

Orchestrating a brighter world

NEC

NEC MultiSync® PA322UHD-2 with SpectraView_{II}

Wide Gamut 4K UHD resolution, LED-backlit
color accurate desktop display



Crisp 4K ultra high definition (UHD) resolution and incredible, predictable color accuracy.

The 32" MultiSync PA322UHD is the ultimate desktop display for applications where precise color is essential. The innovative wide-gamut W-LED backlight provides 99.2% coverage of the Adobe RGB color space, enabling more accurate colors to be displayed on screen. Utilizing a high performance IPS-type LCD panel with IGZO technology and backed by a 4 year warranty with Advanced Exchange, the MultiSync PA322UHD delivers high quality, accurate images simply and beautifully.

Impeccable Image Performance

The wide-gamut W-LED backlight combined with NEC's exclusive SpectraView Color Engine deliver precise color in every environment.

- 4K UHD resolution (3840 x 2160) offers a high pixel density and is equivalent to 4 full HD displays
- Up to 99.2% coverage of the Adobe RGB color space and accurate 100% coverage of sRGB
- 10-bit HDMI and DisplayPort inputs display up to 1.07 billion colors out of a palette of 4.3 trillion colors

Ultimate Color Management

The sophisticated SpectraView 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 included SpectraView_{II} color calibration solution for unparalleled color accuracy

A Perfect Fit for Your Workspace

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

- 10-bit DisplayPort 1.2 and HDMI 2.0 as well as DVI-D inputs connect to most PC and Mac computers
- Four-way ergonomic stand includes pivot, swivel, tilt and height-adjustment up to 150mm
- VESA-standard mounting holes for multi-display setups



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 can load ICC color profiles into any of the presets and also provides keyboard shortcuts for common functions
- 2 up / 3 down USB 3.0 hub with DisplaySync Pro controls two computers with one keyboard and mouse

Color Accurate Editing

The Essential

Designed for color accuracy while editing images and video, the MultiSync PA322UHD utilizes the SpectraView Color Engine to accurately emulate several color spaces, including Adobe RGB, sRGB, REC-709 and DCI.

The Extras

Using MultiProfiler, the presets in the PA322UHD 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 or four 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 1.2, DVI-D, and HDMI 2.0 and 1.4 connections, the MultiSync PA322UHD can connect most modern computer systems.

The Extras

Each PA322UHD features a USB 3.0 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.



Expandable with Open Pluggable Specification (OPS)

The Essential

The MultiSync PA322UHD includes a limited Open Pluggable Specification (OPS) slot that can be used to enable additional digital interfaces. The included OPS features switchable DisplayPort 1.2 / HDMI 2.0 inputs.

The Extras

The PA322UHD's OPS slot is compatible with other OPS options from NEC. For example, the SB-04HC OPS includes a SD/3G/HD-SDI interface that can connect a full HD broadcast signal to the PA322UHD. See the specifications page for a complete list of supported OPS devices.



Color Accurate Professional Desktop

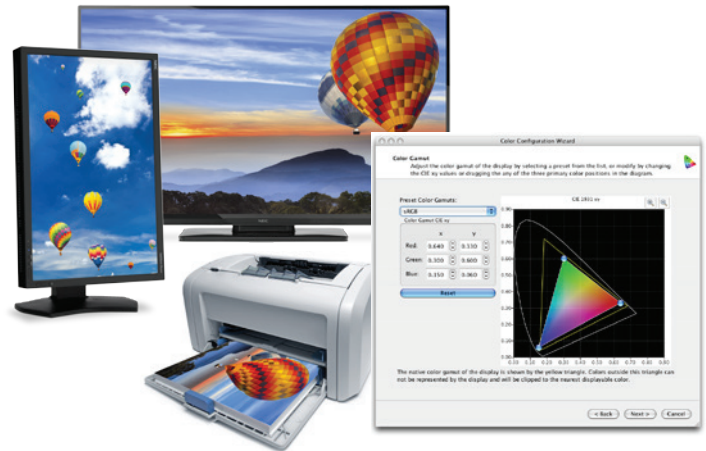
Color Space Emulation

The Essential

Built-in presets for standard color spaces, including sRGB, AdobeRGB, DCI REC 709 and even the DICOM medical imaging 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

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 MultiSync PA322UHD has two-way and four-way Picture by Picture modes.

The Extras

The PA322UHD 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.



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



Picture by Picture
shown with 4 separate inputs



Picture in Picture
shown with 2 separate inputs

10 bit Color

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 PA322UHD offers 10 bit color support over DisplayPort and HDMI inputs for increased color fidelity when matched with a 10 bit operating system and software applications.



10 bit color eliminates banding



8 bit color shows banding

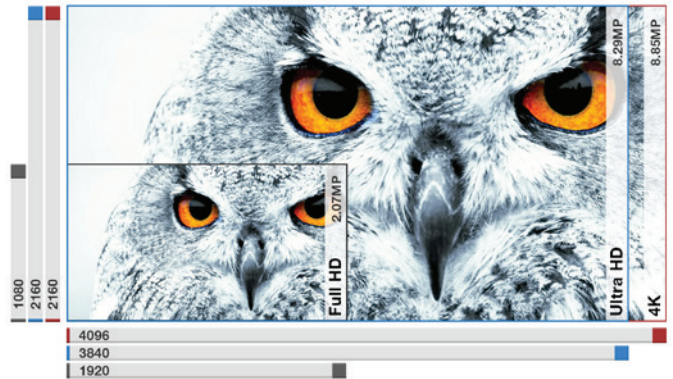
4K UHD Resolution

The Essential

4K ultra high definition (UHD) resolution delivers four times the typical Full HD resolution. This allows for more information on screen and clearer, pixel-free viewing.

The Extras

The UHD resolution on the MultiSync PA322UHD utilizes 140 pixels per inch (PPI) at native resolution, which nears the accuracy of printed content. More content can be put on screen, reducing scrolling and increasing productivity, and the high PPI means images will appear sharper and with more detail. Combined with the Picture by Picture modes, content can be viewed in stunning detail in multiple color spaces easily and clearly.



SpectraView_{II}™ Color Calibration Option

The Essential

Available as an option for the PA322UHD, the SpectraView_{II} color calibration solution uses an external color sensor to ensure the consistency and accuracy of the colors onscreen. SpectraView_{II} is the only software that calibrates the lookup tables (LUTs) in an NEC display, eliminating a loss of color caused by video card LUT calibration.

The Extras

The SpectraView_{II} solution is simple, quick and reliable. Custom calibration targets allow you to calibrate to thousands of calibration combinations and the calibration validation functionality provides you with everything you need to trust the calibration results. In addition, SpectraView_{II} includes lifetime upgrades and can be used for your future NEC displays.

SpectraView_{II}™

Display Color Calibration System



| | | |
|---------------------------------|--|---|
| DISPLAY | Viewable Image Size | IGZO technology IPS type LCD |
| | Aspect Ratio | 16:9 |
| | Native Resolution | 3840 x 2160 (4K UHD) |
| | Pixel Pitch | 0.18mm |
| | Pixels Per Inch | 140 @ native resolution |
| | Brightness (typical) | 350 cd/m ² |
| | Response Time (typical) | 10 ms (GtG) |
| | Color Gamut* Adobe RGB Coverage/Size** NTSC Coverage/Size sRGB Coverage/Size DCI-P3 Coverage / Size | 99.2% / 101.0% 92.4% / 96.5% 136.3% / 99.9% 88.9% / 100.5% |
| | Displayable Colors | 1.07 billion out of 4.3 trillion (10-bit DisplayPort or HDMI input); 16.7 million colors out of 4.3 trillion color palette (8-bit DisplayPort, HDMI or DVI-D) |
| | Input Connectors | DisplayPort 1.2, OPS slot switchable DisplayPort 1.2 / HDMI 2.0 with HDCP 2.2, DVI-D Dual Link x2 / HDMI 1.4 x4 |
| POWER CONSUMPTION | On (typical) | 95W |
| | Power Savings Mode (ADVANCED) | 4.6W |
| PHYSICAL SPECIFICATIONS | Dimensions (WxHxD) | |
| | Net (with stand) | 29.3 x 18.4 x 11.9 in. / 744.8 x 468.4 x 301.6 mm |
| | Net (without stand) | 29.3 x 17.4 x 3.9 in. / 744.8 x 440.8 x 100.0 mm |
| | Weight | |
| | Net (with stand) | 45.2 lbs. / 20.5 kg |
| | Net (without stand) | 31.3 lbs. / 14.2 kg |
| | VESA Hole Configuration | 100 x 100mm, 200 x 100mm |
| ENVIRONMENTAL CONDITIONS | Operating Temperature | 41-95°F / 5-35°C |
| | Operating Humidity | 30 - 80% |
| | Operating Altitude | 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 3.0 hub (2 up/3 down) with DisplaySync Pro, 5 Picture Modes, Picture in Picture, 2 way Picture by Picture, 4 way Picture by Picture, ICC Profile Emulation, Color Vision Emulation, 14-bit 3D gamma lookup table (LUT) with 16-bit processing, wide color gamut, Adobe RGB, DICOM, REC 709, Digital Uniformity Correction, black level adjustment, ambient light sensor, backlight stability sensor, 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, integrated 2+2W speakers, Kensington security slot | |
| OPTIONAL ACCESSORIES | SpectraView _i Color Calibration Kit (SVII-PRO-KIT); Color calibration sensor (MDSVSENSOR3); SpectraView software (SVIISOFT); Hood (HDP32) , HD-SDI input card (SB-01HC), 3G/HD/HD-SDI input card (SB-04HC) | |
| SHIPS WITH | Power cord; DisplayPort cable; Mini DisplayPort to DisplayPort cable; USB 3.0 A to B cable; Mounting screws; CD-ROM with manual and MultiProfiler , NEC custom color sensor (MDSVSENSOR3), SpectraView _{II} software USB drive (SVIISOFT) | |



* 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.

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