Theater 1		
Picture Adjust	Menu Position	Top-L
Fine Menu 1	Language	English
Fine Menu 2	Status Info.	Enable
Input Signal	Power Off Confirm.	Disable
RGB/HD Adjust	Blanking Memory	Off
HDMI	Blanking Top	0
Display	Blanking Bottom	0
OSD/Blanking	Blanking Left	0
Config	Blanking Right	0

Theater 1		
Picture Adjust	Auto Power Off	Disable
Fine Menu 1	Trigger2 Full	On
Fine Menu 2	Trigger2 Normal	On
Input Signal	Trigger2 Zoom	On
RGB/HD Adjust	Trigger2 V-Stretch	On
HDMI	Trigger2 Through	On
Display	Remote Control	
OSD/Blanking	Reset Lamp Life	
Config	Reset All	

In Use

I watched many of the Blu-ray movies I reviewed in April, May, and June, using the VP-11S2. I am sorry now that I have to send the review unit back. Even out of the box, the picture was fantastic. Sometimes, one or two of a projector's modes will look garish, but that was not the case here. All of them were watchable.

Like most projectors, I could see a bit of chromatic aberration at the extreme part of the image, about 0.25 pixel worth, while at the center, aberration was 0.1 pixel. In general, very sharp. The lens has a metal body instead of plastic, so it should be durable over the years. I tested both the standard lens and the long throw lens (the long throw lens is for when the projector has to be situated farther back in the room).

Here is a screenshot of a focus pattern at the center. You can see blue at the top edge, green at the left edge, and red at the bottom edge (this is the chromatic aberration), about 0.10 pixel in width. Chromatic aberration is a result of the lens not bending the different wavelengths of light (different colors) the same amount. All lenses have this problem to varying degrees.
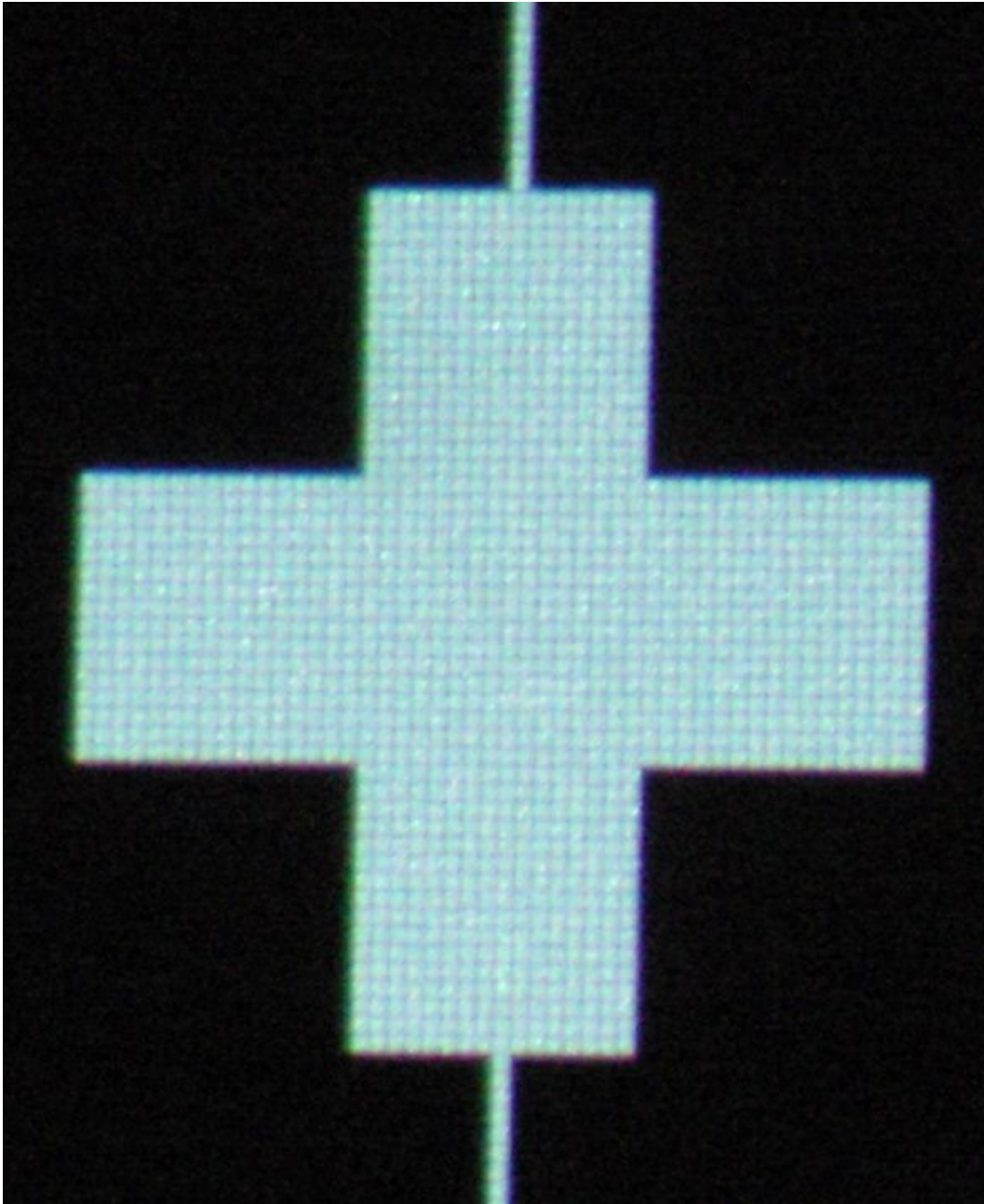
And, here is a shot of the focus pattern at one far side. The chromatic aberration at the periphery is about 0.25 pixel. Aberration is worse at the extreme zoom.
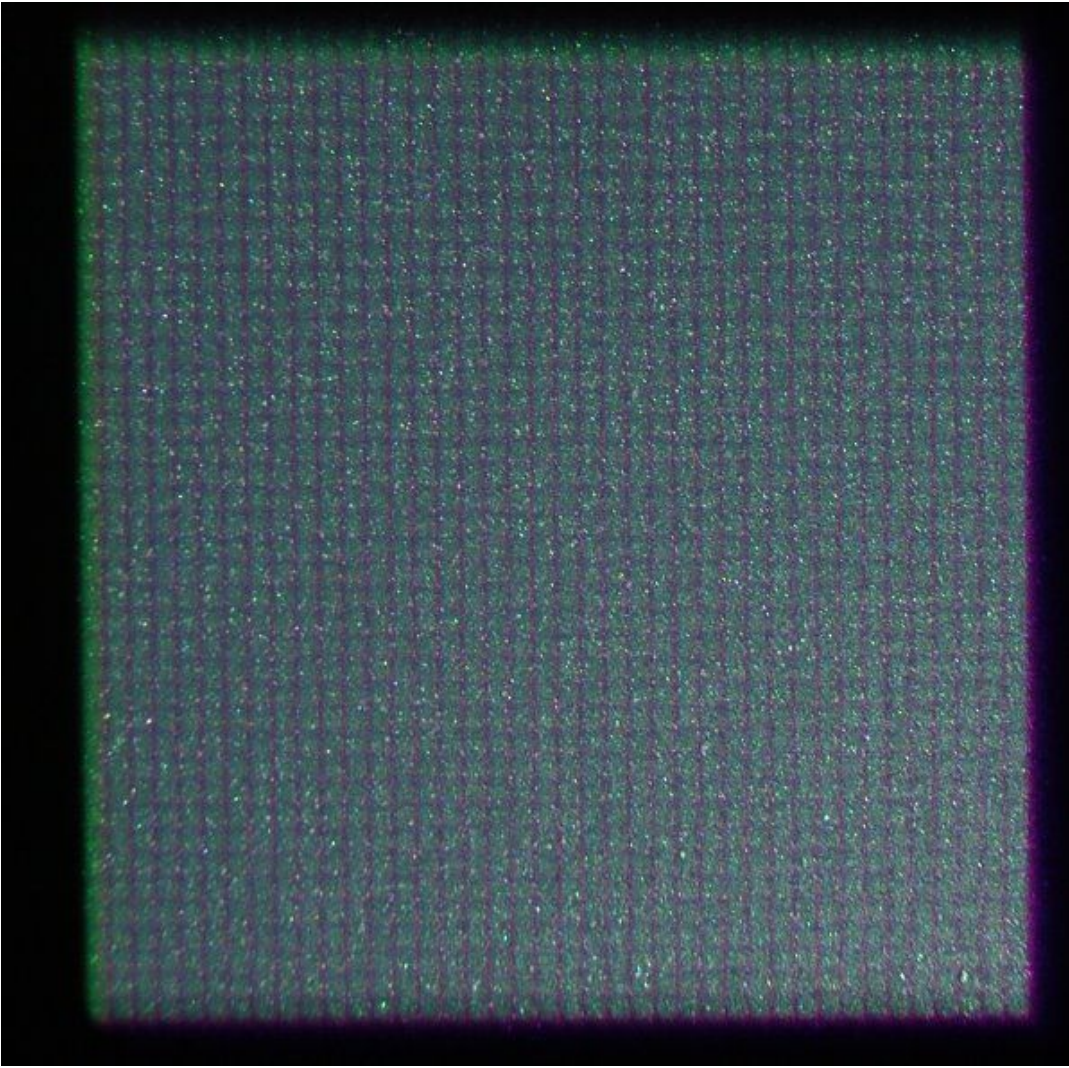
I tend to like extra brightness, and I thought I would have to go to the brighter output setting, but I was very happy with it at the lowest brightness setting, because the black level was so outstanding there. I could barely tell the lamp was on, where usually, there is a faint, but very visible, gray outline of the 16:9 panel on the projection screen when there is no picture being shown.

I really like the old war movies, and when I saw the new Blu-ray release of *Patton*, using the VP-11S2, I knew it is really worthwhile to have a top notch projector. *Patton* was shot on 70mm, and the color depth is just spectacular, but if you watch it on a projector that does not have a good black level, you will miss out. I didn't miss anything with the Marantz. I connected my Blu-ray player directly to the VP-11S2 using HDMI. No other video processor in the signal path. Wow, what a picture!

In Standard mode, which was a low brightness setting, the Full On/Off CR was 3032:1, and ANSI CR was 404:1. Output measured 784 lumens, which is very close to the spec of 800 lumens. This was the measurement right out of the box, uncalibrated.

In Theater 1 mode, after calibration, the Full On/Off CR measured 2511:1, and ANSI CR was 433:1. This was at contrast and brightness settings that I considered the most preferable for watching movies. I was able to obtain a maximum Full On/Off CR of 7507:1. ANSI CR uses an array of black and white squares, so even when you are measuring the black, there is intense white light coming through the lens for the white squares, and this results in light scatter, which lowers the contrast. You can vary the color wheel so that it spins from 4X to 6X. I chose the high speed because I am very sensitive to the Rainbow Effect. There is an iris on this projector, and for all my viewing, I used it closed down to give the best black level.

At this price, I would have liked to see horizontal lens shift. Other than that, I was very happy with the performance.

On the Bench

Below are graphs taken with the VP11S2 in Standard mode, so there is no calibration (adjustments are not available in this mode). I used the HDMI input 1 and an AccuPel HDG-3000 digital color signal generator, along with ColorFacts 7.5 and their latest sensor, the Spyder 3.

Look how straight the color temperature line is, and how (relatively) smooth the RGB values are throughout all IRE levels. Gamma was 2.18, a bit lower than the ideal. The CIE chart shows that the projector has enough red and green, although both are a bit oversaturated, but the usual not enough blue. (The dark triangle in the CIE chart is the color gamut that an HDTV should be able to reproduce, while the white triangle is the color gamut that the display being tested is able to reproduce.)
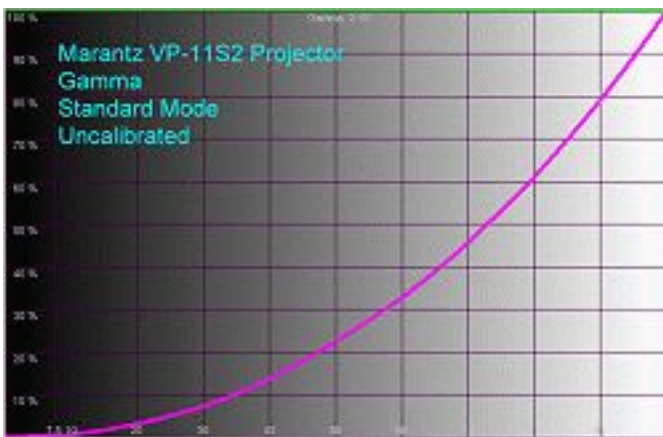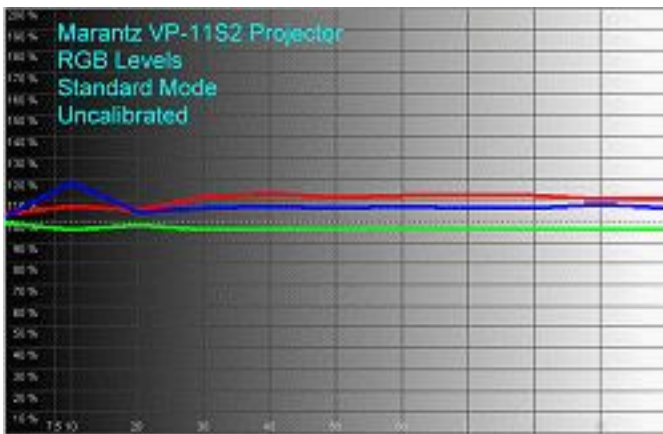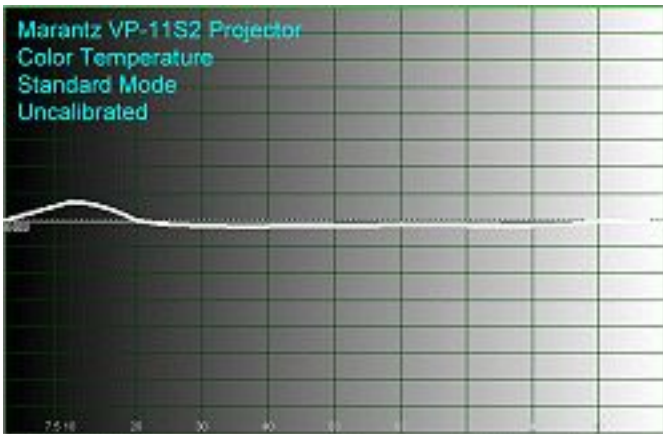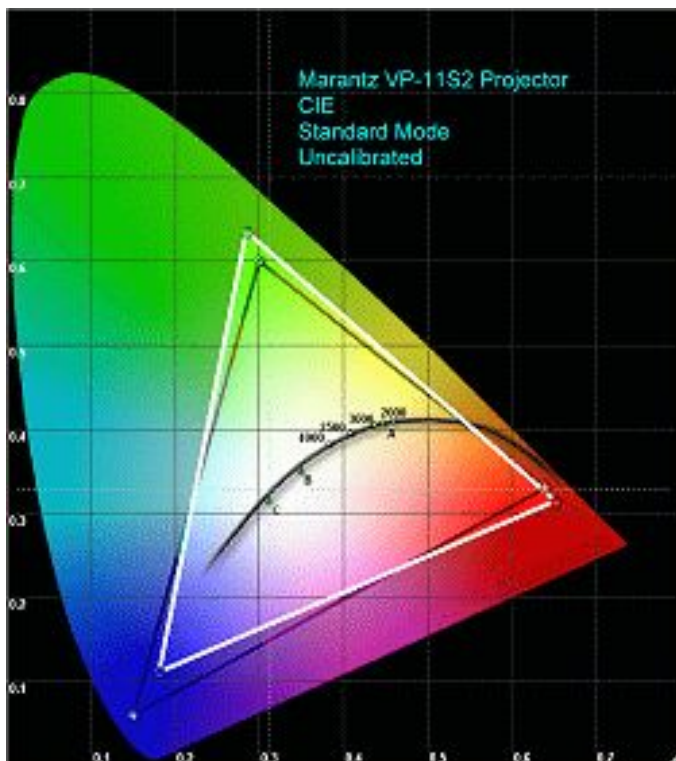
In Theater mode, I was able to use all the calibration controls. Here are the graphs after calibration. The Color Temperature was very smooth, RGB values were quite flat down through the lowest IRE levels, and Gamma was 1.66, which is low.

Marantz VP-11S2 Projector
Gamma
Theater Mode
Calibrated
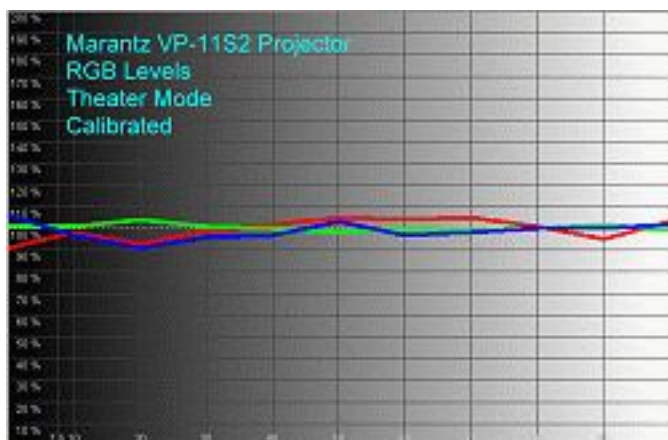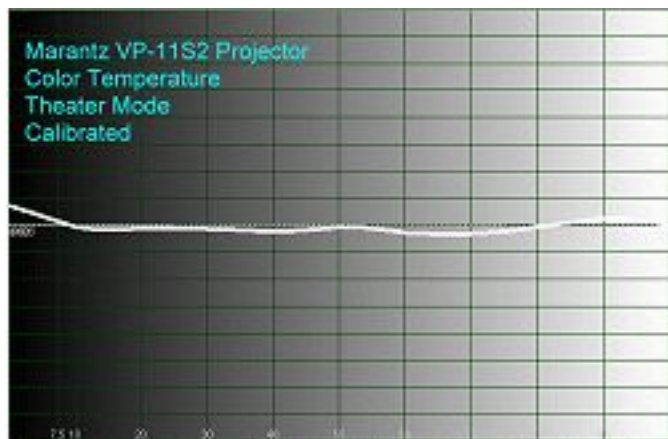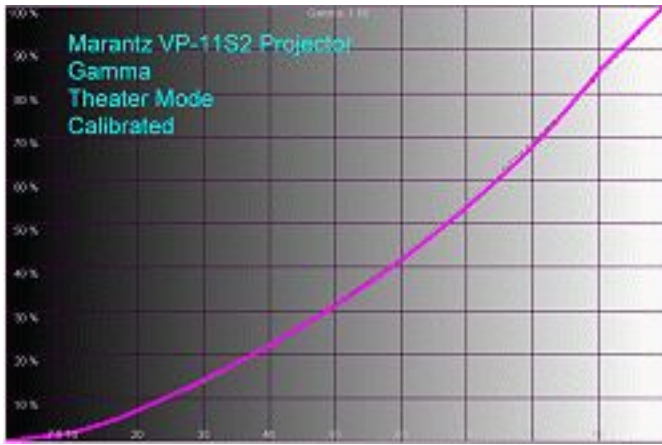
Conclusions

The Marantz VP-11S2 is quite a projector. What you are paying for here is tank-like build quality, plenty of flexible controls, and a bright – yet with a deep black level – sharp 1080p image. I don't think anyone would be disappointed to have such a high quality projector like this in their home theater.