

I M A G I N E

The First Practical

## Reference Projection Monitor

for the Video Production Industry

*"This tool allowed me to push the delivered quality of the Baraka Blu-ray to it's highest potential."*

Christopher M. Reyna – Restoration Producer



**SAMSUNG**

**Samsung SP-A800B and SP-A900B**

1080p Full HD Video Projector



# EXPERIENCE

## The Samsung SP-A900B and SP-A800B 1080p

### Full HD Reference Projection Monitors.



JKP and DVE Distribution invite you to an illustration of what we believe is the first practical true 1080p reference display. With the help of JKP, Samsung has pushed the bounds of display product engineering to a new height. We're introducing the SP-A900B and SP-A800B 1080p Full HD Reference Projection Monitors. These display devices are capable of delivering a premium reference monitoring experience. It's the most image-critical projector based display in its class; and is designed for those demanding nothing less than the best performance.

The advantage of the SP-A900B over the less expensive SP-A800B is a 35% increase in practical image contrast. The user menu system in the SP-A900B has been expanded to include preset options for digital video levels or PC levels for digital source signals, making this the perfect reference monitor for computer based editing systems as well as traditional video monitoring. The SP-A900B also has an internal anamorphic processing option for those interested in 2.35 anamorphic presentations.

## The Monitor as a Canvas for Creating Video Art

The most important tool in any professional video facility is the reference monitor. It is the canvas upon which all programs are created. Traditionally we've used expensive CRT displays for both SD and HD content. The coming of the HD system has pushed our requirements of the display well beyond what the CRT can deliver. Only now, ten years after HDTV first went on the air, can we have a practical true HD monitor that maintains all of the system specified qualities plus display the real resolution contained in the high definition signal.

Since the beginning of HD, there has been knowledge of the shortcomings of CRT displays, but they continued to be used because there wasn't an acceptable alternative. CRT displays don't have the right color of red, green and blue or the resolution capability spelled out in the HD specifications. Not only are the SP-A900B and SP-A800B capable of reproducing broadcast standard colorimetry, the color gamut can be switched among HD, SMPTE-C and EBU standards, coming to within an astounding +/- .001 in both the x and y coordinates for red, green and blue for each of the three world standards.

## Uncompromising 1080p Full HD Resolution

The SP-A900B and SP-A800B projectors offer true 1080p resolution. It's optical path sets up some of the best flat field uniformity ever seen in displays. The lens provides a level of overall focus in the image rarely seen in such displays, at the same time maintaining a superior depth of modulation\* and few, if any, chromatic aberrations. It provides the most accurate, crisp and uniform high definition image in its price range.

\*Depth Of Modulation: Local area contrast, the ability to have small dark areas of the picture show up well when they are right next to bright areas of the picture. A good depth of modulation means light from the bright parts of the picture won't scatter into dark parts of the image.

## Industry Recognition



CNET Reviews awarded the SP-A800B Editors Choice June 2008. Home Entertainment Magazine awarded the SP-A800B one of the best 10 Products of the Year. Visit [www.dvedist.com](http://www.dvedist.com) to learn more. When asked about his experience using the SP-A800B projector in the Blu-ray transfer workflow of the film Baraka, Christopher M. Reyna commented:

"The Baraka Blu-ray with it's 65mm source and 8K UltraDigital HD restoration process was intended to be a benchmark for the burgeoning Blu-ray industry. I needed a 1080p reference display that would allow me to do the critical quality assurance of the Blu-ray encoding and authoring. Pixel discrete flat screen monitors in the 42-55" were the first step, but I needed something bigger, but with reference quality. The Samsung SP-A800B, with it's 100" diagonal picture gave me that next step up for our target high-end Home Theater market. The SP-A800B provided me with accurate color, deep blacks, superb sharpness, and surprising brightness uniformity. This projector gave me the best pixel for pixel reference for detecting artifacts in the image processing of Baraka. This tool allowed me to push the delivered quality of the Baraka Blu-ray to it's highest potential."

*Christopher M. Reyna – Restoration Producer*

## Joe Kane Productions Endorsed



What happens when two industry leaders, esteemed for their history of ground-breaking technologies, share points of view? You get a projector capable of delivering a sensory experience unlike any other. Samsung and Joe Kane Productions have set the standard in home theater projection excellence.

About Joe Kane Productions: Joe Kane Productions (JKP) was founded in 1982 with the intent of assisting the video industry in improving the quality of video. Since then, the company has been actively involved in lectures, training, writing, and consulting on topics of display standards, including such diverse topics as screen specification for projection displays and specifications for all sorts of equipment used to drive displays. The company's clients include most of the television networks; many post production facilities, a large number of equipment manufacturers, and home theater installers. For more information, please visit <http://www.videoessentials.com>.

# T H E R E S T O F T H E P I C T U R E

A breathtaking viewing experience depends on more than just color and clarity.

It's the details that make the difference.

## 24-Frame True Film Mode

Movies are shot at 24 frames per second and have been displayed as a 48 Hz interlaced signal on professional video monitors. We've tolerated the flicker because in the past there didn't seem to be a choice. The Samsung display takes that 24 Hz signal in and displays it as a 48 Hz progressive image with no flicker. It's true film motion. The projector can also add the 2/3 sequence to display the image at 60 Hz.

## Enhanced HDMI Connectivity



The projector can display the full bandwidth of a 1080p signal. There is no analog roll-off associated with CRT displays or other technologies for displaying HD images. In the professional world, an external HD SDI to HDMI converter is used to take full advantage of the projector's capability.

## Extremely Quiet Operation

A soaring musical score, a moving deathbed love scene, even a simple teen comedy... these can all be ruined by a noisy projector. These projectors operate at a virtually inaudible 24 dBA in the Theater mode of the lamp, and 30dBA in Bright mode of the lamp. The audience focus will remain on the movie, where it belongs.

## Organic Design

The uniquely elegant design tucks discretely out of the way, or adds contemporary styling to any environment. Finished in a luxurious high-gloss piano black, they can be either ceiling- or table-mounted. They even have the flexibility to be right side up, level with the top of the screen.

## Easy Set-Up

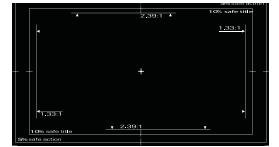
The approach to calibration uses a concept put together by the Digital Cinema Initiative. The person calibrating the projector tells it where it is in terms of red, green, blue and white. The projector knows where it should be in terms of primary colors and gray, and calculates the difference between the two so the picture you see conforms to industry standards.

Brightness and contrast are set using external test patterns.

The projector also has internal test patterns for setting up image position on the screen and provides guidelines for any aspect ratio masking that might be desired.



Crosshatch Pattern



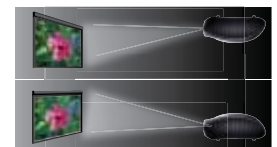
Picture Size Pattern

## Distortion-Free Display

Whether the SP-A900B and SP-A800B are mounted on the ceiling or on a table, the image should be skew and distortion-free. To aid in this, Lens Shift makes it easy to optimize the vertical location of the image on the screen, while Install Position Shift compensates for mounting position.



Lens Shift



Install Position Shift

## User-Adjustable Settings

The SP-A800B and SP-A900B have user adjustable controls to compensate for input signals that might not be at the correct levels. This is almost always needed for analog VGA signals, but may even be necessary for some digital signals. Up to three User memories are available for each type of input. The SP-A900B has a fixed offset for PC levels as opposed to video levels.

## Service and Support

We've got options to fit your needs. From calibration, lamp replacement and overnight projector replacement, we've got you covered.

Specifications		SP-A800B	SP-A900B	
Display Device		TI DMD, 1080p Single Chip Dark Chip 2	TI DMD, 1080p Single Chip Dark Chip 4	
Screen Format		16:9	16:9	
System	NTSC	✓	✓	
	AV-NTSC	✓	✓	
	PAL/SECAM	✓	✓	
Power	Supply	100V-240V, 50Hz - 60Hz AC	100V-240V, 50Hz - 60Hz AC	
Picture	Brightness	1000 ANSI Lumens (Full on)	1000 ANSI Lumens (Full on)	
	Contrast Ratio	10,000:1	12,000:1	
	<b>SP-A900B has a 35% increase in practical contrast ratio over SP-A800B†</b>			
	Lamp Type	300W Philips UHP	300W Philips UHP	
	Lamp Life	2000 Hours	2000 Hours	
	Dynamic Black	Off/3-Positions/Auto	Off/Sliding Scale/Auto	
	Reference Color Temp.	6500K	6500K	
	Color Temp. Variation	5500K/6500K/8000K/9300K	5500K/6500K/8000K/9300K	
	Resolution	1920 x 1080	1920 x 1080	
	Scan System	Progressive (1080p)	Progressive (1080p)	
	3D Y/C Comb filter	✓	✓	
	Digital Noise Reduction	✓	✓	
	2:3 Pull Down	✓	✓	
	Functions	PC Input	VGA/HDMI	HDMI Video-PC mode
		Blank Screen - No Input	Blue/Black	Blue/Black
Multi Language		English/German/Spanish/Dutch/French /Italian/Portuguese/Chinese/Swedish/Korean	English/German/Spanish/Dutch/French /Italian/Portuguese/Chinese/Swedish/Korean	
DTV Ready		HDMI Input: 1080p/1080i/720p/576p/480p	HDMI Input: 1080p/1080i/720p/576p/480p	
Analog Video		Component Input: 1080i/720p/576p/576i/480p/480i	Component Input: 1080i/720p/576p/576i/480p/480i	
Multi Format		16:9/Zoom1/Zoom2/Wide Fit/4:3	16:9/Zoom1/Zoom2/Wide Fit/4:3/Anamorphic (lens required)	
Picture Mode		7 (Dynamic/Standard/Movie1-2/User1-3)	7 (Dynamic/Standard/Movie1-2/User1-3)	
LED Lamp Off		✓	✓	
Lens Focus		Manual	Manual	
Lens Shift		Manual (vertical only)	Manual (vertical only)	
Zoom Lens		Manual	Manual	
Throw Ratio		1.72-2.24	1.72-2.24	
Image Size (width - feet)		3' to 10'	3' to 10'	
Analog Scan Rate Compatibility (PC-VGA)		VGA (640x480), SVGA (800x600), XGA (1024x768), SXGA (1280x1024)	VGA (640x480), SVGA (800x600), XGA (1024x768), SXGA (1280x1024)	
Digital Data Rate Capability (PC-HDMI)		VGA (640x480), SVGA (800x600), XGA (1024x768), SXGA (1280x1024), UXGA(1600x1200)	VGA (640x480), SVGA (800x600), XGA (1024x768), SXGA (1280x1024), UXGA(1600x1200)	
Fan Noise		24 dBA Theater mode, 30 dBA Bright mode	24 dBA Theater mode, 30 dBA Bright mode	
Terminal		Rear Input	HDMI	2
	Composite In		1	
	S-Video		1	
	Component		2 (1080p/1080i/720p/576p/576i/480p/480i)	
	PC (D-sub 15-Pin)		1	
	RS-232C (S/W Upgrade+Function control)		1	
Dimensions		18" x 8.5" x 19"	18" x 8.5" x 19"	
Weight		21.6 lbs.	21.6 lbs.	

† Practical contrast ratio refers to the contrast in a real image, the difference between light and dark areas of a picture.

#### Dimensions



www.dvedist.com  
1-888-383-9698

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