

# NEC MultiSync® PA Series with SpectraView<sub>II</sub>™

*Color calibration solution ideal  
for color-critical applications*

Thoughtfully designed and individually factory calibrated to deliver reliable, accurate color, the NEC MultiSync PA Series displays with the SpectraView<sub>II</sub> calibration solution, backed by a 4-year warranty with Advanced Exchange, are an unbeatable investment for color-critical applications.



PA272W-BK-SV



PA302W



PA242W-BK-SV  
Picture in picture

## Impeccable Image Performance

A GB-R LED backlight, a high performance AH-IPS LCD panel and the SpectraView Color Engine deliver great color in every environment.

- Up to 99.3% coverage of the Adobe RGB color space and accurate 100% coverage of sRGB
- 10-bit HDMI and DisplayPort inputs can use 1.07 billion colors out of a palette of 4.3 trillion colors
- AH-IPS LCD provides wide viewing angles of 178°

## Simple Color Management

The sophisticated color engine provides extensive, intuitive control over color settings.

- MultiProfiler software and on-screen controls provide access to thousands of color gamut, gamma, white point, brightness and contrast combinations
- Internal 14-bit 3D lookup tables (LUTs) work with the SpectraView<sub>II</sub> color calibration solution for unparalleled color accuracy

## A Better Workflow

Exclusive, innovative features can eliminate steps in a color editing workflow, saving time and hassle.

- 5 completely customizable picture modes provide shortcuts to commonly used graphics settings
- MultiProfiler loads ICC profiles into presets and also provides keyboard shortcuts for common functions
- 2 up / 3 down USB hub with DisplaySync Pro controls two computers with one keyboard and mouse

## A Perfect Fit for Your Workspace

Future-proof connectivity, great ergonomics, VESA mount and a choice of black or white cabinets to fit every desk and office environment.

- 10-bit DisplayPort and HDMI as well as DVI-D and VGA inputs connect to most PC and Mac computers
- Four-way ergonomic stand boasts pivot, swivel, tilt and height-adjustment up to 150mm
- VESA-standard mounting holes for multi-display setups

# 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.





## Color Accurate Editing



### The Essential

Designed for color accuracy while editing images and video, the MultiSync PA Series can accurately emulate several color spaces, including Adobe RGB, sRGB, REC-709 and DCI.

### The Extras

Using MultiProfiler, the presets in a MultiSync PA Series can be set to emulate most other color spaces simply by loading an ICC profile from a printer, display or projector, allowing you to quickly switch between multiple color spaces while editing. In addition, you can display the same image in two different picture modes simultaneously on screen, allowing for a quick preview of a second color space and saving time switching between color spaces in editing software.

## Multiple Computer Environments



### The Essential

With plenty of connectivity options, including DisplayPort, DVI-D, HDMI and select models with Mini DisplayPort and VGA connections, the MultiSync PA Series can connect most modern computer systems.

### The Extras

Each MultiSync PA Series features a USB hub with two upstream connections and three downstream connections. This allows you to connect two different computers using the USB port and share a keyboard, mouse and a third device between the two computers with the push of a button. Since the internal LUTs store the calibration data in the display, every input is a calibrated input.

# Adaptable to Every Workspace

## The Essential

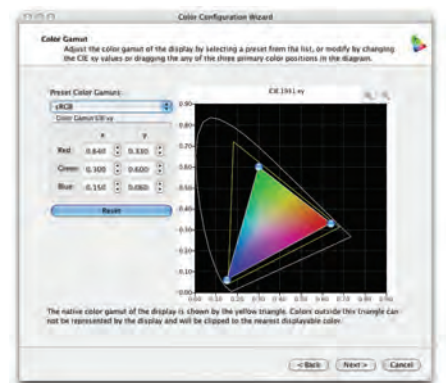
With a fully-featured ergonomically designed stand, the MultiSync PA Series displays rotate, tilt, pivot to portrait and extend up to 150mm. The removable stand features an integrated cable management system with cover and also includes a locking feature for easy transport. In addition, the MultiSync PA302W is available in both black and white to better match the design of your office or home.

## The Extras

The MultiSync PA Series on screen display (OSD) is fully featured and contains exclusive controls for color and inputs and will rotate to match the orientation of your display. There is also a dedicated button for turning the Picture in Picture mode on and off and another for switching inputs.



# Color Space Emulation



## The Essential

Built-in presets for standard color spaces, including sRGB, AdobeRGB, DCI and even medical DICOM standard provide quick access to previewing your work in a specific color space.

## The Extras

MultiProfiler software gives you direct control over your display's built-in preset so that you can have multiple custom color space emulations simultaneously on the display. Color gamut, white point, gamma and brightness are controllable for each preset and ICC color profiles for printers or displays can also be loaded into the presets for a more perfect color match.



# Picture in Picture / Picture by Picture



Picture in Picture  
*shown with 2 separate inputs*



Picture by Picture  
*shown with the same input, multiple color spaces*

## The Essential

Picture in Picture and Picture by Picture configurations allow multiple inputs to be shown on screen simultaneously in order to improve productivity.

## The Extras

The MultiSync PA Series allows for two different inputs to be shown simultaneously, which is useful for multiple computer configurations or even replacing multiple display setups. The same input can also be displayed in a second color space, which is most often used for a quick preview of an output color space (for example, sRGB) while working in a different color space (for example, Adobe RGB). This saves the time used to switch back and forth between color spaces as final editing tweaks are made.

## 10 bit Color



10 bit color eliminates banding



8 bit color shows banding







## The Essential

10 bit color or “deep color” provides an extra 2 bits of color data accessible through the display, extending the typical display’s 16.7 million colors to over 1 trillion colors. This improves gradients and reduces image banding.

## The Extras

The MultiSync PA Series offer 10 bit color support over DisplayPort and HDMI inputs for increased color fidelity. When matched with 10 bit operating system, software applications and video card, images are displayed with even more accuracy than ever before.

# Specifications for MultiSync PA242W-BK-SV/PA272W-SV/PA272W-BK-SV/PA302W-SV/PA302W-BK-SV

| MODEL                        | PA242W-BK-SV  |                | PA272W-SV/PA272W-BK-SV  |                       | PA302W-SV/PA302W-BK-SV  |          |
|------------------------------|---|----------------|---|-----------------------|---|----------|
| DISPLAY                      | <div><div></div><div></div></div>   |                | <div><div></div><div></div></div> |                       | <div><div></div><div></div></div> |          |
|                              | Panel Type  | Backlight Type | Viewing Angle   | 1000:1 Contrast Ratio | Lookup Table  | Warranty |
| Viewable Image Size          | 24.1"   |                | 27"   |                       | 29.8"   |          |
| Aspect Ratio                 | 16:10   |                | 16:9  |                       | 16:10   |          |
| Native Resolution            | 1920 x 1200   |                | 2560 x 1440   |                       | 2560 x 1600   |          |
| Pixel Pitch                  | 0.27mm  |                | 0.23 mm   |                       | 0.251mm   |          |
| Pixels Per Inch              | 93 @ native resolution  |                | 109 @ native resolution   |                       | 101 @ native resolution   |          |
| Brightness (typical)         | 340 cd/m²   |                | 350 cd/m²   |                       | 340 cd/m²   |          |
| Response Time (typical)      | 8ms Rapid Response  |                | 6ms Rapid Response  |                       | 6ms Rapid Response  |          |
| Color Gamut*                 |   |                |   |                       |   |          |
| Adobe RGB Coverage/Size**    | 99.3% / 108.6%  |                |   |                       |   |          |
| NTSC Coverage/Size           | 94.8% / 103.7%  |                |   |                       |   |          |
| sRGB Coverage/Size           | 100% / 146.4%   |                |   |                       |   |          |
| Displayable Colors           | 1.07 billion out of 4.3 trillion (10-bit DisplayPort or HDMI input); 16.7 million colors out of 1.05 billion color palette (DVI-D and VGA inputs)   |                | 1.07 billion out of 4.3 trillion (10-bit DisplayPort or HDMI input); 16.7 million colors out of 1.05 billion color palette (DVI-D)  |                       |   |          |
| Input Connectors             | DisplayPort, HDMI, DVI-D, VGA   |                | DisplayPort, Mini DisplayPort, HDMI, DVI-D Dual Link  |                       |   |          |
| POWER CONSUMPTION            |   |                |   |                       |   |          |
| On (typical)                 | 56W   |                | 73W   |                       | 87W   |          |
| Power Savings Mode (typical) | 0.2W  |                | 1W  |                       | 1.4W  |          |
| PHYSICAL SPECIFICATIONS      |   |                |   |                       |   |          |
| Dimensions (WxHxD)           |   |                |   |                       |   |          |
| 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 x 466.4-616.4 x 301.6 mm  |          |
| 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 3.2 in. / 688 x 446.8 x 82 mm   |          |
| Weight                       |   |                |   |                       |   |          |
| Net (with stand)             | 23.4 lbs. / 10.6 kg   |                | 28.4 lbs. / 12.9 kg   |                       | 37.5 lbs. / 17.0 kg   |          |
| Net (without stand)          | 16.3 lbs. / 7.4 kg  |                | 19.6 lbs. / 8.9 kg  |                       | 23.6 lbs. / 10.7 kg   |          |
| VESA Hole Configuration      | 100 x 100mm   |                | 100 x 100mm, 200 x 100mm  |                       |   |          |
| ENVIRONMENTAL CONDITIONS     |   |                |   |                       |   |          |
| Operating Temperature        | 41-95°F / 5-35°C  |                |   |                       |   |          |
| Operating Humidity           | 20 - 80%  |                |   |                       |   |          |
| Operating Altitude           | 6562 ft. / 2000m  |                | 16,404 ft. / 5000m  |                       |   |          |
| Storage Temperature          | 14-140°F / -10-60°C   |                |   |                       |   |          |
| Storage Humidity             | 10-85%  |                |   |                       |   |          |
| Storage Altitude             | 40,000 ft. / 12,192m  |                |   |                       |   |          |
| Tropical Environments        | Yes   |                |   |                       |   |          |
| ADDITIONAL FEATURES          | USB hub (2 up/3 down) with DisplaySync Pro, 5 Picture Modes, Picture in Picture, Picture by Picture, ICC Profile Emulation, Color Vision Emulation, 14-bit 3D gamma, Wide Color Gamut, Adobe RGB, DICOM, REC 709, Digital Uniformity Correction, black Level adjustment, 150mm height-adjustable and quick release stand with locking base and cable management as well as tilt, swivel and pivot, MultiProfiler software, touch-integratable, CableComp, TileMatrix and TileComp support, Standalone hardware calibration (PA302W models only) |                |   |                       |   |          |
| OPTIONAL ACCESSORIES         | Hood (HDP A212426), Multimedia soundbar - black (SOUNDBARPRO)   |                | Hood (HDP A27); Multimedia soundbar - black (SOUNDBARPRO)   |                       | Hood (HDP A30-2); Multimedia soundbar - black (SOUNDBARPRO)   |          |
| SHIPS WITH                   | Power cord; DisplayPort cable; Mini DisplayPort to DisplayPort cable; DVI cable; USB A to B cable; SpectraView_ software; NEC customer calibrator   |                |   |                       |   |          |

\* 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.

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

## Optional Accessories



2W USB SOUNDBARPRO



| Hood Compatibility |             |                     |                     |
|--------------------|-------------|---------------------|---------------------|
| NEC Model No.      | HDP A212426 | HDP A27             | HDP A30-2           |
| Hood Size          | 21" - 24"   | 27"                 | 30"                 |
| Works With         | PA242W-BK   | PA272W<br>PA272W-BK | PA302W<br>PA302W-BK |

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