

NEC MultiSync EX241UN-BK



BY JOHN R. DELANEY

The **business monitors** in NEC's MultiSync line have been providing stellar performance and ergonomic comfort to users for more than 30 years, and the EX241UN-BK (\$379) continues the trend. Based on In-Plane Switching (IPS) technology, this 24-inch display aced our color accuracy and grayscale performance tests, and is loaded with business-centric features, including a fully adjustable stand, ControlSync management, and power-saving modes that help keep energy costs at bay. It's our Editors' Choice for midsize business monitors.

Design and Features

The panel of the EX241UN-BK [\\$377.77 at Amazon](#) is housed in a basic, matte-black cabinet with a zero-bezel design that makes it ideal for side-by-side, multiple-monitor configurations. The stand is also black and offers the full gamut of ergonomic adjustments, including height, tilt, swivel, and pivot, but you'll need both hands to rotate the panel, as the pivot mechanism is very stiff. The panel has a maximum resolution of 1,920 by 1,080, a 6-millisecond (gray-to-gray) pixel response, a peak brightness of 250cd/m², a 16:9 aspect ratio, and a 1,000:1 contrast ratio.



[View All 7 Photos in Gallery](#)

At the rear of the cabinet, facing downward, are numerous I/O ports, including HDMI, DVI, VGA, and DisplayPort video inputs. They are joined by a DisplayPort output for daisy-chaining multiple monitors, an audio input, and two ControlSync ports (in and out). ControlSync is NEC's IT-friendly technology that allows you to control settings for up to 25 NEC EX Series monitors using a ControlSync cable.

On the left side of the display are three USB 3.0 downstream ports, a USB 3.0 upstream port, a headphone jack, and a port for an optional sensor that attaches to the side of the monitor and detects human presence and ambient light to help conserve power. On the right side of the rear panel are a Power switch, a button for toggling through the ECO power-saving modes, an input-select button, and a four-way jog button for navigating the menu system. The embedded 1-watt speakers are relatively loud, but their lack of bass response makes them sound tinny when cranked up.

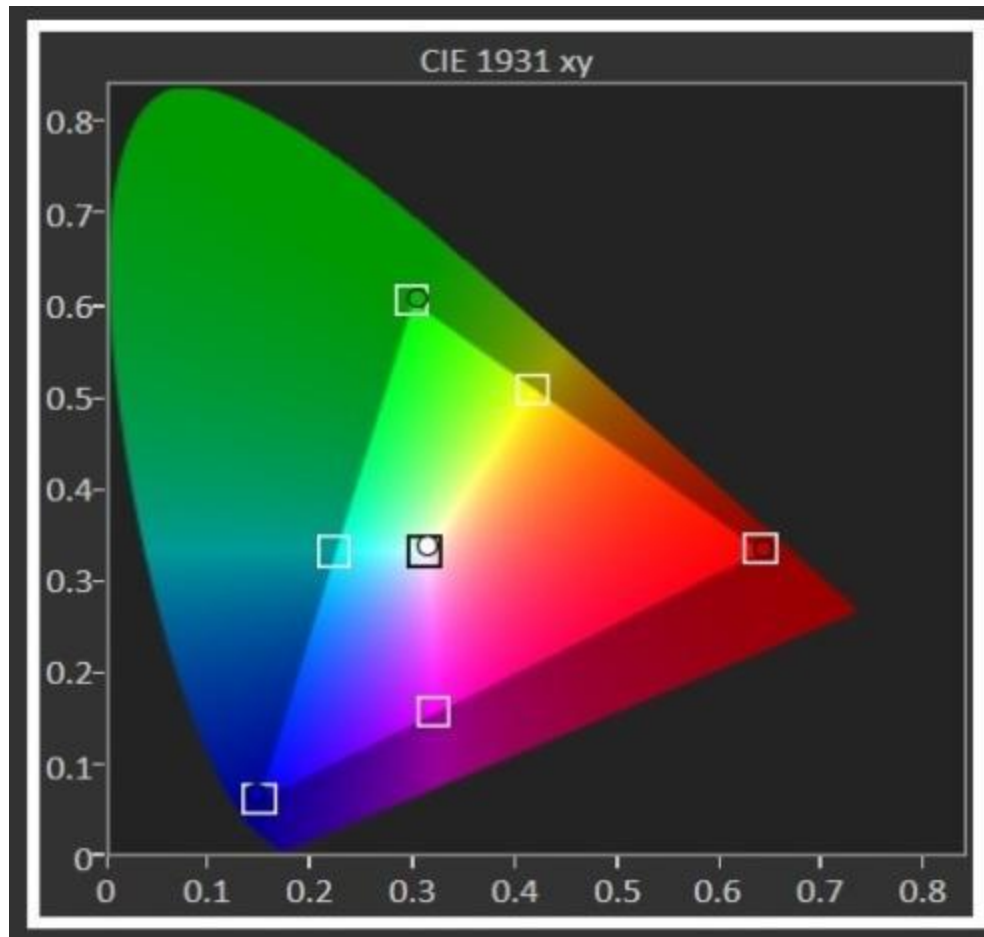


In addition to Brightness, Contrast, and Black Level settings, the EX241UN-BK has five picture presets (Standard, Movie, Photo, Gaming, and Dynamic), and nine Color Control settings, including four color-temperature levels, an sRGB mode, a native mode, a low blue light mode, a DICOM (medical imaging) mode, and a user-programmable mode that works with NEC's optional SpectraView kit, which includes calibration software and an X-Rite colorimeter. You can buy the monitor bundled with the SpectraView kit for \$529. As with other MultiSync displays, including the **NEC MultiSync EA244UHD** [\\$1,049.00 at Amazon](#) and the **NEC MultiSync EA305W** [\\$1,447.52 at Amazon](#), the EX241UN-BK offers a carbon meter that measures the monitor's carbon footprint, energy costs, and energy cost savings.

The EX241UN-BK comes with a three-year warranty on parts, labor, and the backlight. Inside the box are USB (upstream), DisplayPort, and ControlSync cables, and a User Guide.

Performance

The EX241UN-BK delivered rich, accurate colors right out of the box. On the chromaticity chart below, red, green, and blue color measurements are represented by the colored dots, and the ideal CIE coordinates are represented by the boxes. As illustrated, each color is very closely aligned with its ideal coordinates. Colors appeared uniform and evenly saturated in the DisplayMate Color Purity and Uniformity tests and in my tests images, and remained intact when viewed from an extreme top, side, or bottom angle.



Grayscale performance was also quite good. The IPS panel correctly displayed every shade of gray on the DisplayMate 64-Step Grayscale test and provided excellent highlight and shadow detail in my test photos. While not designed for gaming, the panel did an admirable job of displaying fast-action sequences in my *Crysis 3* (PC) and *Grand Theft Auto V* ([Sony PlayStation 4 \\$312.40 at Amazon](#)) gaming tests. But its input lag (the time it takes for the monitor to react to a controller command) of 39.5 milliseconds, as measured with a [Leo Bodnar Video Signal Lag Tester](#), is less than ideal. Our fastest monitor, the [BenQ XL2430T \\$383.58 at Walmart](#) (a gaming display), measured a short 9.5 milliseconds.



See How We Test Monitors

Businesses looking to reduce utility costs will appreciate the EX241UN-BK's low power usage. It consumed just 18 watts of power in testing with ECO mode disabled, 14 watts in ECO 1 mode, and 12 watts in ECO 2 mode. The **NEC MultiSync EA244WMi**, another top pick, consumed 26 watts, 19 watts, and 13 watts (respectively), and the **Dell UltraSharp 24 InfinityEdge Monitor U2417H** [\\$309.99 at Dell](#) consumed 14 watts (it doesn't offer power-saving modes).

Conclusion

As with the NEC EA244WMi, the NEC MultiSync EX241UN-BK is an excellent choice for businesses looking to reduce deployment times and cut energy costs, but it also offers a few features that the NEC EA244WMi doesn't, including USB 3.0 connectivity and a video output for connecting multiple monitors. Color accuracy was spot-on in our testing, as was grayscale performance, and viewing angles were nice and wide. The stand offers all the adjustments you'll need for ergonomic comfort, but is a bit too rigid, and the speakers, while loud, sound tinny. Neither gripe prevents the EX241UN-BK from earning our Editors' Choice for midsize business monitors.