

# NEC MultiSync® EA Series

Desktop LCDs ideal for corporate environments



**Take your productivity to new heights.** With its MultiSync EA Series, NEC has developed desktop displays that combine cutting-edge technologies with dynamic design accents, giving you the ability to increase your productivity while adding a modern flair to your desktop. The 19" NEC MultiSync EA191M, 22" EA221WM, 23" EA231WMi, 24" EA241WM and 26" EA261WM, which tout flexibility for any number of applications and environments, meet the diverse needs of businesses of all kinds.

**It's easy to be green.** The MultiSync EA Series is loaded with features that promote environmental consciousness, including: two-step ECO Mode™, Intelligent Power Manager (IPM) and an off timer for further energy savings; a carbon footprint meter for tracking the conservation of green gas emissions; and a significant reduction in packaging materials.

**Enhanced screen performance.** With contrast ratios up to 1500:1 (typical) and brightness quality of up to 400 cd/m<sup>2</sup>, outstanding LCD monitor front-of-screen visual performance is NEC Display Solutions' #1 goal. Rapid Response™ technology provides for lifelike full-motion video display without distortion at a response time as quick as 5ms.

**Wide compatibility for today and tomorrow.** With Ambix® dual-input technology—which utilizes both DVI-D and traditional 15-pin VGA connectors—you can bridge the gap between analog and digital systems by allowing the same monitor to work seamlessly in either environment. Ambix provides compatibility with today's computer systems and is on the forefront of tomorrow's digital output. The EA231WMi features DisplayPort for even more enhanced compatibility.

## Features & Benefits

**Height-adjust, pivot, tilt and swivel capabilities** add flexibility and comfort to your viewing preferences

**Ambient light sensor** automatically adjusts the backlight and power management depending on the ambient lighting brightness (EA231WMi)

**Built-in multimedia speakers with headphone jack** save significant desktop space

**Integrated USB 2.0 hub** gives you convenient connections to peripherals (except EA191M)

**DisplayPort input** provides maximum display performance with improved resolution, color depths and refresh rates (EA231WM)

**ECO Mode™** helps save power, reduce heat and extend the life of the display by allowing the user to dim the backlight

**5-setting Dynamic Video Mode** enhances video and images with real-time optimization of brightness, color and contrast

**Carbon footprint meter** helps track and calculate the reduction of green gas emissions

**Intelligent Power Manager (IPM) system and off timer** provide innovative power-saving methods and reduce CO<sub>2</sub> emissions by shifting to a lower power consumption level or automatically powering down when the monitor is on but not in use

**Rapid Response technology** delivers virtually uninterrupted, undistorted viewing of high-speed, full-motion video

**NaViSet™ software** offers an expanded and intuitive interface, allowing you to more easily adjust display settings via mouse and keyboard

**Energy Star 5.0 and TCO 5.0 compliance** reduce electrical costs and lowers total cost of ownership

**EPEAT Gold and Silver compliance** ensures the displays reduce hazardous waste and electricity usage, resulting in lower energy costs and increased protection for the environment

**NEC Display Solutions' quality and reliability** provide peace of mind with a 3-year limited parts and labor warranty (including backlight) and unrivaled customer service and technical support

## NEC MultiSync EA Series Design Features

Built-in speakers and headphone jack



Swivel (nearly 360°)



Tilt



Pivot



Height-adjustable stand (up to 110mm)



Built-in carrying handle



Multi-directional NaViKey for easy screen adjustments



Built-in USB 2.0 hub



Ambient light sensor (EA231WMi)



DisplayPort (EA231WMi)



Model	MultiSync EA191M	MultiSync EA221WM	MultiSync EA231WMi	MultiSync EA241WM	MultiSync EA261WM
<b>Display</b>	Viewable Image Size 19" Pixel Pitch 0.294mm Pixels Per Inch 86 @ native resolution Brightness (typical) 250 cd/m <sup>2</sup> Contrast Ratio (typical) 1500:1 Viewing Angle (typical) 170° Vert., 176° Hor. (88U/88D/88L/88R) (CR > 10) Response Time (typical) Rapid Response (25ms) Display Colors More than 16.7million	22" 0.282mm 90 @ native resolution 250 cd/m <sup>2</sup> 1000:1 170° Vert., 176° Hor. (85U/85D/88L/88R) (CR > 5) Rapid Response (5ms) More than 16.7million	23" 0.265mm 96 @ native resolution 270 cd/m <sup>2</sup> 1000:1 (3000:1 dynamic) 178° Vert., 178° Hor. (89U/89D/89L/89R) (CR > 10) Rapid Response (14ms) More than 16.7million	24" 0.270mm 94 @ native resolution 400 cd/m <sup>2</sup> 1000:1 160° Vert., 160° Hor. (80U/80D/80L/80R) (CR > 10) Rapid Response (5ms) More than 16.7million	26" 0.292mm 87 @ native resolution 400 cd/m <sup>2</sup> 1000:1 160° Vert., 160° Hor. (80U/80D/80L/80R) (CR > 10) Rapid Response (5ms) More than 16.7million
<b>Synchronization Range</b>	Horizontal 31.5-81.1KHz (Analog/Digital) Vertical 56-75Hz (Analog/Digital)	Horizontal 31.5-81.1KHz (Analog/Digital) Vertical 56-75Hz (Analog/Digital)	Horizontal 31.5-83.1KHz (Analog/Digital) Vertical 56-75Hz (Analog/Digital)	Horizontal 31.5-81.1KHz (Analog/Digital) Vertical 56-76Hz (Analog/Digital)	Horizontal 31.5-81.1KHz (Analog/Digital) Vertical 56-76Hz (Analog/Digital)
<b>Input Signal</b>	Video Analog 0.7 Vp-p / 75 Ohms Sync Separate Sync: TTL Level (positive/negative)	Video Analog 0.7 Vp-p / 75 Ohms Sync Separate Sync: TTL Level (positive/negative)	Video Analog 0.7 Vp-p / 75 Ohms Sync Separate Sync: TTL Level (positive/negative)	Video Analog 0.7 Vp-p / 75 Ohms Sync Separate Sync: TTL Level (positive/negative)	Video Analog 0.7 Vp-p / 75 Ohms Sync Separate Sync: TTL Level (positive/negative)
<b>Inputs</b>	DVI-D and VGA 15-pin D-Sub	DVI-D and VGA 15-pin D-Sub	DVI-D and VGA 15-pin D-Sub, DisplayPort	DVI-D and VGA 15-pin D-Sub	DVI-D and VGA 15-pin D-Sub
<b>Resolutions Supported</b>	Analog/Digital 720 x 400 @ 70 Hz 640 x 480 @ 60-75 Hz 800 x 600 @ 56-75 Hz 832 x 624 @ 75 Hz 1024 x 768 @ 60-75 Hz 1152 x 864 @ 70-75 Hz 1152 x 870 @ 75 Hz 1280 x 960 @ 60-75 Hz 1280 x 1024 @ 60-75 Hz	Analog/Digital 720 x 400 @ 70 Hz 640 x 480 @ 60-75 Hz 800 x 600 @ 56-75 Hz 832 x 624 @ 75 Hz 1024 x 768 @ 60-75 Hz 1152 x 864 @ 70-75 Hz 1152 x 870 @ 75 Hz 1280 x 960 @ 60-75 Hz 1280 x 1024 @ 60-75 Hz 1360 x 768 @ 60 Hz 1440 x 900 @ 60-75 Hz 1440 x 1050 @ 60-70 Hz 1680 x 1050 @ 60 Hz	Analog/Digital 720 x 400 @ 70 Hz 640 x 480 @ 60-75 Hz 800 x 600 @ 56-75 Hz 832 x 624 @ 75 Hz 1024 x 768 @ 60-75 Hz 1152 x 870 @ 75 Hz 1280 x 1024 @ 60-75 Hz 1400 x 1050 @ 60 Hz 1440 x 900 @ 60 Hz 1920 x 1080 @ 60 Hz	Analog/Digital 720 x 350 @ 70-85 Hz 720 x 400 @ 70-85 Hz 640 x 480 @ 60-75 Hz 800 x 600 @ 56-75 Hz 832 x 624 @ 75 Hz 1024 x 768 @ 60-75 Hz 1152 x 864 @ 75 Hz 1152 x 870 @ 75 Hz 1280 x 720 @ 60 Hz 1280 x 768 @ 60-75 Hz 1280 x 960 @ 60/75/85 Hz 1280 x 1024 @ 60-75 Hz 1360 x 768 @ 60 Hz 1440 x 900 @ 60 Hz 1440 x 1050 @ 60 Hz 1680 x 1050 @ 60 Hz 1600 x 1200 @ 60 Hz 1920 x 1200 @ 60 Hz	Analog/Digital 720 x 350 @ 70/85 Hz 720 x 400 @ 70/85 Hz 640 x 480 @ 60-75 Hz 800 x 600 @ 56-75 Hz 832 x 624 @ 75 Hz 1024 x 768 @ 60-75 Hz 1152 x 864 @ 75 Hz 1152 x 870 @ 75 Hz 1280 x 720 @ 60 Hz 1280 x 768 @ 60-75 Hz 1280 x 960 @ 60/75/85 Hz 1280 x 1024 @ 60-75 Hz 1360 x 768 @ 60 Hz 1440 x 900 @ 60 Hz 1440 x 1050 @ 60 Hz 1680 x 1050 @ 60 Hz 1600 x 1200 @ 60 Hz 1920 x 1200 @ 60 Hz
<b>Native Resolution</b>	1280 x 1024 @ 60 Hz	1680 x 1050 @ 60 Hz	1920 x 1080 @ 60 Hz	1920 x 1200 @ 60 Hz	1920 x 1200 @ 60 Hz
<b>Additional Features</b>	Thin-frame (bezel), integrated speakers, height-adjustable stand (110mm), pivot, tilt, swivel, No Touch Auto Adjust, cable management, AccuColor color control, digital smoothing, digital controls, DDC/CI, NaViSet software, Plug and Play (VESA DDC 1/2B), VESA DPMS power management, OSD user controls, ISO 13406-2 Class II, Windows Vista Premium-certified, Dynamic Video Mode, HDCP, ECO Mode, carbon meter, EPEAT Silver	Thin-frame (bezel), wide-screen format, integrated speakers, USB 2.0 hub, height-adjustable stand (110mm), pivot, tilt, swivel, No Touch Auto Adjust, cable management, AccuColor color control, digital smoothing, digital controls, DDC/CI, NaViSet software, Plug and Play (VESA DDC 1/2B), VESA DPMS power management, OSD user controls, ISO 13406-2 Class II, Windows Vista Premium-certified, Dynamic Video Mode, HDCP, 720p, ECO Mode, carbon meter, HDMI-capable with adapter, EPEAT Gold	3-step auto brightness (ambient sensor), thin-frame (bezel), wide-screen format, integrated speakers, USB 2.0 hub, height-adjustable stand (110mm), pivot, tilt, swivel, off-timer, cable management, AccuColor color control, digital smoothing, digital controls, DDC/CI, NaViSet software, Plug and Play (VESA DDC 1/2B), VESA DPMS OSD user controls, ISO 9241-307, Windows Vista Premium-certified, Dynamic Video Mode, HDCP, 2-step ECO Mode, carbon footprint meter, EPEAT Gold, Energy Star 5.0, lead-free, RoHS-compliant, TCO 5.0, carrying handle	Thin-frame (bezel), wide-screen format, integrated speakers, USB 2.0 hub, height-adjustable stand (110mm), pivot, tilt, swivel, No Touch Auto Adjust, cable management, AccuColor color control, digital smoothing, digital controls, DDC/CI, NaViSet software, Plug and Play (VESA DDC 1/2B), VESA DPMS power management, OSD user controls, ISO 13406-2 Class II, Windows Vista Premium-certified, Dynamic Video Mode, HDCP, 92% color gamut, 720p and 1080p from DVI-D, ECO Mode, carbon meter, HDMI-capable with adapter, EPEAT Gold	Thin-frame (bezel), wide-screen format, integrated speakers, USB 2.0 hub, height-adjustable stand (110mm), pivot, tilt, swivel, No Touch Auto Adjust, cable management, AccuColor color control, digital smoothing, digital controls, DDC/CI, NaViSet software, Plug and Play (VESA DDC 1/2B), VESA DPMS power management, OSD user controls, ISO 13406-2 Class II, Windows Vista Premium-certified, Dynamic Video Mode, HDCP, 92% color gamut, 720p and 1080p from DVI-D, ECO Mode, carbon meter, HDMI-capable with adapter, EPEAT Gold
<b>Voltage Rating</b>	AC 100-120V / AC 220-240V	AC 100-120V / AC 220-240V	AC 100-120V / AC 220-240V	AC 100-120V / AC 220-240V	AC 100-120V / AC 220-240V
<b>Power Consumption (typical)</b>	On (w/ USB + audio) 39W Power Savings Mode 2W ECO Mode ON (with USB & Audio) 31W (without USB & Audio) 27W	59W 2W 47W 27W	43W < 1W 28W 22W	71W < 2W 57W 38W	99W < 2W 67W 50W
<b>Dimensions (W x H x D)</b>	Net (with stand) 16.1 x 15.1 - 19.4 x 8.7 in. / 408 x 383.5-493.5 x 220mm Net (without stand) 16.1 x 13.3 x 2.6 in. / 408 x 338 x 65mm	20 x 15 - 19.4 x 8.7 in. / 507.8 x 382 - 492 x 220mm 20 x 13.1 x 2.8 in. / 507.8 x 332.1 x 71.8mm	21.7 x 14.9 - 19.3 x 8.7 in. / 550.1 x 379.1 - 489.1 x 220mm 21.7 x 13 x 2.8 in. / 550.1 x 329 x 71mm	22 x 17.3-21.7 x 10.7 in. / 558.6 x 440.5-550.5 x 272.4mm 22 x 14.4 x 3.1 in. / 558.6 x 366.2 x 89mm	23.4 x 17.8-22.1 x 10.7 in. / 594.4 x 451-561 x 272.4mm 23.4 x 15.3 x 3.8 in. / 594.2 x 389.8 x 95.6mm
<b>Weight</b>	Net (with stand) 15.4 lbs. / 7 kg Net (without stand) 9.7 lbs. / 4.4 kg	17.4 lbs. / 7.9 kg 11.7 lbs. / 5.3 kg	18.7 lbs. / 8.5 kg 14.3 lbs. / 6.5 kg	23.1 lbs. / 10.5 kg 14.8 lbs. / 6.5 kg	27.1 lbs. / 12.3 kg 18.7 lbs. / 8.5 kg
<b>VESA Hole Configuration Specifications</b>	100 x 100mm	100 x 100mm	100 x 100mm	100 x 100mm	100 x 100mm; 200 x 100mm
<b>Environmental Conditions</b>	Operating Temperature 5-35°C / 41-95°F Operating Humidity 20-80% Operating Altitude 4572m / 15,000 ft. Storage Temperature -10-60°C / 14-140°F Storage Humidity 10-85% Storage Altitude 12,192m / 40,000 ft.	5-35°C / 41-95°F 20-80% 2000m / 6562 ft. -10-60°C / 14-140°F 10-85% 12,192m / 40,000 ft.	5-35°C / 41-95°F 20-80% 2000m / 6562 ft. -10-60°C / 14-140°F 10-85% 12,192m / 40,000 ft.	5-35°C / 41-95°F 20-80% 2000m / 6562 ft. -10-60°C / 14-140°F 10-85% 12,192m / 40,000 ft.	5-35°C / 41-95°F 20-80% 2000m / 6562 ft. -10-60°C / 14-140°F 10-85% 12,192m / 40,000 ft.
<b>Limited Warranty</b>	3 years parts and labor, including backlight	3 years parts and labor, including backlight	3 years parts and labor, including backlight	3 years parts and labor, including backlight	3 years parts and labor, including backlight
<b>Technical Support</b>	M - F (7am - 7pm CST)	M - F (7am - 7pm CST)	M - F (7am - 7pm CST)	M - F (7am - 7pm CST)	M - F (7am - 7pm CST)



Ambix, MultiSync and XtraView are registered trademarks and ECO Mode, NaViKey, NaViSet and Rapid Response are trademarks of NEC Display Solutions. All other brand or product names are trademarks or registered trademarks of their respective holders. Product specifications subject to change. 7/09 ver. 5.

©2009 NEC Display Solutions of America, Inc. All rights reserved.

**NEC Display Solutions**  
500 Park Boulevard, Suite 1100  
Itasca, IL 60143  
866-NEC-MORE

# NEC

## Free Manuals Download Website

<http://myh66.com>

<http://usermanuals.us>

<http://www.somanuals.com>

<http://www.4manuals.cc>

<http://www.manual-lib.com>

<http://www.404manual.com>

<http://www.luxmanual.com>

<http://aubethermostatmanual.com>

Golf course search by state

<http://golfingnear.com>

Email search by domain

<http://emailbydomain.com>

Auto manuals search

<http://auto.somanuals.com>

TV manuals search

<http://tv.somanuals.com>