

# NEC MultiSync® PA Series with SpectraView™ II

Color calibration solution ideal  
for color-critical applications

Meticulously designed to deliver reliable, accurate color, the NEC MultiSync PA Series displays with the SpectraView II calibration solution are an unbeatable investment for color-critical applications.



PA301W




PA242W with picture in picture



PA271W with picture by picture

Model	Size	Panel	AdobeRGB Coverage
PA242W	24"	AH-IPS	99.3%
PA271W	27"	p-IPS	97.1%
PA301W	30"	p-IPS	98.2%

## Highlights

- **Best-in-class 10-bit IPS LCD technology with wide color gamut\*** provides optimum performance for critical color matching
- **Internal 14-bit programmable 3D lookup tables (LUTs)** allow the display of 1.07 billion colors out of a palette of 4.3 trillion\*\* for lossless color and smooth images and hardware calibration 
- **The included MultiProfiler software** is a perfect companion to SpectraView II and provides complete control over the display's five picture modes.
- **Built-in USB hub with DisplaySync Pro™** controls two computers with only one keyboard and mouse



# SpectraView<sub>II</sub> Color Calibration Solution Features and Benefits



## How it works

The SpectraView<sub>II</sub> system uses the customized NEC MDSVSENSOR3 colorimeter to take color measurements of the display screen during calibration. The software analyzes these measurements and sends color adjustment commands directly to the display monitor. All adjustments are made in the monitor rather than in the video graphics adapter, resulting in full use of the number of colors available on the graphics adapter and a much brighter image with the maximum possible color gamut. Since the video graphics adapter is not used at all to make any gamma or tone response curve corrections to the display, so the full color resolution and fidelity of the system is maintained and the display remains calibrated for all digital video inputs.

## Multiple calibration targets

Different monitor calibrations can be instantly loaded, allowing quick and easy switching between different calibration settings without the need to re-calibrate the display. These calibration targets contain many settings, including luminance, contrast ratio, color gamuts and gamma curves. Each time a calibration set is loaded, the necessary monitor settings and ICC/ColorSync profiles are automatically updated.



## Calibrated display information

At the end of each monitor calibration, an information window is displayed that includes a wealth of information about the display such as the measured color gamut, grayscale color tracking, Delta-E and luminance values as well as the model name, serial number and the total hours of use.

## Monitor profiling

After calibration, the display is automatically profiled and highly accurate ICC/ColorSync color profiles are generated and automatically registered with the computer's color management system.



## Calibration status validation

SpectraView<sub>II</sub> will query each calibrated monitor to see if any controls have changed since the last calibration. If anything has changed, the previous calibrated state can be restored automatically.

## Colorimeter function

The software features a colorimeter function, which allows direct measurements to be taken by the color sensor and the results displayed in a variety of different formats.



## USB & Display Data Channel Command Interface (DDC/CI) Communications

SpectraView<sub>II</sub> communicates with the monitor using either USB or DDC/CI, which is a two-way communications link between the video graphics adapter and display monitor using the standard video signal cable.



## Monitor locking

Once calibrated, the On Screen Display (OSD®) controls for the display monitors can be locked to prevent accidental or unauthorized adjustment, which may invalidate the calibrated state of the monitor.



## NEC NaViSet™ Administrator integration

SpectraView<sub>II</sub> integrates with the NEC NaViSet Administrator network software to provide remote network access and monitoring of display monitors. NaViSet Administrator is able to read, display and log the current calibration settings and status of displays on a corporate network.

## SpectraView<sub>II</sub> Software Requirements

Apple Mac OS X v10.5 or higher. Microsoft Windows 2000, Windows XP (Home and Professional editions), Windows XP 64 bit, Windows Vista 32 bit and 64 bit versions, and Windows 7 32-bit and 64-bit versions. Suse Enterprise Desktop 10 and higher. At least one available USB port for MDSVSENSOR3 color sensor.

Visit [www.necdisplay.com](http://www.necdisplay.com) for the latest requirements.



# Specifications for MultiSync PA242W-BK-SV/PA271W-BK-SV/PA301W-BK-SV

MODEL	PA242W-BK-SV	PA271W-BK-SV	PA301W-BK-SV
<b>DISPLAY</b>			
Panel Technology	AH-IPS		IPS
Backlight Type	GB-R		CCFL
Viewable Image Size	24.1"	27"	29.8"
Aspect Ratio	16:10		
Native Resolution	1920 x 1200	2560 x 1440	2560 x 1600
Pixel Pitch	0.27mm	0.23mm	0.251mm
Pixels Per Inch	93 @ native resolution	109 @ native resolution	101 @ native resolution
Brightness (typical)	340 cd/m <sup>2</sup>	300 cd/m <sup>2</sup>	350 cd/m <sup>2</sup>
Contrast Ratio (typical)	1000:1		
Viewing Angle (typical)	178° Vert., 178° Hor. (89U/89D/89L/89R) @ CR>10		
Response Time (typical)	8ms	7ms	
<b>Color Gamut*</b>			
Adobe RGB Coverage/Size***	99.3% / 108.6%	97.1% / 107.2%	98.2% / 106.7%
NTSC Coverage/Size	94.8% / 103.7%	92.6% / 102.5%	93.3% / 102%
sRGB Coverage/Size	100% / 146.4%	100% / 144.7%	100% / 144%
Lookup Table	14-bit 3D		
Displayable Colors	1.07 billion out of 4.3 trillion		
<b>Synchronization Range</b>			
Horizontal (Analog/Digital)	31.5-93.8 and 118.4 kHz (analog) / 31.5-91.1 and 118.4 KHz (digital)	31.5-93.9 kHz (Digital only)	31.5-98.7 kHz (Digital only)
Vertical	50-85 Hz	50-87 Hz	
<b>Input Signal</b>			
Video	Analog RGB 0.7 Vp-p/75 Ohms		NA
Sync	Separate Sync: TTL Level (Positive/Negative); Composite Sync: TTL Level (Positive/Negative); Composite Sync on Green: (0.3Vp-p negative 0.7Vp-p positive)		NA
Input Connectors	DisplayPort, HDMI, DVI-D, VGA 15-pin D-sub	DisplayPort, DVI-D (2)	DisplayPort (2), DVI-D (2)
<b>POWER CONSUMPTION</b>			
On (typical)	56W	117W	155W
Power Savings Mode (typical)	0.2W	1.4W	1.7W
<b>PHYSICAL SPECIFICATIONS</b>			
<b>Dimensions (WxHxD)</b>			
Net (with stand)	21.9 x 14.8 - 20.7 x 8.9 in. / 556.8 x 378 - 528 x 227.6 mm	25.2 x 15.6-21.5 x 9.3 in. / 640.4 x 396.2-546.2 x 235.5mm	27.1 x 18.4-24.3 x 11.9 in. / 688.3 x 467.4-617.2 x 302.3mm
Net (without stand)	21.9 x 14.2 x 3.3 in. / 556.8 x 362.4 x 85 mm	25.2 x 14.9 x 3.3 in. / 640.4 x 378.6 x 85mm	27.1 x 17.6 x 4.9 in. / 688.3 x 447 x 124.5mm
<b>Weight</b>			
Net (with stand)	23.3 lbs. / 10.6 kg	30 lbs. / 13.6 kg	41.5 lbs. / 18.8 kg
Net (without stand)	16.3 lbs. / 7.4 kg	21.2 lbs. / 9.6 kg	27.6 lbs. / 12.5 kg
VESA Hole Configuration	100 x 100mm	100 x 100mm, 200 x 100mm	
<b>ENVIRONMENTAL CONDITIONS</b>			
Operating Temperature	41-95°F / 5-35°C		
Operating Humidity	20 - 80%	30 - 80%	
Operating Altitude	6562 ft. / 2000m	10,000 ft. / 3048m	
Storage Temperature	14-140°F / -10-60°C		
Storage Humidity	10-85%		
Storage Altitude	40,000 ft. / 12,192m		
Tropical Environment	Yes		
<b>LIMITED WARRANTY</b>	4 years parts and labor, including backlight***		
<b>ADDITIONAL FEATURES</b>	ECO Mode; Carbon footprint meter; Thin frame; Tilt; Swivel; Pivot; Height-adjustable stand with locking base; Quick release stand; Carrying handle; Rapid Response; Ambix4; XtraView+; OSD user controls; MultiProfiler software; USB hub (2 up/3 down) with DisplaySync Pro; Cable management; Touch-integratable; VESA mount; HDCP; DDC/CI; No Touch Auto Adjust; 14-bit 3D LUT; X-Light Pro; Black Level adjustment; AmbiBright; Wide Color Gamut; Adobe RGB; CableComp; TileMatrix; TileComp; GammaComp MD QA software ready; SpectraView software ready; Standalone hardware calibration (PA301W only)		
<b>SHIPS WITH</b>	Setup sheet; Driver & Manual CD; Power cord; DisplayPort cable; DVI-D cable; USB cable; Mini DisplayPort to DisplayPort cable; SpectraView <sub>ii</sub> Color Calibration Kit (SVII-PRO-KIT)	Power cord; DVI cable; USB cable; Mounting Screw; SpectraView <sub>ii</sub> Color Calibration Kit (SVII-PRO-KIT)	
<b>OPTIONAL ACCESSORIES</b>	Hood (HDPA212426); SOUNDBARPRO multimedia sound bar	Hood (HDPA27); SOUNDBARPRO multimedia sound bar	Hood, SOUNDBARPRO multimedia sound bar

\* Color gamut size and coverage calculated as 2-D gamut area in CIE 1931 xy colorspace. Size is the total relative display gamut area and includes any colors outside the reference gamut. Coverage is the relative display gamut area contained inside the reference gamut. NTSC values provided for comparison purposes - modern broadcast video uses SMPTE-C, ITU-R BT, 709-5/sRGB or EBU primaries.

\*\* with 10-bit DisplayPort input. 16.7 million colors out of 65 billion with DVI-D input.

\*\*\* AdobeRGB is a standard defined by Adobe Systems Incorporated.

\*\*\*\* Warranty restrictions apply. Contact your representative for details.