

An affordable solution for color-accurate applications

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



## Cutting-edge Technology

High performance AH-IPS LCD panels provide wide viewing angles of up to 178° and deliver great color in every environment.

- ControlSync enables multi-monitor setups of up to six monitors and controls up to 26 settings
- Human sensor and ambient light sensor automatically detect your work conditions to determine the proper display brightness, thereby conserving power

## A Perfect Fit for Your Workspace

Future-proof connectivity, great ergonomics, and a VESA mount to fit every desk and office environment.

- 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 130mm
- 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 a 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 displays 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. Windows 7 and Windows 8 32-bit and 64-bit versions. Suse Enterprise Desktop 10 and higher. At least one available USB port for the color sensor.

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

## Adaptable to Every Workspace

### The Essential

With a fully-featured ergonomically designed stand, the MultiSync EA Series displays rotate, tilt, pivot to portrait and extend up to 130mm. The removable stand features an integrated cable management system with cover and also includes a locking feature for easy transport.

### The Extras

The MultiSync EA Series on screen display (OSD) is fully featured and touch-enabled. There is also a dedicated button for turning the Picture in Picture mode on and off and another for switching inputs.



## Picture in Picture / Picture by Picture

### The Essential

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

### The Extras

The MultiSync EA Series allows for two different inputs to be shown simultaneously, which is useful for multiple computer configurations or even replacing multiple display setups.



# Specifications for EA244UHD / EA274WMI / EA304WMI

MODEL	EA244UHD-BKSV	EA274WMI-BKSV	EA304WMI-BKSV
<b>DISPLAY</b>			
Panel Technology	AH-IPS	AH-IPS	AH-IPS
Backlight Type	GB-R LED	W-LED	GB-R LED
Viewable Image Size	23.8"	27"	29.8"
Aspect Ratio	16:9	16:9	16:10
Native Resolution	3840 x 2160	2560 x 1440	2560 x 1600
Pixel Pitch	0.14	0.233mm	0.25
Pixels Per Inch	185 @ native resolution	109 @ native resolution	101 @ native resolution
Brightness (typical)	350 cd/m <sup>2</sup>	350 cd/m <sup>2</sup>	350 cd/m <sup>2</sup>
Contrast Ratio (typical)	1000:1 (25,000: dynamic)		
Viewing Angle (typical)	178° Vert., 178° Hor. (89U/89D/89L/89R) @ CR>10		
Response Time (typical)	6ms		
Color Gamut*			
Adobe RGB Coverage/Size**	99.3% / 108.6%	80.4% / 85.8%	99.3% / 108.6%
NTSC Coverage/Size	94.8% / 103.7%	77.3% / 82.0%	94.8% / 103.7%
sRGB Coverage/Size	100% / 146.4%	100% / 115.7%	100% / 146.4%
Displayable Colors	More than 16.7 million		
Synchronization Range			
Horizontal (Analog/Digital)	31.5-134 kHz	31.5-83 kHz	31.5-98.7kHz
Vertical	30-75 Hz	56-75 Hz	50-85 Hz
Input Signal			
Video	Analog RGB 0.7 Vp-p/75 Ohms		
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)		
Input Connectors	DVI-D(2), HDMI(2), DisplayPort(2)	DisplayPort, HDMI, DVI-D, VGA 15-pin D-sub	DisplayPort, HDMI, VGA, DVI-D
<b>POWER CONSUMPTION</b>			
On (typical)	79W	57W	63W
Power Savings Mode (typical)	0.33W	0.8W	0.7W
<b>PHYSICAL SPECIFICATIONS</b>			
Dimensions (WxHxD)			
Net (with stand)	22.0 x 15.2 - 20.3 x 8.6 in. / 558.2 x 386.7 - 516.7 x 218.0 mm	25.2 x 16.5 - 21.6 x 9.1 in. / 639.2 x 417.9 - 537.9 x 230 mm	27.0 x 18.6 - 23.7 x 9.1 in. / 686.9 x 472.8 - 602.8 x 230.0 mm
Net (without stand)	22.0 x 13.2 x 2.8 in. / 558.2 x 334.3 x 72.0 mm	25.2 x 14.9 x 2.6 in. / 639.3 x 377.8 x 66.5 mm	27.0 x 17.6 x 3.0 in. / 686.9 x 446.6 x 75.1 mm
Weight			
Net (with stand)	16.3 lbs. / 7.4 kg	19.2 lbs. / 8.7 kg	24.3 lbs. / 11.0 kg
Net (without stand)	11.0 lbs. / 5.0 kg	12.8 lbs. / 5.8 kg	17.6 lbs. / 8.0 kg
VESA Hole Configuration	100 x 100mm		
<b>ENVIRONMENTAL CONDITIONS</b>			
Operating Temperature	41-95°F / 5-35°C		
Operating Humidity	20 - 80%		
Operating Altitude	6562 ft. / 2000m	6562 ft. / 2000m	6562 ft. / 2000m
Storage Temperature	14-140°F / -10-60°C		
Storage Humidity	10-85%		
Storage Altitude	40,000 ft. / 12,192m		
Tropical Environments	Yes		
<b>ENVIRONMENTAL COMPLIANCE</b>			
ENERGY STAR	6.0		
TCO	Edge Certified 1.2		6.0 / Edge Certified 1.2
EPEAT	Gold		
RoHS	Yes		
<b>LIMITED WARRANTY</b>			
3 years parts and labor, including backlight*			
<b>ADDITIONAL FEATURES</b>			
Picture by Picture, Tilt; Swivel; Pivot; Height-adjustable stand; ControlSync; Customize Setting; Integrated speakers; 4-port USB hub; LED backlight; Auto brightness with ambient light sensor; Human sensor; ECO Mode; Carbon footprint meter; Resettable cost meter; Thin frame; Carrying handle; Rapid Response; Ambix; XtraView; Hot Key; Touch OSD controls; OSD Lock Out; Cable management; Dynamic Visual Mode (Standard, Text, Movie, Gaming, Photo, Dynamic); NaViSet Administrator 2; VESA mount; HDCP; DDC/CI; No Touch Auto Adjust; Plug and Play (VESA DDC2B); VESA DPMS power management; AccuColor color control; Digital smoothing; Digital controls; ISO 9241-307 Class I; DICOM SIM for IPS models			
<b>SHIPS WITH</b>			
Setup sheet; User manual; Power cord; DVI-D cable; USB cable; Audio cable; ControlSync cable, SpectraView II software USB drive, Datacolor color calibration sensor			Setup sheet; User manual; Power cord; DisplayPort cable; DVI-D cable; USB cable; Audio cable; ControlSync cable, SpectraView II software USB drive, Datacolor color calibration sensor

\* 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.