

**NEC**

# *MULTISYNC® LCD1850X™*

Thin-frame series featuring XtraView+™ and Ambix™ technology



LCD SERIES



**NEC/MITSUBISHI**  
NEC-MITSUBISHI ELECTRONICS DISPLAY

LCD monitor with

# THIN-FRAME DESIGN

featuring high-end features for space-conscious users.

Space efficiency is increasingly becoming an issue in environments such as financial trading floors and call centers, as well as government and corporate settings. Designed to address this matter, the 18.1" NEC MultiSync LCD1850X, the premier model in the next generation of thin-frame LCD monitors from NEC-Mitsubishi Electronics Display, eliminates the desktop clutter and cramped spaces created by bulky CRT monitors.

The sleek cabinet design of the MultiSync LCD1850X, which is available in both white and black to match your system, laptop, or work environment allows you to situate more monitors side-by-side on individual desks or wall mounts. This not only helps users increase their viewing area but, in turn, adds to overall productivity and potentially saves corporate dollars by consuming less floor space.

In addition to delivering this revolutionary benefit, this newly-designed model puts you at the forefront of monitor technology with outstanding image quality and a host of high-end features that enhance your visual experience.

**Attention-grabbing screen performance.** The MultiSync LCD1850X's flat-panel display delivers flicker-free, precise images and crystal-clear text you won't want to take your eyes off. With a brightness level of 240 cd/m<sup>2</sup>, the monitor boasts the brightest 18" mainstream LCD display to date. The flat screen surface reduces glare and reflection while enhancing contrast and clarity. As a result, users experience significantly less eyestrain and fatigue when compared to a traditional CRT monitor. The benefits of this surface are complemented



*The MultiSync LCD1850X's thin frame and overall dynamic design frees up even more valuable space for multiple-monitor applications such as stacking on financial trading desks.*

by NEC's award-winning display that delivers unprecedented focus, purity and bright colors.

With XtraView+ wide-angle viewing technology, you can enjoy flexible viewing angles of 170° horizontally and vertically (85° up, down, left and right) with less color shift and without any glare, reflection or distortion.

**Wide compatibility for today and tomorrow.**

Ambix technology bridges the gap between analog and digital systems by allowing the same monitor to work seamlessly in either environment, quickly



*A height-adjustable stand not only increases viewing comfort but allows for additional desktop space.*

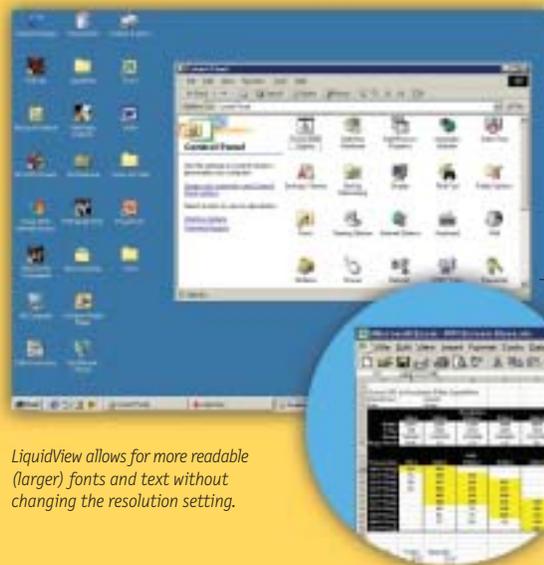
and easily from a single DVI-I connector. A second analog input also is provided with a traditional 15-pin VGA connector, which allows for legacy analog-only connection and for easier and less costly connection with the 13W3 connectors most prevalent on Sun® workstations. Digital connectors such as DFP and P&D also are compatible via adapters. With the easy-to-use DVI connector system, which provides greater performance than standard VGA systems, the display indicates analog or digital mode and configures the system accordingly for optimal screen resolution. This dual-input technology guarantees compatibility with today's computer systems and is on the leading forefront of tomorrow's digital output. A standard in the industry for many years, the easy-to-recognize VGA connector ensures hassle-free equipment swaps during technology upgrades. In addition, low-cost VGA signal cables can be easily obtained to replace lost cables or to facilitate switching monitors between desks.

**A consistent color environment.** The MultiSync LCD1850X utilizes NEC-Mitsubishi's OmniColor™ technology to achieve standard sRGB color and create precise color images for still images, moving pictures and, in particular, for real-time videos. With sRGB, the colors seen by the user on his/her screen can be reproduced with exactness in many applications, such as documents created via printers set to a corresponding setting. In addition, OmniColor allows you to individually and precisely adjust any one of the 6-axis color data (red, yellow, green, cyan, blue and magenta) without affecting the others.

**Easy setup right out of the box.** Historically, when first hooking up a new system, the user had to adjust screen controls to reach preferred settings. With



*The Standard Desktop and Application User Interface without LiquidView Icons, text, and graphics are smaller at high resolution.*



*LiquidView allows for more readable (larger) fonts and text without changing the resolution setting.*

*LiquidView Enhanced Display and Application At the same high resolution, icons, text and other navigational tools are larger and easier to see.*

No Touch Auto Adjust, however, this hassle is eliminated. When turning on the MultiSync LCD1850X for the first time, the monitor and video card communicate to automatically adjust screen settings for optimal viewing.

**Flexible viewing options.** The MultiSync LCD1850X boasts numerous features that enable alternatives to standard display viewing. The portrait/landscape capability enables you to easily change the orientation of the monitor, while a height-adjustable

stand not only increases viewing comfort but allows for additional desktop space. For those interested in completely eliminating the desktop space used by a monitor, the wall/arm mounting capabilities of the MultiSync LCD1850X allow for positioning in a variety of out-of-the-way locations.

**Ear-pleasing multimedia capabilities.** The optional MultiSync sound bar, attachable in both portrait and landscape views and available in white and black, enhances your computing

experience with exceptional sound quality. This option allows you to install speakers only on the units desired, which saves money for users with multiple monitor applications.

**Complete control of display settings.** The MultiSync LCD1850X features NEC-Mitsubishi's fourth-generation On Screen Manager (OSM®) on-screen controls, the most precise monitor adjustments available. A touch of the up-front controls activates the OSM, giving you access to a comprehensive set of adjustments and an expanded display mode, plus monitor information such as vertical refresh rate, model number and serial number.

**Easy touch or protective glass integration options.** Companies authorized through NEC-Mitsubishi's Authorized Integrator Program (AIP) can easily integrate a host of third-party touch and protective glass solutions from various manufacturers. Given the many types of available touch technologies and the fact that no one technology is ideal for every application, this option provides a choice of the best technology for installation in a timely

fashion. The AIP also allows users to achieve a full manufacturer's warranty and full certifications. Third-party protective glass adds durability to the monitor's screen surface for more demanding applications such as industrial workplaces, rugged trading environments or locations subject to harsh weather conditions.



*With a thin-frame design that saves at least 12% horizontal desktop space compared to traditional LCD models, the MultiSync LCD1850x delivers a virtual single-monitor view in multiple-monitor environments.*

LCD1850x



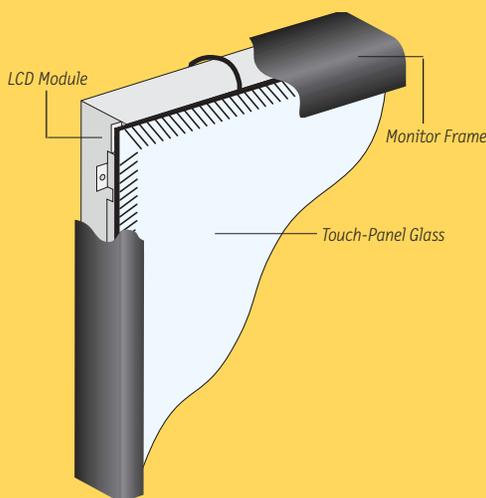
LCD1810x

**A smart investment.** Using approximately 35% less power and emitting less heat than comparable CRT monitors, the MultiSync LCD1850X allows you to conserve energy and lower your total cost of ownership. These advantages, combined with many advanced features, make this model a smart investment as soon as it's taken out of the box.

The MultiSync LCD1850X is one of the first LCD monitors to be certified to ISO 13406-2 standards, which obliges the panel manufacturer to give comparable information about the luminous intensity of the display, contrast, reflections, color reproduction,

uniformity of luminous intensity and color, font analysis, flicker, pixel faults and viewing angle classification. In the case of the MultiSync LCD1850X, this means that the pixel faults are limited to a maximum of two always-dark pixels and two always-light pixels as well as a maximum of 5 defective sub-pixels/million guaranteed.

**Warranty and support provide assurance.** You can rest easier knowing that NEC-Mitsubishi is available 24 hours a day, 7 days a week for technical support, and a 3-year limited warranty (including backlight) on all models guarantees your satisfaction.



# FEATURES AND BENEFITS

**Thin-frame design** frees up even more horizontal desktop space for multiple-monitor applications

**Low power consumption and reduced emissions** conserve energy and lower total cost of ownership

**High-bright backlight** provides superior performance for readability and clarity

**No Touch Auto Adjust** provides optimal display settings upon initial power-on

**Cabinet color options** of white or black allow you to match your system, laptop or work environment

**OmniColor technology** achieves standard sRGB color to create a consistent color environment and provides 6-axis color control for the utmost in color calibration

**Ambix technology** allows for digital and analog connectivity

**XtraView+ technology** allows for the widest viewing angles available without off-angle color shift

**Portrait/landscape capability and adjustable stand** add flexibility to your viewing preferences

**Optional sound bar attachment** creates a multimedia-enhanced monitor solution

**On Screen Manager** puts you in complete control of display setting adjustments

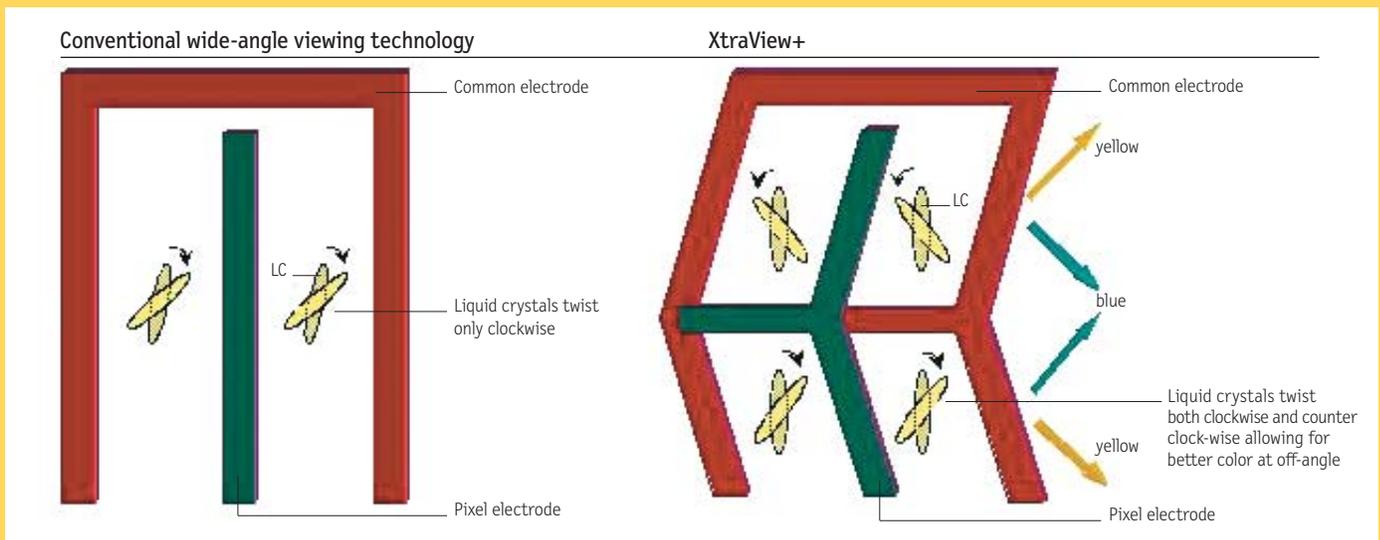


NEC's MultiSync sound bar can be attached to the MultiSync LCD1850X in either portrait (pictured) or landscape orientation. See the cover image for an illustration of the sound bar attached in the monitor's landscape position.

**Touch or protective glass integration-enabling design** increases application options

**LiquidView™** bundled software delivers easier, high-resolution readability by allowing for largest font/icon/tool and task bar sizes at native resolution

**NEC-Mitsubishi's quality and reliability** provide peace of mind with a limited 3-year parts and labor warranty (including backlight) and 24/7 customer service and technical support



XtraView+ not only offers the widest viewing angles in the industry (170° horizontal and vertical), it significantly reduces color shift during off-angle viewing, for color vibrancy at any viewing angle.

## MultiSync LCD1850x Specifications

<b>Display</b> Viewable Image Size (Diagonal) Pixel Pitch Pixels Per Inch Brightness Contrast Ratio Viewing Angle Response Time Display Colors	18.1" 0.28mm 90.7 @ native resolution 240 cd/m <sup>2</sup> 300:1 XtraView+ = 170° (85 U/85 D/85 L/85 R) 14 ms white to black (typical), 15 ms black to white (typical) Over 16 million
<b>Synchronization Range</b> Horizontal Vertical	31 kHz-82 kHz 50 Hz-85 Hz
<b>Input signal</b> Video Sync	Analog 0.7 Vp-p/75 Ohms Separate Sync: TTL Level (positive/negative) Composite Sync: TTL Level (positive/negative) Composite Sync on green: (0.3 Vp-p negative 0.7 Vp-p positive)
<b>Input</b>	Ambix (VGA 15 pin & DVI-I)
<b>Resolutions Supported</b>	720 x 400 @ 70 Hz 640 x 480 @ 60 Hz-85 Hz 800 x 600 @ 56 Hz-85 Hz 832 x 624 @ 75 Hz 1024 x 768 @ 60 Hz-85 Hz 1280 x 1024 @ 60 Hz-76 Hz
<b>Native Resolution (recommended)</b>	1280 x 1024 @ 60 Hz
<b>Additional Features</b>	Ultra-thin frame (bezel), XtraView+ technology wide-angle viewing, No Touch Auto Adjust, OmniColor, (for sRGB color setting), Ambix support for both digital and analog connections, 3rd party touchscreen and protective glass integration, digital smoothing, digital control, color control (4-mode memory + sRGB), Plug and Play (VESA DDC 1/2B), VESA DPMS power management, user (OSM) controls, optional MultiSync sound bar
<b>Voltage Rating</b>	Universal 100 (110-240 V) 50-60 Hz internal
<b>Power Consumption</b> On Power Savings Mode	65 W 3 W
<b>Dimensions (W x H x D)</b> Net (with stand)  Net (without stand)	398 x 445 x 218mm 15.7 x 17.5 x 8.6 in. 398 x 349 x 74.4mm 15.7 x 13.7 x 2.9 in.
<b>Net Weight (with stand)</b>	18.7 lbs (8.5 Kg)
<b>VESA Hole Configuration Specification</b>	100mm x 100mm
<b>Accessories</b>	User's Manual, (1) VGA 15-pin D-Sub cable, (1) DVI-D to DVI-I cable, power cord, CD-ROM, LiquidView Software, Portrait Software
<b>Regulatory Approvals</b>	UL/C-UL or CSA; FCC Class B/Canadian DOC; TUV/GS, TUV/ERGONOMIE, ENERGY STAR, MPRII, TCO '95, CE, Ctick
<b>Environmental Considerations</b> Operating Temperature: Operating Humidity: Operating Altitude: Storage Temperature: Storage Humidity: Operating Altitude:	5-35C/41-95F 30-80% 3,048m/10,000 ft. -10C-60C/14-140F 10-85% 13,716m/45,000 ft
<b>Limited Warranty</b>	3 years parts and labor, 3 years backlight