Ambix Technology

MultiSync LCD1810X and MultiSync LCD1525X

NEC Technologies revolutionary Ambix™ technology, featured on the new MultiSync® LCD1525X™ and LCD1810X™ monitors, lets you maximize your monitor investment with digital and analog connectivity.

Dual-connection technology creates a new category of LCD monitors. Known for their advanced technology and user-friendly features, NEC Technologies MultiSync LCD Series monitors have long been considered the smart choice for users seeking a monitor with a slim footprint, low emissions and bright, color-saturated images. NEC Technologies leadership in the LCD arena has produced innovations such as XtraView™ wide angle viewing technology, portrait/land-scape viewing flexibility, and the first 20.1-inch LCD monitor. The latest monitors to join the MultiSync LCD Series feature yet another signifi-cant innovation from NEC Technologies.

NEC Technologies exclusive Ambix technology, featured on the 15.0-inch MultiSync LCD1525X monitor and the 18.1-inch MultiSync 1810X monitor, will revolutionize the display industry, effectively creating a new category of LCD monitors. This new technology enables both digital and analog connections to the monitor, guaranteeing compatibility with today's computer systems and tomorrow's digital output.*

The digital/analog dichotomy. The way a monitor connects to a computer is an integral part of the computing experience. In the past, the CRT monitor–an analog device–could only communicate with the computer through a digital-to-analog converter called a video card. Early in the computer age, many computer man-ufacturers built PCs with proprietary video card connections to their own displays, each with their own frequency ranges and connector types (you may recall terms such as CGA, EGA, VGA and others). As part of the computer industry's effort to create an open computing environment, NEC developed the MultiSync monitor, a monitor that revolutionized the display industry by allowing connection with any signal in a preset range, regardless of the frequency output of the video card.

Today the computer industry is on a similar threshold as LCD monitors gain in popularity. LCD monitors are digital in nature, making possible a direct digital connection to the computer. Because no digital-to-analog conver-sion is necessary, loss of signal is virtually eliminated, resulting in superior picture interface.

While direct digital connection is clearly the choice of the future, most of today's computers still produce analog output because they are fitted with video cards for use with CRT monitors. As a result, digital-input LCD monitors were not directly compatible with the majority of installed computers–until now.

It can often take years for a migration of this nature to occur–for example, floppy drives and the ISA bus persist even with the advent of high-capacity storage devices and faster, local bus options.

Revolutionary compatibility protects your investment. Ambix technology offers the best of both worlds–the superior picture clarity and easy setup of a digital connection, as well as legacy compatibility with the analog connections of existing computers. This revolutionary technology guarantees* your LCD monitor will be compatible with systems already in place including PC and Macintosh® computers, Sun® and Silicon Graphics® workstations and other computers and x-terminals. What's more, Ambix technology protects your monitor investment by providing a bridge to the future of display technology–direct digital display. In other words, Ambix means to LCD monitors what MultiSync meant to CRT monitors more than a decade ago: guaranteed compatibility.

MultiSync monitors with Ambix technology accept DVI-I digital input for the broadest possible com-patibility and interoperability in the digital domain. Ambix also offers compatibility with other TMDS-based digital interfaces such as DFP and P&D, so even early adopters of digital technology won't be left in the cold.

In addition, Ambix technology takes the new industry standard, DVI, one step further by incor-porating analog compatibility on this same DVI connector (this type of connection is often called DVI-I, for "integrated"). Some system manufactur-ers will ship computers with the new DVI connector for analog connections as well.

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MultiSync LCD1810X input panel

Implementations that only allow for digital connections to the DVI port (often called DVI-D, for "digital only") won't allow for this seamless connectivity off of a single connector. Ambix technology also accommodates traditional analog connections by providing the standard 15-pin VGA connector that has become ubiquitous in the display industry. By incorporating both the digital and analog components of the DVI specification, Ambix allows for two different types of dual port connection: either one digital and one analog, or two analog. Dual analog connections have been a popular feature on CRT monitors, allowing two computers to be connected to the display simultaneously.

In short, with Ambix, you won't have to remember acronyms like VGA, XGA, DVI, DFP, DDWG, P&D, EGA, CGA or TMDS. There is only one word to remember: Ambix (from the root of "ambidextrous"). By ensuring long-term connectivity today and tomorrow, Ambix helps you maximize your monitor investment.

Ambix technology delivers flexibility for seamless technology refreshes. Since many corporations refresh technology in phases, monitors that can be "handed down" from one department to the next are most cost-efficient. Because Ambix technology guarantees* compatibility with virtually any current or future computer system, organizations can get more use out of each monitor. And Ambix is perfect for instances when equipment purchases are not centrally controlled–for example, when a remote IT department purchases equipment independently of corporate IS. Because it's compatible with either digital or analog systems, Ambix is always the right choice.

Ambix technology delivers dual inputs that allow you to connect your MultiSync LCD monitor using either DVI for analog and digital or 15-pin VGA for analog.

All the hallmarks of NEC Technologies quality, from superior display performance to low power consumption. MultiSync LCD1810X and MultiSync LCD525X monitors with Ambix technology offer all the features you've come to expect from NEC Technologies:

Excellent compatibility meets your needs well into the future. MultiSync LCD1810X and LCD1525X monitors offer support for multiple resolutions, extending their long-term versatility. The MultiSync LCD1810X monitor supports resolutions from 640x480 to 1280x1024. The MultiSync LCD1525X supports resolutions from 640x480 to 1024x768.

Superior display quality provides bright, sharp images with true color reproduction. The active matrix LCD modules used in these MultiSync LCD monitors enable the display of almost unlimited colors providing a truer representation of color.

Low power consumption and reduced emissions save costs. MultiSync LCD1810X and LCD1525X monitors consume 50% less power on average than comparable CRT monitors, and emit less heat. This translates into lower electric and cooling needs, allowing users to conserve energy and save on energy costs. MultiSync LCD1810X and LCD1525X monitors exceed Energy Star® and NUTEK requirements for reduced power consumption. And, they have almost no emissions, making them suitable for a number of sensitive environments.

OSM™ on-screen controls enable image adjustments at the touch of a button. MultiSync LCD1810X and LCD1525X monitors incorporate NEC Technologies own OSM on-screen controls for quick, easy image adjustments including brightness, horizontal and vertical position and contrast.

XtraView technology featured on the MultiSync LCD1810X monitor offers the widest viewing angles available. NEC Technologies XtraView technology, featured on the MultiSync LCD1810X monitor, extends viewing angles to allow for multiple users in both portrait and landscape modes. XtraView allows for wide viewing angles of more than 80 degrees left

and right, as well as more than 85 degrees up and down.

Portrait/landscape flexibility adds versatility. The MultiSync LCD1810X monitor features portrait/landscape display capability, which enables you to change the orientation of the monitor easily.

Wall/arm mounting capability saves on space. MultiSync LCD1810X and LCD1525X monitors are compatible with the VESA industry standard for wall or arm mounting, enabling you to save valuable desktop space. Because the DVI-I and the VGA connectors are located on the monitor itself (as opposed to the stand) there is no loss of compatibility when these monitors are mounted on the wall or on an articulating arm.

Four-port USB Hub offers plug-and-play convenience. Four easily accessible USB ports, featured on the MultiSync LCD1525X monitor, allow fast and easy connections for true plug-and-play convenience.

Audio input and headphone output. The MultiSync 1810X features audio input and a headphone output for private listening.

Built-in power supply. The MultiSync LCD1810X and the LCD1525X both have built in power supplies. Additionally, the power supply for the MultiSync LCD1810X is built directly into the main unit so there is no additional bulky power "brick" even when the monitor is arm or wall mounted.

The quality and reliability of NEC Technologies provides peace of mind. MultiSync LCD1810X and LCD1525X monitors follow the tradition of quality and reliability set by previous generations of NEC Technologies award-winning LCD and CRT monitors. Each MultiSync LCD monitor is backed by a three-year limited warranty (including backlight) as well as the outstanding service and support of NEC Technologies.

MultiSync LCD1525X and 1810X Specifications

Model	MultiSync LCD1525X	MultiSync LCD1810X
Display:	15.0" (15.0" viewable image size), active matrix, thin film transistor (TFT), liquid crystal display (LCD); 0.30 mm dot pitch; 200 cd/m² white luminance, typical; 200:1 contrast ratio, typical	18.1" (18.1" viewable image size), active matrix, thin film transistor (TFT), liquid crystal display (LCD); 0.28 mm dot pitch; XtraView technology, 200 cd/m² white luminance, typical; 150:1 contrast ratio, typical
Synchronization Range:	Horizontal: 24 KHz to 60 KHz Vertical: 56.2 Hz to 75 Hz	Horizontal: 24 KHz to 80 KHz Vertical: 56.2 Hz to 75 Hz
Resolutions Supported:	1024 x 768 @ 60 Hz to 75 Hz 832 x 624 @ 60 Hz to 75 Hz 800 x 600 @ 56 Hz to 75 Hz 640 x 480 @ 60 Hz to 75 Hz	1280 x 1024 @ 60 Hz to 75 Hz 1152 x 870 @ 60 Hz to 75 Hz 1024 x 768 @ 60 Hz to 75 Hz 832 x 624 @ 60 Hz to 75 Hz 800 x 600 @ 56 Hz to 75 Hz 640 x 480 @ 60 Hz to 75 Hz
Native Resolution:	1024 x 768	1280 x 1024
Additional Features:	USB HUB 2, 1-Watt speakers VESA mountable Dual inputs	XtraView Pivot Enabled™ Height adjustable VESA mountable Dual inputs
Viewing Angles:	left/right +/-60° up 45° down 55°	left/right +/-85° up 85° down 85°
Display Colors:	More than: 16.7 million	More than: 16.7 million
Power Consumption:	Typical: 45W On mode, under 5 Watts power saving mode	Typical: 67W On mode, under 8 Watts power saving mode
Input:	Analog VGA 15-pin D-sub DVI-I (for digital or analog)	Analog VGA 15-pin D-sub DVI-I (for digital or analog)
Dimensions: (W×H×D)	With stand: 14.6"×14.2"×6.2" 370 mm × 360 mm ×158 mm Without stand: 14.6"×12.3"×2.2" 370 mm×312 mm×56 mm	Landscape (Net): 17.9"×18.1"×10.3" 454 mm×461 mm×262 mm Without stand: 17.9"×15.0"×3.5" 454 mm×382 mm×90 mm
Net Weight:	With stand: Net: 9.9 lbs./4.5 kg Without stand: Net: 7.5 lbs./3.4 kg	With stand: 22.0 lbs./10.0 kg Without stand: 12.1 lbs./5.5 kg
Limited Warranty:	3 years, parts and labor; 3-year backlight	3 years, parts and labor; 3-year backlight

Technology designed for today and tomorrow from NEC.

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