

EIZO Flat Panel Monitors

FlexScan® L360 & L66

38 cm (15 inch) and 46 cm (18.1 inch) class Color LCD Monitors



Quality, Reliability & Performance





EIZO'S NEXT GENERATION OF FLAT PANEL MONITORS

With LCDs positioned to become the monitor of choice in offices everywhere, EIZO has designed two innovative LCDs to meet the increasing demands of today's business environment where quality images, clarity, and flexibility are of vital importance.

EIZO innovations include:

- The first 18 inch LCD on the market, the L66, and a newly designed 15 inch model, the L360, to meet emerging market trends.
- High resolutions of 1280 × 1024 for the L66 and 1024 × 768 for the L360.
- Impressive picture quality on large screens with wide viewing angles.
- D³ [D-cubed] Technology for enhanced color reproduction and brightness control.
- Desktop stand and free mount versions for increased functionality and possibilities of use.
- Value added features such as the *i*-Sound unit for multimedia enhancement and a USB (Universal Serial Bus) hub for true Plug & Play technology.

The leading technological innovations combined with an advanced ergonomic design and options for enhanced performance place EIZO's LCD line-up at the forefront of the industry.



Flexibility in 15" and 18" LCDs

EIZO considers the monitor an integral desktop component, therefore flexibility and versatility are key concepts to its design. For adaptability to a variety of environments, EIZO is introducing the new L360 (15") and L66 (18") LCD monitors in both desktop stand and free mount versions.

Desktop Stand Type

- Space saving, attractive design ideal for the desktop environment
- Integrated USB hub for true Plug & Play
- Power supply internally incorporated to increase work space

Free Mount Type

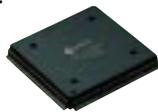
- Designed for mounting on arms or walls
- VESA compatible mount bracket to simplify attachment
- External AC Power Supply and secondary power switch on front panel

EIZO has concentrated on keeping abreast of emerging trends in both the technology and utilization of LCDs in order to meet the requirements of the markets and the specifications of our customers.

D³ (D-cubed) Technology



EIZO's original D³ ASIC (Application Specific Integrated Circuit) greatly improves the control of the brightness level and color reproduction for superior image quality on all EIZO LCDs. D³ encompasses EIZO's advanced skill in three key areas of digital display technology: Digital Signal Processing, Digital Image Control, and Digital FlexScan.



Digital Signal Processing

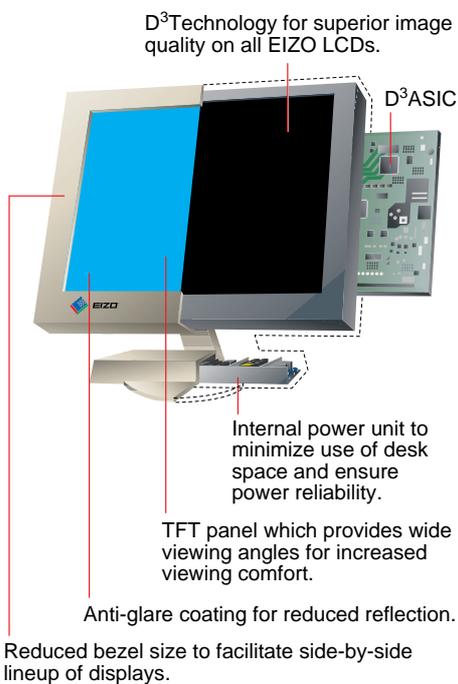
D³ includes FRC (Frame Rate Circuitry) to expand the panel's color capabilities from 260,000 to 16 million colors. EIZO has also incorporated an automatic contrast adjustment function that amplifies the video input for excellent color reproduction.

Digital Image Control

The Auto Brightness Control System eliminates any brightness fluctuation by monitoring changes in the surrounding and backlight temperatures and automatically adjusting the divergence. For maximum viewing comfort, EIZO has incorporated a Variable Border Intensity function that allows the user to adjust the level of contrast between the background and the cabinet as well as an interpolation function that allows for modes such as 640 X 480 and 800 X 600 to be enlarged to almost a full screen.

Digital FlexScan

For simplification of screen adjustments, EIZO has incorporated an Auto Adjustment function which takes a sampling of the computer's timing and calculates the best screen position. EIZO's LCDs support a wide range of standard analog RGB input signals that are digitally processed to create the optimal image. For further adjustments, the EIZO ScreenManager can be used to refine the image.

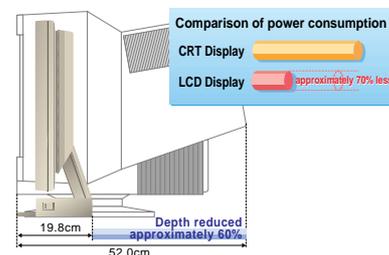


Advanced Ergonomic Design

EIZO LCDs provide an attractive alternative to CRT monitors because of their light weight, low power consumption, compact design, and low EMI (Electromagnetic Interface) emissions. Furthermore, EIZO's emphasis on ergonomics has led to additional innovations in design to produce the most comfortable working environment.

Space-Saving Design

EIZO's LCDs occupy only about 40% of the depths of CRTs with the equivalent screen size. This is most noticeable in their unobtrusive cable hook-up design, making them ideal for an office environment where space is at a premium.



Energy Saving

Newly developed LCD power circuits lowers the power consumption of the L360 to approximately 27 Watts and the L66 to 48 Watts when in regular use. With the built-in PowerManager™ function, power consumption drops to a mere 3 Watts for both products when the displays are not in active use. These low energy requirements and heat emissions result in reduced electricity costs, adding to the value of the investment in an LCD monitor.

Off Timer Function

EIZO has included an Off Timer Function to minimize unnecessary use of the backlight and protect the LCD panel from afterimage retention.

Wide Viewing Angle and Wide Angle Adjustment

Understanding that users require different viewing angles for a variety of applications, the L360 and L66 utilize liquid crystal panels which have 140° horizontal and 110°-120° wide viewing angles to make for easy viewing. In addition, the panels tilt and swivel for a wide sphere of adjustment possibilities and viewing comfort.

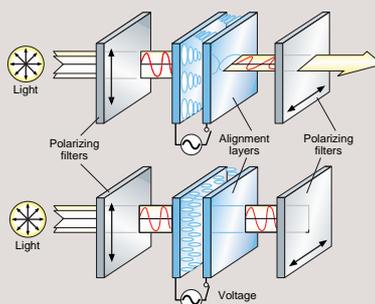
LCD Technology in Brief

LCDs are made from liquid crystals, an intermediary substance between a liquid and a solid. When liquid crystals are inserted between alignment layers, they line up with the grooves of the layers. Light then follows the direction in which the liquid crystal molecules are arranged. When an electrical charge is applied the molecules rearrange themselves in a vertical pattern and light passes through without being twisted.

A combination of polarizing filters along with alignment layers and liquid crystal molecules form aliquid crystal display. Two types of drive panels are used to control an LCD, active and passive. An active matrix display contains a transistor while a passive one does not. A transistor allows for superior picture quality and faster response times. All EIZO LCDs contain a transistor.

Polarizing Filters

When two polarizing filters are arranged along perpendicular axes, as in the first illustration, light passes through the lead filter and follows the helix arrangement of the liquid crystal molecules. The light is twisted 90° thus allowing it to pass through the lower filter. When voltage is applied, however, the liquid crystal molecules straighten out of their helix pattern. Light is blocked by the lower filter and the screen appears black because of there being no twisting effect.



EIZO Flat Panel Options

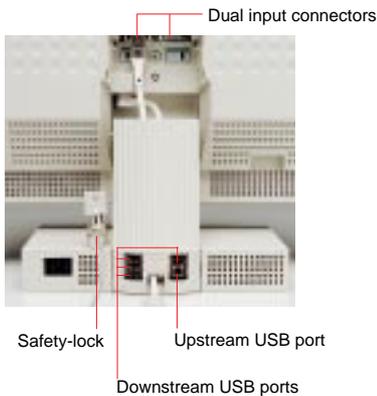
Thin Bezel Size

The L66 was designed so the bezel occupies only the minimum amount of the monitor's total area. This allows for several monitors to be positioned closely to each other for greater efficiency of available space.



Dual Inputs, Input Priority Switch, and DDC

EIZO LCDs are equipped with dual input connectors and an input priority function. This allows for two computers to be simultaneously connected to any EIZO LCD and priority can be given to either computer. Switching between the two computers can be done conveniently using a button on the front panel. Each input can support Plug & Play (VESA DDC 1/2B) independently.



USB Hub for Universal Serial Bus Support

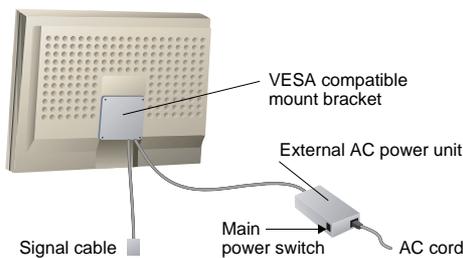
In anticipation of future technology trends, the desktop stand versions of the L360 and the L66 include an integrated USB Hub for convenient access to all USB compliant peripherals. The USB Hub is positioned on the rear of the stand to allow for quick access and contains one upstream port and four downstream ports.

Safety-Lock Device

The L360 and L66 come equipped with a safety-lock device for security on both the desktop stand and free mount versions.

VESA Compatible Mount Bracket and External AC Power Unit

The free mount type includes both a VESA compatible mount bracket and an external AC power unit. A power switch is located on the front panel for convenience.



Compliance With Global Ergonomic Standards

In accordance with EIZO's policy of manufacturing products which are environmentally and ergonomically sound, all of EIZO's LCDs meet the most stringent ergonomic standards in the world, including the following:

- TCO'95 for such areas as electromagnetic waves, energy reduction, x-rays, visual ergonomics, and recyclability.
- ISO 9241-3, -7, and -8 for character definition, reflection, and color uniformity.
- TÜV Rheinland/Ergonomie Geprüft for contrast, reflection, flicker, very low magnetic field, AEF, and electrostatic emissions.
- CE Mark to limit EMI (Electromagnetic Interference) and EMS (Electromagnetic Susceptibility/Immunity).



To meet the specific needs of users, EIZO manufactures both the *i-Sound* for audio enhancement and an LCD protection panel to prevent damage to the surface.

i-Sound™ for LCD*

As sound is becoming a necessary feature in the day to day use of computers, EIZO offers the *i-Sound*, a detachable speaker unit that fits around the bottom of the panel console of the L360 and the L66, making it compatible with both the desktop stand and free mount versions. The *i-Sound* is equipped with two speakers and a microphone powered directly from the monitor. For high sound quality, the oval designed speakers have an amplifier output of 2 Watts with a full range bass reflex. Several external jacks are provided for headphones, a headset, CD or tape players.



LCD Protection Panel™ for L66*

To protect the LCD surface of the L66 from dust, scratches, or any other type of damage, EIZO manufactures a panel protector with easy clip-on installation and an anti-reflection coating.

*The *i-Sound* and LCD Protection Panel are sold separately.



Specifications

	L360	L66
LCD Panel	38 cm (15") TFT Color LCD Panel	46 cm (18.1") TFT Color LCD Panel
Dot Pitch	0.297 mm	0.280 mm
Display Color	260,000 colors (16 million colors with FRC Circuitry)	260,000 colors (16 million colors with FRC Circuitry)
Viewing Angle	Horizontal: 140° Vertical: 120°	Horizontal: 140° Vertical: 110°
Scanning Frequency	Horizontal: 30-61 kHz Vertical: 50-85 Hz (Up to 75 Hz at 1024 × 768 mode)	Horizontal: 30-80 kHz Vertical: 50-85 Hz (Up to 75 Hz at 1280 × 1024 mode)
Input Signals	RGB Analog	RGB Analog
Input Terminal	D-sub mini 15 pin × 2 (switchable)	D-sub mini 15 pin × 2 (switchable)
Active Display Size	304 (H) mm × 228 (V) mm	359 (H) mm × 287 (V) mm
Viewable Image Size	380 mm (Diagonal)	459 mm (Diagonal)
Recommended Resolution	1024 dots × 768 lines	1280 dots × 1024 lines
Plug & Play ¹	VESA DDC 1/2B	VESA DDC 1/2B
Screen Control	ScreenManager™, One Touch Auto Adjustment Function	ScreenManager™, One Touch Auto Adjustment Function
Power Management	VESA DPMS, EIZO MPMS ²	VESA DPMS, EIZO MPMS ²
Power Consumption	27 W (Typical, Normal Operation)	48 W (Typical, Normal Operation)
Power Save Mode 1	Less than 3 W	Less than 3 W
Mode 2(Off)	Less than 3 W	Less than 3 W
Dimensions (Desktop Stand)	397 mm (W) × 397 mm (H) × 176 mm (D)	430 mm (W) × 455 mm (H) × 198 mm (D)
(Free Mount)	397 mm (W) × 317 mm (H) × 92 mm (D)	430 mm (W) × 375 mm (H) × 94 mm (D)
Net Weight (Desktop Stand)	6.5 kg	9.5 kg
(Free Mount)	5.0 kg	7.1 kg
Safety Standards	TÜV Rheinland/GS, CB, CE Mark	TÜV Rheinland/GS, CB, CE Mark
Ergonomic/Environmental Standards	TÜV Rheinland/Ergonomie Geprüft (including ISO 9241-3, -7, -8 and MPR-II), EPA ENERGY STAR® Program, TCO'95	TÜV Rheinland/Ergonomie Geprüft (including ISO 9241-3, -7, -8 and MPR-II), EPA ENERGY STAR® Program, TCO'95

Compatibility with Resolution Standards³

Resolution	Standards	Dot Clock (MHz)	Horizontal Scanning Frequency (kHz)	Vertical Scanning Frequency (Hz)	Full Screen Mode Support	Magnified to Full Screen Mode ⁴	L360	L66
VGA	640×480	25.2	31.5	60	○	X1.5	●	●
					○	X2	●	●
VGA	720×400	28.3	31.5	70	○	X1.25	●	●
					○	X1.5	●	●
VESA	640×480	31.5	37.9	72	○	X1.5	●	●
					○	X2	●	●
VESA	640×480	31.5	37.5	75	○	X1.5	●	●
					○	X2	●	●
VESA	640×480	36.0	43.3	85	○	X1.5	●	●
					○	X2	●	●
VESA	800×600	36.0	35.2	56	○	X1.25	●	●
					○	X1.5	●	●
VESA	800×600	40.0	37.9	60	○	X1.25	●	●
					○	X1.5	●	●
VESA	800×600	50.0	48.1	72	○	X1.25	●	●
					○	X1.5	●	●
VESA	800×600	49.5	46.9	75	○	X1.25	●	●
					○	X1.5	●	●
VESA	1024×768	65.0	48.4	60	○	X1.25	●	●
					○	X1	●	●
VESA	1024×768	75.0	56.5	70	○	X1.25	●	●
					○	X1	●	●
VESA	1024×768	78.8	60.0	75	○	X1	●	●
					○	X1.25	●	●
VESA	1280×1024	108.0	64.0	60	○	X1	●	●
					○	X1	●	●
VESA	1280×1024	135.0	80.0	75	○	X1	●	●
					○	X1	●	●
MAC 13" mode	640×480	30.2	35.0	67	○	X1.5	●	●
					○	X2	●	●
MAC 16" mode	832×624	57.3	49.7	75	○	X1.5	●	●
					○	X1	●	●
MAC	1024×768	65.0	48.4	60	○	X1	●	●
					○	X1.25	●	●
MAC 19" mode	1024×768	80.0	60.0	75	○	X1	●	●
					○	X1.25	●	●
MAC 21" mode	1152×870	100.0	68.5	75	○	X1	●	●
					○	X1.25	●	●
MAC	1280×960	126.0	75.0	75	○	—	●	●

- 1 Only valid when computer system supports all Plug & Play functions (personal computer, graphics board, Windows® 95 / 98). For more details, please refer to the Windows 95 / 98, personal computer, and graphics board manuals or contact the manufacturers.
- 2 EIZO MPMS is a power management system developed by EIZO to replace Swedish NUTEK which was discontinued at the end of 1997.
- 3 Other resolution standards can be displayed besides those listed in the table. Some adjustment by the user may be necessary even for the supported resolution standards printed here.
- 4 The rate by which the resolution must be magnified to achieve a full screen display.

*Liquid crystal panels are made from technology which utilizes extremely high density. Please be aware that there may be missing or illuminating pixels.



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Specifications are subject to change without notice.

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Published on Chlorine-free paper.

(980603) Printed in Japan, 7, 1998, 10K