

NEC

# LCD3000

30" (29.5" VIS) LCD Featuring Innovative Technology for Multiple Display Solutions



INFORMATION DISPLAY SERIES

## FEATURES AND BENEFITS

**30" (29.5" VIS) diagonal screen size** adds a new option to information display visual offerings

**1280 x 768 resolution** allows for crisp text and precise images

**Virtually eliminates the potential for permanent image burn-in**, contributing to optimal screen performance and longer monitor life

**XtraView® technology** allows for wide-angle viewing

**DDC/CI capabilities** allow control commands to be sent directly to the monitor through a standard PC or over an existing network by a system administrator

**CableComp™ automatic long cable compensation** prevents image quality degradation caused by long cable lengths

**User-friendly, efficient design** features the currently proposed VESA-standard mounting and an overall lightweight construction for easy transport and installation

**Optional Onkyo™ detachable speakers** deliver an enhanced multimedia experience with amazing sound quality

**Low power consumption** conserves energy and leads to a lower total cost of ownership

**Rapid Response™** time of 25ms delivers virtually uninterrupted, undistorted viewing of full-motion video

**On Screen Manager (OSM®)** puts you in complete control of display setting adjustments

**NEC's quality and reliability** provide peace of mind with a 1-year limited parts and labor warranty (including backlight) and 24/7 customer service and technical support



*At 35.2 lbs (shown with optional speakers), the LCD3000 was designed with light weight in mind. Transporting and installing your visual display has never been so easy.*

# Expanding information display options with

# SUPERIOR

## screen performance.

Providing visual display solutions to a wide variety of users for many years, NEC LCD monitors have set the standard for flat-panel technology and continue to offer new ways to enhance visual experiences. Our visual solutions provide users with a diverse range of options to help them see their digital world more clearly and support them in achieving their goals.

Building on this tradition of quality and innovation, NEC's new 30" (29.5" viewable image size) LCD3000 features the latest in advanced LCD technologies and creates a new option for those in the information display market. As one of the largest screen size LCD displays commercially available, this model carries with it all of the benefits users have come to value in NEC's smaller-sized LCD displays. These benefits now can be enjoyed in a variety of information display applications, including conference rooms, public information kiosks, retail signage, financial exchanges, airports and trade show exhibits. The LCD3000's screen performance brings ideas to life, capturing the attention and imagination of viewers and ensuring that messages reach audiences with maximum clarity and impact.

**Sized to please.** Filling the gap between flat panels designed for the desktop and those intended for larger venues, this monitor offers the information display market another option for a variety of visual display needs. It also fills the void left by larger-sized CRT monitors, which are no longer widely available.

**Superior screen performance.** The LCD3000 takes advantage of the many display technologies that have made LCD monitors so popular over the years and delivers them through an expansive screen featuring a wide aspect ratio. The monitor's 1280 x 768 (WXGA) resolution optimizes on-screen text, images and video with remarkable precision and clarity, allowing onlookers to clearly view presentations, charts, advertisements, pricing and other public display information. Further, these applications can be viewed simultaneously utilizing the display's picture-in-picture capability when using the defined combination of video inputs (see User's Manual).

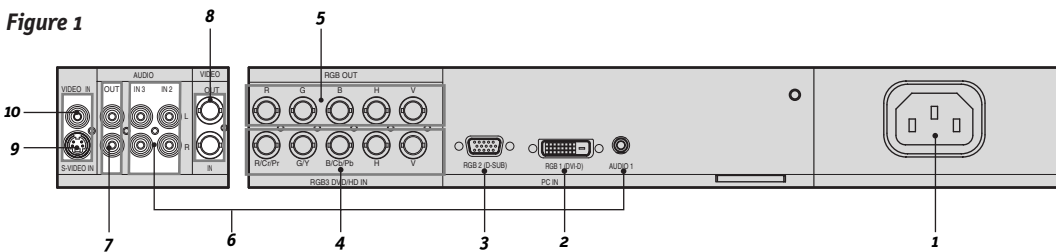
With some screen technologies, leaving the display on for a long period of time would perma-

nently burn the image into the screen. As can be noted with phosphor-based public displays, the image would remain permanently "engraved" into the display, rendering it useless. Since this display does not use phosphors in its construction, the potential for permanent burn-in is significantly decreased, thereby contributing to optimal screen performance and a longer life for the monitor.

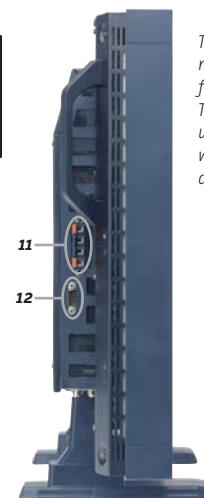
In applications where spectators are situated at various angles in front of the screen or where they are passing by the display, the LCD3000 provides an undistorted view of the screen. Using XtraView wide-angle viewing technology, this monitor provides flexible 170° horizontal and vertical viewing angles (85° up, down, left and right) with less glare, reflection and distortion.

With a brightness of 450 cd/m<sup>2</sup>, this display stands out in the crowd, allowing onlookers to view text and graphics with ease and comfort. A 350:1 typical contrast ratio helps the monitor deliver amazingly vivid colors and supports

Figure 1



1. **AC IN connector** Connects with the supplied power cord.
2. **RGB 2 IN (DVI-D)** To input digital RGB signals from a computer having a digital RGB output. Note; this connector does not support analog input.
3. **RGB 2 IN (mini D-Sub 15 pin)** To input analog RGB signals from a personal computer or other RGB equipment.
4. **RGB 3 DVD/HD [R/Cr/Pr, G/Y, B/Cb/Pb, H, V] (BNC) IN connector** To input analog RGB signals or signals from other RGB equipment. Also for connecting equipment such as a DVD player or HDTV laser disc player. A Sync-on-Green signal also can be connected.
5. **RGB OUT connector (BNC)** To output the signal from the RGB 3 DVD/HD IN connector.
6. **AUDIO IN 1,2,3** To input audio signal from external equipment such as a computer, VCR or DVD player.
7. **AUDIO OUT** To output the audio signal from the current audio input.
8. **VIDEO OUT** To output the video signal from the VIDEO IN connector.
9. **S-VIDEO IN** For connecting equipment such as a DVD player or VCR.
10. **VIDEO IN** For connecting equipment such as a DVD player or VCR.
11. **SPEAKER TERMINAL** For connecting non-amplified speakers.
12. **RS-232 INPUT** For connecting a control cable for remote control.



The LCD3000 features a number of input connections for maximum compatibility. This makes it possible to upgrade adapters or software without having to purchase a new display.



# The LCD3000's screen performance brings ideas to life, capturing the attention and imagination of viewers and ensuring that messages reach audiences with maximum clarity and impact.

superior grayscale. Further, its Rapid Response time of 25ms allows it to display undistorted full-motion video, while virtually eliminating ghosting or image trailing.

**Take control of your monitor.** In an effort to make remote control and diagnostics easier, the LCD3000 provides two different methods to manipulate the display—an RS-232 connector and the advanced remote diagnostics and remote control capabilities of the Display Data Channel/Command Interface (DDC/CI). By utilizing the inherent power of the PC (a typical source for the display), DDC/CI allows control commands to be sent directly to the monitor through a standard PC system or remotely over an existing network (LAN) by a system administrator. A wide range of DDC/CI-based graphics cards, which will become standard in the near future, allow for this easy control through a Windows 2000/XP interface.

**Achieve consistent, long-distance signals.** Users can now realize the advantages of long monitor cable lengths without the difficulties and costs

normally associated with this type of configuration. In environments such as trading floors, call centers and public signage venues, longer cables enable systems to be centrally located in control rooms far away from users (up to 326 feet/100 meters), allowing monitor upgrades, service and repairs to be accomplished without interrupting the work or display environment.

Historically, longer monitor cable configurations tended to have limitations, including weakened signals, which resulted in blurred images. Inconsistent red, green and blue cable lengths were also common. This produced uneven signals, thereby drastically reducing display quality.

The display's CableComp technology solves these dilemmas by using a digitized signal delay circuit to automatically compensate for each red, green and blue cable's length and video signal delay, ensuring sharp image reproduction. CableComp also boosts the VGA video signal to prevent blurred images without the need for costly repeaters.

**Get connected.** The LCD3000 features a number of input connections for maximum compatibility (see Figure 1). These include a DVI-D connector for digital video signal adapters and a traditional 15-pin mini D-sub connector that is configured for IBM® VGA-compatible adapters, as well as BNC VGA, composite video, component video and S-Video connectors. This wide compatibility makes it possible to upgrade adapters or software without having to purchase a new monitor. By accepting analog signal inputs, this monitor can display more than 16 million colors, depending on the graphics card and software being used.

**User-friendly, efficient design.** As ease of installation is a main concern for the information display market, the LCD3000 was designed with light weight in mind. At only 35.2 lbs, this monitor is simple to transport and install wherever necessary. In addition, with the introduction of this display, NEC is on the forefront of mounting technology as the monitor's cabinet was designed to meet currently proposed VESA mounting standards for larger-sized public displays, which

## Multiple application solutions

*And you thought LCD monitors were used only on desktops. With space conservation a major concern for all types of markets in today's business world, the LCD3000's space-conscious design allows it to fit comfortably into almost any application for maximum impact to viewers. Wall mounting, custom-made cabinets and hanging fixtures are just a few of the options you have when choosing your display installation for this 30" (29.5" VIS) LCD monitor.*

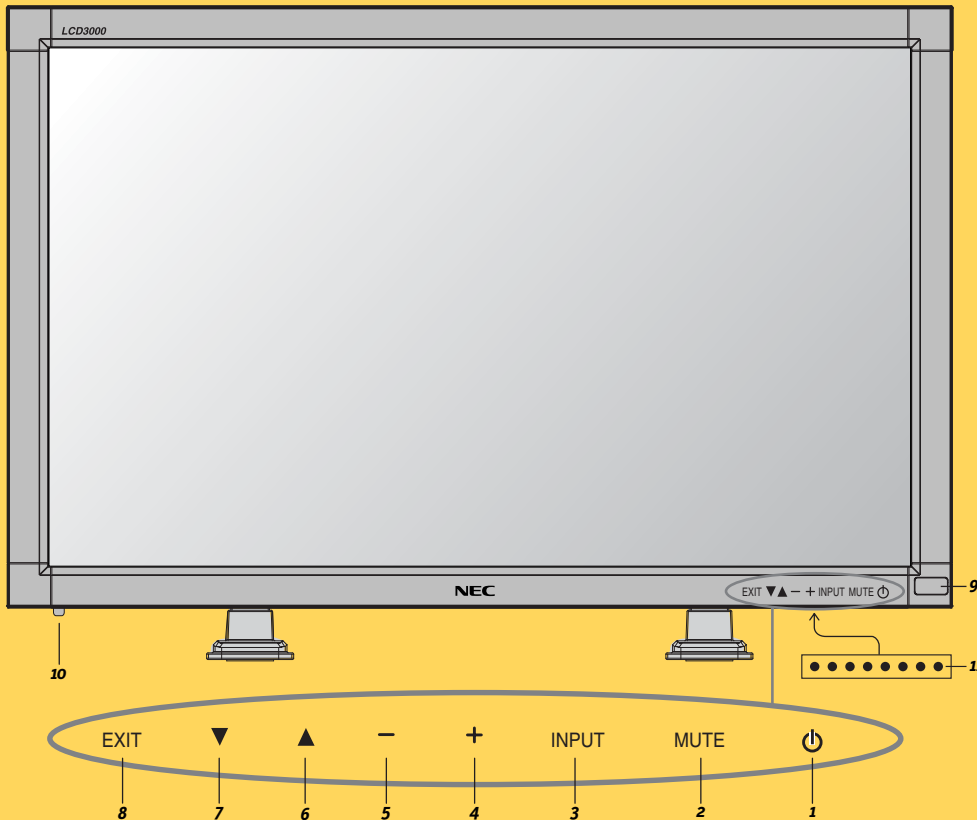


**Information Display.** Make a lasting impression on the public eye with the LCD3000. Whether this display is placed in airports, train stations, restaurants or kiosks in any interior environment, its spacious screen is guaranteed to turn heads and feed useful information to passersby. With XtraView wide-angle viewing technology, it doesn't matter if they're directly in front of the screen or passing by—an ideal view is assured.



**Advertising.** With its high resolution, bright display and lifelike colors, the LCD3000 is unrivaled in drawing consumer attention. Spread the word on your products and services to moviegoers, advertise the latest sale items at a department store or attract the eyes of passersby in the storefront of a clothing store. No matter the outlet, this monitor stops consumers in their tracks.

**Figure 2**



1. **POWER button** Switches the power on/off.
2. **MUTE button** Switches the audio mute on/off.
3. **INPUT button** Acts as SET button with OSM menu. Selects the signal connected with the RGB input connector.
4. **PLUS (+) button** Increases the adjustment with OSM menu. Increases the audio output level when the OSM menu is turned off.
5. **MINUS button** Decreases the adjustment with OSM menu. Decreases the audio output level when the OSM menu is turned off.
6. **UP button** Activates the OSM menu when the OSM menu is turned off. Allows you to move the highlighted area up to select the adjustment with OSM menu.
7. **DOWN button** Activates the OSM menu when the OSM menu is turned off. Allows you to move the highlighted area down to select the adjustment with OSM menu.
8. **EXIT button** Activates the OSM menu when the OSM menu is turned off. Allows you to move to the previous menu with OSM menu.
9. **Remote control sensor and Power indicator** Receives the signal from the remote control (when using the wireless remote control).
10. **Main power switch** Seesaw switch for the main power on/off.
11. **Control Panel** Located under bezel.

will be required of all manufacturers in the future. With a uniformly thin frame, this display's design is ideal for multi-screen construction for virtually seamless video walls.

**Enhance your multimedia experience.** Optional Onkyo multimedia speakers boost the senses during presentations or other display applications. These powerful components easily attach to the vertical sides of the display, spanning the height of the cabinet and creating a clean, streamlined look.

**Simplified control of screen settings.** The LCD3000 features NEC's critically acclaimed On Screen Manager (OSM) for precise monitor adjustments (see Figure 2). A touch of the convenient controls or the individual remote control activates the OSM, delivering a comprehensive set of adjustments and an expanded display mode with monitor information such as brightness, contrast and color settings. However, for quick and easy setups, a multitude of presets makes this monitor ready to go right out of the box.

**Intelligent power management ensures a smart investment.** Utilizing energy-efficient technologies in its design, the LCD3000 reduces power consumption and significantly lowers the total cost of ownership (TCO). The high-efficiency backlight reduces not only the power consumption but also the heat generation at the front of the screen.



**Financial.** In the fast-paced financial market, information needs to be relayed in real time. The LCD3000 is capable not only of displaying on-the-fly market data and other vital information without distortion, but does so using crisp text and a high-bright backlight for easier readability.



**Corporate.** Deliver a presentation they'll remember using the LCD3000. Ideal for board rooms, conference rooms and large offices, this monitor's ability to display crystal-clear text and precise images adds clarity and profundity to spreadsheets, documents and graphics-based presentations. Picture-in-picture capability allows your group to simultaneously view multiple applications, such as a spreadsheet and full-motion video conference.



**Tradeshows.** With a multitude of exhibitors vying for the attention and time of tradeshow visitors, it can be difficult to stand out from the crowd. The LCD3000 helps your exhibit become the center of attention with its amazing screen performance. Its brightness and dynamic design will draw interest, while Rapid Response and a high contrast ratio allow you to effectively demonstrate your company's message. The lack of permanent phosphor image burn-in extends the monitor's life and protects your investment.



**LCD3000** (29.5" VIS)

<b>Model</b>	<b>LCD3000</b> (29.5" VIS)	
<b>Display</b>	Viewable Image Size 29.5" Viewing Angle 170° horizontal, 170° vertical Native Pixel Resolution 1280 x 768 Active Screen Area (W x H) 643.2 x 385.9mm Panel/Set Brightness (typical) 450cd/m <sup>2</sup> Contrast Ratio (typical) 350:1 Screen Aspect Ratio 15:9 Output Color 256 RGB Levels, over 16 million colors	
<b>Frequency Range</b>	Analog Horizontal 31.5-75 kHz (15.75 kHz) Vertical 58-62 Hz	Digital 31.5-48.4 kHz 58-62 Hz
<b>Resolution Supported</b>	640 x 480 @ 60 Hz 800 x 600 @ 60 Hz 1024 x 768 @ 60 Hz 1280 x 768 @ 60 Hz 1280 x 1024 (Analog only, compressed) 1600 x 1200 (Analog only, compressed) NTSC/PAL, HDTV 480i, 480p, 720p, 1080i	
<b>Input Terminals</b>	RGB 1 DVI-D x 1 RGB 2 Analog D-sub RGB 3 Analog BNC Video 1 Composite RCA or S-Video Component Video 1 (DVD/HD) Component BNC (common use with RGB3, selectable) Audio 2 sets RCA stereo, 1 mini stereo Internal Speaker: None External Speaker Jacks (Amplified): 7W x 7W RS-232C, DDC-CI	
<b>External Control</b>		
<b>Environmental Conditions</b>	Operating Temperature 5-40°C Operating Humidity 10-80% (no condensation)	
<b>Regulatory Approvals</b>	UL 1950, CSA950, TUVGS, FCC Class B, METI, CE	
<b>Included Accessories</b>	AC power cord, user manual, wireless remote control, 15-pin RGB cable, batteries	
<b>Other Features</b>	Power Management, Plug & Play (DDC/CI, DDC2Bi), PinP(Remote), CableComp, Screen Savers, Rapid Response, Video Ready (no tuner), HDTV Ready (no tuner), Infrared remote control included	
<b>Voltage Rating</b>	AC100-120V/200-240V, 50/60 Hz	
<b>Power Consumption</b>	180W (max)	
<b>Dimensions (W x H x D)</b>	27.8 x 17.7 x 4.5 in./706 x 449 x 114mm	
<b>Weight</b>	35.2 lbs./16 kg	
<b>Optional Accessories</b>	Onkyo speakers	
<b>Limited Warranty</b>	1 year parts and labor, including backlight	
<b>Technical Support</b>	24 hours / 7 days	