# User's Manual





## SAFETY SYMBOLS

This manual uses the safety symbols below. They denote critical information. Please read them carefully.



# WARNING

Failure to abide by the information in a WARNING may result in serious injury and can be life threatening.



# CAUTION

Failure to abide by the information in a CAUTION may result in moderate injury and/or property or product damage.



Indicates a prohibited action.



Indicates to ground for safety.

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As an ENERGY STAR<sup>®</sup> Partner, Eizo Nanao Corporation has determined that this product meets the ENERGY STAR guidelines for energy efficiency.

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### **IMPORTANT!**

- This product has been adjusted specifically for use in the region to which it was originally shipped. If operated outside the region to which it was originally shipped, the product may not perform as stated in the specifications.
- To ensure personal safety and proper maintenance, please read this section and the caution statements on the unit (refer to the figure below).

### [Location of the Caution Statements]



# 

#### If the unit begins to emit smoke, smells like something is burning, or makes strange noises, disconnect all power connections immediately and contact your dealer for advice.

Attempting to use a malfunctioning unit can be dangerous.

#### Do not dismantle the cabinet or modify the unit.

Dismantling the cabinet or modifying the unit may result in electric shock or burn.



#### Refer all servicing to qualified service personnel.

Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards.

000 00



OK

# 

### Keep small objects or liquids away from the unit.

Small objects accidentally falling through the ventilation slots into the cabinet or spillage into the cabinet may result in fire, electric shock, or equipment damage.

If an object or liquid falls/spills into the cabinet, unplug the unit immediately. Have the unit checked by a qualified service engineer before using it again.

### Place the unit on a strong, stable surface.

A unit placed on an inadequate surface may fall, resulting in injury or equipment damage.

When the unit is dropped, please ask your dealer for advice. Do not continue using a damaged unit. Using a damaged unit may result in fire or electric shock.

### Set the unit in an appropriate location.

Not doing so may cause damage and could result in fire or electric shock.

- \* Do not place in outdoors.
- \* Do not place in the transportation system (ship, aircraft, trains, automobiles, etc.)
- \* Do not install in a dusty or humid environment.
- \* Do not place in a location where the steam comes directly on the screen.
- \* Do not place near heat generating devices or a humidifier.

To avoid danger of suffocation, keep the plastic packing bags away from babies and children.

#### Use the enclosed power cord and connect to the standard power outlet of your country. Be sure to remain within the rated voltage of the power cord.

Not doing so may cause in fire or electric shock.

### To disconnect the power cord, grasp the plug firmly and pull.

Never tug on the cord, doing so may cause damage and could result in fire or **Ok** electric shock.













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### The equipment must be connected to a grounded main outlet.

Not doing so may cause in fire or electric shock.

### Use the correct voltage.

- \* Do not overload your power circuit, as this may result in fire or electric shock.
- \* The unit is designed for use with a specific voltage only. Connection to another voltage than specified in this User's Manual may cause fire, electric shock, or other damage.
- \* Do not overload your power circuit, as this may result in fire or electric shock.

### Handle the power cord with care.

- \* Do not place the cord underneath the unit or other heavy objects.
- \* Do not pull on or tie the cord.

If the power cord becomes damaged, stop using it. Use of a damaged cord may result in fire or electric shock.

### Never touch the plug and power cord if it begins to thunder.

Touching them may result in electric shock.

# When attaching an arm stand, please refer to the user's manual of the arm stand and install the unit securely with the enclosed screws.

Not doing so may cause the unit to come unattached, which may result in injury or equipment damage. When the unit is dropped, please ask your dealer for advice. Do not continue using a damaged unit. Using a damaged unit may result in fire or electric shock. When reattaching the tilt stand, please use the same screws and tighten them securely.

### Do not touch a damaged LCD panel directly with bare hands.

The liquid crystal which leaks from the panel is poisonous if it enters the eyes or mouth.

If any part of the skin or body comes in direct contact with the panel, please wash thoroughly. If some physical symptoms result, please consult your doctor.

### Follow local regulation or laws for safe disposal.

The backlight of the LCD panel contains mercury.







# 

### Handle with care when carrying the unit.

Disconnect the power cord and cables when moving the unit. Moving the unit with the cord attached is dangerous. It may result in injury or equipment damage.

# When handling the unit, grip the bottom of the unit firmly with both hands ensuring the panel faces outward before lifting.

Dropping the unit may result in injury or equipment damage.

### Do not block the ventilation slots on the cabinet.

- \* Do not place books or any other papers on the ventilation slots.
- \* Do not install the unit in a closed space.
- \* Do not use the unit lying down or upside down.

Using the unit in these ways blocks the ventilation slots and prevents proper airflow, leading to fire or other damage.

### Do not touch the plug with wet hands.

Touching them may result in electric shock.

### Use an easily accessible power outlet.

This will ensure that you can disconnect the power quickly in case of a problem.

### Periodically clean the area around the plug.

Buildup of dust, water, or oil on the plug may result in fire.

### Unplug the unit before cleaning it.

Cleaning the unit while it is plugged into a power outlet may result in electric shock.

If you plan to leave the unit unused for an extended period, disconnect the power cord from the wall socket after turning off the power switch for the safety and the power conservation.







## LCD Panel

The screen may have defective pixels. These pixels may appear as slightly light or dark area on the screen. This is due to the characteristics of the panel itself, and not the product.

The backlight of the LCD panel has a fixed life span. When the screen becomes dark or begins to flicker, please contact your dealer.

Do not press on the panel or edge of the frame strongly, as this will result in damage to the screen. There will be prints left on the screen if the pressed image is dark or black. If pressure is repeatedly applied to the screen, it may deteriorate or damage your LCD panel. Leave the screen white to decrease the prints.

Do not scratch or press on the panel with any sharp objects, such as a pencil or pen as this may result in damage to the panel. Do not attempt to brush with tissues as this may scratch the LCD panel.

# **1. INTRODUCTION**

Thank you very much for choosing an EIZO Color Monitor.

# 1-1. Features

- Dual inputs compliant
- DVI (p. 44) Digital input (TMDS (p. 45)) compliant
- Horizontal scanning frequency: 31 61 kHz (Digital input: 31 49 kHz) Vertical scanning frequency: 50 - 85 Hz Vertical (1024 x 768 ~ 75 Hz) Vertical (Digital) of 60 Hz (VGA text: 70 Hz)

Resolution: 1024 x 768

- Smoothing function incorporated for the adjustment of an enlarged image. (p.26)
- Auto Adjustment compliant and original "Picture Adjustment Program" software included.
- ColorManagement function incorporated (p.28)
- Support to sRGB (p.45) standard
- USB (Universal Serial Bus) hub supported. (p.32)
- Ultra slim bezel incorporated

# 1-2. Package Contents

Please contact your local dealer for assistance if any of the listed items are missing or damaged.

- LCD Monitor
- Power Cord
- Signal Cable (FD-C16)
- Signal Cable (FD-C04)
- 4 of M4 x 12 mm mounting screws
- EIZO LCD Utility Disk
- User's Manual
- ScreenManager Quick Reference
- LIMITED WARRANTY

### NOTE

• Please retain the packing materials for future transference.

## 1-3. Controls & Connectors

### Front



- (6) Control Buttons
- (7) Power Button
- (8) Power Indicator<sup>\*1</sup>

Green	Operation
Yellow	Power saving
Flashing yellow (2 times for each)	Power save mode Digital only
Flashing yellow slowly	Power is off (Main power is on)

<sup>1</sup> Regarding the power indicator for the "Off Timer", see page 19.

### Rear



- (9) Stand with cable holder (Detachable)<sup>\*2</sup>
- (10) Power Terminal Covers for the Optional peripheral
- (11) Security Lock Slot<sup>3</sup>
- (12) DVI-I Input Connector x 2 (SIGNAL 1, SIGNAL 2)
- (13) USB Port (2 Downstream)
- (14) USB Port (1 Upstream)
- (15) Power Connector
- <sup>2</sup> The LCD monitor can be used with an optional arm stand by removing the stand. (see page 34)
- <sup>'3</sup> Allows for connection of a security cable. This lock supports Kensington's MicroSaver security system. For further information, please consult : Kensington Technology Group 2855 Campus Drive, San Mateo, CA 94403 USA Tel.: 800-650-4242, x3348, Intl: 650-572-2700, x3348 Fax: 650-572-9675 <a href="http://www.kensington.com">http://www.kensington.com</a>

# 2. CABLE CONNECTION

# 2-1. Before connecting

Before connecting your monitor to the PC, change the display screen settings (resolution p. 45) and frequency) in accordance with the charts below.

### NOTE

• When your computer and display support VESA DDC, the suitable resolution and the refresh rate are set by just plugging your display into the computer without any manual settings.

Resolution	Frequency	Remarks
640 × 480	~ 85 Hz	VGA, VESA
720 × 400	70 Hz	VGA TEXT
800 × 600	~ 85 Hz	VESA
832 × 624	75 Hz	Apple Macintosh
1024 × 768	~ 75 Hz	VESA

### **Analog Input**

## **Digital Input**

Only the following resolutions with frequency can be displayed on this model.

Resolution	Frequency	Remarks
640 × 480	60 Hz	VGA
720 × 400	70 Hz	VGA TEXT
800 × 600	60 Hz	VESA
1024 × 768	60 Hz	VESA

# 2-2. Connecting the signal cable

### NOTE

- Be sure that the power switches of both the PC and the monitor are OFF.
- **1.** Plug the signal cable into the connector at the rear of the monitor and the other end of the cable into the video connector on the PC.

After connecting, secure the connection with the screw-in fasteners.



## **Analog Input**

Signal Cable	Connector	PC
Signal Cable (FD-C16 enclosed)	Video Output Connector D-Sub mini 15 pin	<ul> <li>Standard graphics card</li> <li>Macintosh G3 (Blue &amp; White) / G4</li> </ul>
Signal Cable (FD-C16 enclosed) + Macintosh Adapter (Optional)	Video Output Connector D-Sub 15 pin	<ul> <li>Macintosh Macintosh Adapter (Optional)</li> </ul>

## **Digital Input**

Signal Cable	Connector	PC
Signal Cable (FD-C04 enclosed)	Video Output Connector DVI-I	Digital graphics board

### NOTE

- The monitor is not compatible with a Power Macintosh G4/G4 Cube ADC (Apple Display Connector)
- **2.** Plug the power cord into the power connector on the rear of the monitor.

**3.** Lead the power cord and signal cable into the cable holder at rear of the monitor.



**4.** Plug the other end of the power cord into a power outlet.

# \land WARNING

# Use the enclosed power cord and connect to the standard power outlet of your country.

Be sure to remain within the rated voltage of the power cord. Not doing so may cause in fire or electric shock.

# The equipment must be connected to a grounded main outlet.

Not doing so may cause in fire or electric shock. Not doing so may cause in fire or electric shock.



# **5.** Turn on the monitor's main power and then switch on the PC's power.

The monitor's power indicator will light up (green).

If an image does not appear, refer to the "TROUBLE SHOOTING"  $\left( p.36\right)$  for advice.

Whenever finished, turn off the PC and the monitor.

### NOTE

- When turning on the monitor, the kind of the input signal (Signal1 or 2/Analog or Digital) is displayed for a few seconds on the right top corner of the screen.
- Adjust brightness of the screen depending on the brightness of your environment.
- Be sure to take adequate rests. A 10-minute rest period each hour is suggested.

## 2-3. Connecting two PCs to the monitor

Two PCs can be connected to the monitor through the Signal 1 and the Signal 2 on the back of the monitor.

### **Connecting Examples**



	PC 1		PC 2			
(Ex.1)	Analog	D-Sub mini 15 pin	Signal Cable (FD-C16 enclosed)	Signal Cable (FD-C04 enclosed)	DVI	Digital
(Ex.2)	Analog	D-Sub mini 15 pin	Signal Cable (FD-C16 enclosed)	Signal Cable (FD-C16 optional)	D-Sub mini 15 pin	Analog
(Ex.3)	Digital	DVI	Signal Cable (FD-C04 enclosed)	Signal Cable (FD-C04 optional)	DVI	Digital

### Selecting the active input

The Input signal selection button on the front panel can be used to select either Signal 1 or Signal 2 as the active input at any time. Every time the button is pressed, the input changes. When switching the signal, the kind of the input signal (Signal1 or 2/Analog or Digital) is displayed for a few seconds on the right top corner of the screen.



### The priority input signal

This function is used to select which PC will have priority to control the monitor when utilizing two PCs. The monitor constantly checks the input signals and switches automatically in accordance with the "Input Priority" setting (see table below). Once a priority is set, whenever a change of signal is detected at the selected input, the monitor will switch the input to that signal.

In the case of only one signal being present at either input, the monitor automatically detects and displays that signal.

Priority setting	Performance
	If signals from both inputs are present, the monitor gives preference to Signal 1 in the following cases.
Signal 1	<ul> <li>When the power of the monitor is turned ON</li> </ul>
	<ul> <li>When the signal input to Signal 1 is changed even if active input was Signal 2.</li> </ul>
	If signals from both inputs are present, the monitor gives preference to Signal 2 in the following cases.
Signal 2	<ul> <li>When the power of the monitor is turned ON</li> </ul>
	<ul> <li>When the signal input to Signal 2 is changed even if active input was Signal 1.</li> </ul>
Manual	The monitor will not detect signals automatically in this mode. Select the active input by pressing the input signal selection button on the monitor's front panel.

### NOTE

 When the Signal 1 or Signal 2 is selected, the power saving mode of the monitor activates only if both PCs are in power saving mode.

# 3. ScreenManager

# 3-1. How to use the ScreenManager



### **1.** Entering the ScreenManager

Push the Enter button once to display the main menu of the ScreenManager. [Main Menu]



## **2.** Making Adjustments and Settings

- (1) Select the desired sub menu icon using the Control buttons and push the Enter button. The sub menu appears.
- (2) Use the Control buttons to select the desired setting icon and push the Enter button. The setting menu appears.
- (3) Use the Control buttons to make all required adjustments and push the Enter button to save the settings.

### **3.** Exiting the ScreenManager

- (1) To return to the main menu, select the <Return> icon or push the down button twice, followed by the Enter button.
- (2) To exit the ScreenManageru, select the <Exit> icon or push the down button twice, followed by the Enter button.

### NOTE

• Double clicking the Enter button at any time also exits the ScreenManager menu.

## **3-2. ScreenManager Adjustments and Settings.**

The following table shows all the ScreenManager's adjustment and setting menus. "\*" indicates adjustments of analog input only and "\*\*" indicates digital input only.

Main menu	S	ub menu		Reference
Screen	Clock		*	4-1. Screen Adjustment (p.21)
	Phase		*	
	Position			
	Resolution			
	Smoothing			
	Contrast/Bri	ghtness		
	Signal Filter	-	*	
ColorManagement	Range Adju	stment	*	4-3. Color Adjustment (p.28)
	Color Mode			
	Standard Mode	Temperature		
	Custom	Temperature		
	Mode	Saturation		
		Hue		
		Gain		
		Reset		
	sRGB			
PowerManager	DVI DMPM			4-4. Power-save Setup(p.30)
	VESA DPMS		*	
	EIZO MPMS	6	*	
Others	Screen Size			4-2. Displaying a low resolutions (p.26)
	Border Inter	isity		
	Input Priority	/		Select the priority input signal. (p.16)
	Off Timer			Set the monitor's off timer to on or off. (p.19)
	Веер			Set the monitor's beeper to on or off. (p.42)
	Menu Settings	Menu Size		Change the size of the menu.
		Menu Position		Adjust the menu position
		Menu Off Timer		Set the menu displaying time.
		Translucent		Set the transparency of the background.
	Reset			Return to the factory default settings. (p.42)
Information	Information			Review the ScreenManager's settings, model name, serial number and usage time <sup>-1</sup> .
Language	English, German, French, Spanish, Italian, Swedish and Japanese			Select the ScreenManager's language.

<sup>\*1</sup>Due to the inspection on the factory, the usage time may not "0 hour" at shipping.

# 3-3. Useful Functions

### **Adjustment Lock**

Use the "Adjustment Lock" function to prevent any accidental changes.

Locked function	<ul> <li>Auto adjustment button adjustments and settings in the ScreenManager.</li> </ul>
	Auto Adjustment Button
Unlocked function	<ul> <li>Adjustment of contrast and brightness by the control buttons.</li> </ul>
	<ul> <li>Input signal selection button</li> </ul>

To lock

Switch off the monitor's power by the power button on the front panel. Press on the Auto adjustment button while switching on the monitor's power.

To unlock

Switch off the monitor's power by the power button on the front panel, then hold down the Auto adjustment button once again and turn the power back on.

## Off Timer

The off timer function causes the monitor to automatically enter a power off state after a predetermined amount of time has lapsed. This function was created to reduce afterimage (p.44) characteristics that are particular to LCD monitors when the monitor screen is left on for a long period without use.

### [Procedure]

- (1) Select <Off Timer> in the ScreenManager "Others" menu.
- (2) Select "Enable" and press the right and left buttons to adjust the "On Period" (1 to 23 hours).

#### [Off timer system]

PC	Monitor	LED
On Period (1H - 23H)	Operation	Green
Last 15 min. in "On period"	Advance Notice <sup>*1</sup>	Green Flashing
"On period" expired	Power off	Flashing yellow slowly

<sup>1</sup>Advance notice (LED flashing green) will be given 15 minutes before the monitor automatically enters the "Power Off" mode. To delay entering the "Power Off" mode, press the power button during the advance notice period. The monitor will continue to operate for an additional 90 minutes.

### [Procedure]

Press the power button to return to a normal screen.

### NOTE

• The off timer function works while the PowerManager is active, but there is no advance notice before the monitor's power is switched off.

## **EIZO Logo appearing function**

When switching on the power button on the front panel, the EIZO logo is displyed for a while. If you desire to display or undisplay this logo, use this function. (Default is logo appearing.)

• To undisplay

Switch off the monitor's power by the power switch on the front panel, then hold down the Enter button once again and turn the power back on.

• To display again

Switch off the monitor's power by the power switch, then hold down the Enter button once again and turn the power back on.

# 4. ADJUSTMENT

# 4-1. Screen Adjustment

### NOTE

 Allow the LCD monitor to stabilize for at least 20 minutes before making image adjustments.

When connecting the DVI-I cable for digital input, see page 25.

## Analog Input

Screen adjustments for the LCD monitor should be used in suppressing screen flickering and also for adjusting the screen to its proper position. There is only one correct position for each display mode. It is also recommended to use the ScreenManager function when first installing the display or whenever changing the system. For convenience, an easy set-up Program installed on the utility disk to assist in the set-up procedure is provided.

### **Adjustment Procedure**

**1.** Push the Auto adjustment button on the front panel.

The message "Your setting will be lost, if you press again now." appears and remains on the screen for 5 seconds. While the message is on the screen, push the Auto adjustment button again to automatically adjust the clock, phase, screen position and resolution. If you do not wish to do adjust the screen, do not push the Auto adjustment button again.

If the appropriate screen can not be made by using the Auto adjustment button, adjust the screen through the following procedures. If the appropriate screen can be made, proceed to step 4.

### **2.** Install the "Screen adjustment program"

Having read the "Readme.txt" file, install and run the "Screen adjustment program" in the enclosed EIZO LCD utility disk. Step by step adjustment is provided by the wizard guide.

### NOTE

• If the user's operating system has no utility disk (e.g. OS/2), we recommend setting the desktop pattern to that as shown in the diagram on the following page.



### **3.** Adjust by using <Screen> menu in the ScreenManager.

- (1) Vertical bars appear on the screen
  - $\rightarrow$   $\bigcirc$  Use the <Clock> (p.44) adjustment.

Select the "Clock" and eliminate the vertical bars by using the right and left of the control buttons. Do not continuously press the control buttons, as the adjustment value will change quickly and make it difficult to locate the most suitable adjustment point.

If the horizontal flickering, blur or bars appear, proceed to "Phase" adjustment as follows.



### NOTE

- When adjusting the <Clock>, the horizontal screen size will also change.
- (2) Horizontal flickering, blurring or bars appear on the screen.

 $\rightarrow$  Use the <Phase> (p.44) adjustment.

Select the <Phase> and eliminate the horizontal flickering, blurring or bars by using the right and left buttons.



#### NOTE

 Horizontal bars may not completely disappear from the screen depending on the PC. (3) The screen position is not incorrect.

 $\rightarrow$  Use the <Position> adjustment.

The correct displayed position of the monitor is decided because the number and the position of the pixels are fixed. The <Position> adjustment moves the image to the correct position.

Select <Position> and adjust the position of the upper left corner of the image by using the up, down, right and left buttons in order to align the screen.

If vertical bars of distortion appear after finishing the <Position> adjustment, return to <Clock> adjustment and repeat the previously explained adjustment procedure ("Clock"  $\rightarrow$  "Phase"  $\rightarrow$  "Position")



(4) Screen image is smaller or larger than the actual screen images.

 $\rightarrow$   $\Box$  Use the <Resolution> adjustment.

Adjustment is needed when the input signal resolution and the resolution now being displayed are different.

Select <Resolution> and confirm if the resolution now being displayed is the same as the input resolution. If it is not, adjust the vertical resolution using the up and down button and adjust the horizontal resolution using the right and left buttons.

C/V

Smaller than the actual screen images.





Larger than the actual screen images.





Adjusted to actual screen

# Adjust the output signal range (Dynamic Range) of the signal. → <sup>-</sup> Use the <Range Adjustment> (p.45) of <ColorManagerment> menu.

This controls the level of output signal range to display the whole color gradation (256 colors).

#### [Procedure 1]

Push the Auto adjustment button on the front panel while displaying the <Range Adjustment> menu to automatically adjust the range. The screen blanks for a moment, and adjusts the color range to display the whole color gradation of the current output signal.

#### [Procedure 2]

Pressing Auto adjustment button while displaying the contrast/brightness adjustment screen (appeared by pressing the control buttons directly) adjusts the range automatically. (Contrast and Brightness will not be adjusted.)

### **5.** Set the Contrast of the screen. $\rightarrow$ **()** Use the <Contrast> adjustment.

This controls the brightness for the each color (red, blue and green) at the same time.

Select <Contrast/Brightness> and adjust by using the right and left buttons.

### NOTE

- Percentage except 100 % may cause undisplayable color tone.
- During selecting the <sRGB> of <ColorManagement>, contrast cannot be adjusted.

### **6.** Set the Brightness of the screen.

## $\rightarrow \bigcirc$ Use the <Brightness> adjustment.

The brightness of the entire screen is controlled by changing the brightness of the backlight.

Select <Contrast/Brightness> in the screen menu and adjust by using the up and down buttons.

### NOTE

• Directly pressing the control buttons also adjusts the contrast and brightness. Press the <Enter> button to save and exit the settings after the adjustment.

## **Digital input**

The monitor displays the digital input image correctly based on its pre-setting data. However, if the image position is not correct or larger than the actual image screen, please adjust the following adjustment items using the "Screen" menu of the ScreenManager.

**1.** The screen position is incorrect.  $\rightarrow \square$  Use the <Position> adjustment.

See page 23.

**2.** Screen image is smaller or larger than the actual screen images.  $\rightarrow \square$  Use the <Resolution> adjustment.

See page 23.

- **3.** Set the Contrast of screen.  $\rightarrow$  **①** Use the <Contrast> adjustment. See page 24.
- 4. Set the Brightness of the screen.  $\rightarrow \frac{1}{\sqrt{2}}$  Use the <Brightness> adjustment.

See page 24.

# 4-2. Displaying a low resolutions

The lower resolutions are enlarged to full screen automatically. Using the <Screen Size> function in the <Others> menu enables to change the screen size.

### 

Select the <Screen Size> in the others menu and select the screen size by using the up and down buttons.

Menu	Function
Full	Displays the picture on the screen in full, irrespective of the picture's resolution. Since the vertical resolution and the horizontal resolution are enlarged at different rates, some images may appear distorted.
Enlarged	Displays the picture on the screen in full, irrespective of the picture's resolution. Since the vertical resolution and horizontal resolution are enlarged at same rates, some horizontal or vertical image may disappear.
Normal	Displays the picture at the actual Screen resolution.

Example: Displaying 720 x 400



# **2.** Smooth the blurred texts of the enlarged screen. $\rightarrow$ II Switch the <Smoothing> setting.

Select the suitable level from 1 - 5 (Soft – Sharp).

Select <Smoothing> in the <Screen> menu and adjust by using the right and left buttons.

### NOTE

 <Smoothing> is disabled when the screen is displayed in the following resolutions.
 \*1024 x 768

# **3.** Set the brightness of the black area surrounding the displayed image. $\rightarrow \square$ Set the <Border Intensity>.

In the <Enlarge> mode or <Full Screen> mode, the outer area (border) is usually black.

Select <Border Intensity> in the <Others> menu and adjust by using the right and left buttons.



## 4-3. Color Adjustment

The <ColorManagement> menu in the ScreenManager enables to change the color of the screen. By using the <Color Mode>, the adjustment mode can be selected from <Custom mode> (to adjust the color settings according to your preference) and <sRGB> mode.

In the analog input, perform the "Range Adjustment" (p.24) before making the color adjustments.

### NOTE

- Allow the LCD monitor to stabilize for at least 20 minutes before making image adjustments. (Allow the monitor to warm up for at least 20 minutes before making adjustments.)
- Performing the <Reset> of the <ColorManagement> menu returns the color settings to the default settings. (Except <Range Adjustment> settings).
- The values shown in percentages represent the current level within the specific adjustment. They are available only as a reference tool. (To create a uniform white or black screen, the percentages for each will probably not be the same.)

### <Standard> mode: To set the color temperature

### To set the color temperature (p.45)

## $\rightarrow \mathbb{I}^{\mathsf{K}}$ Set the <Temperature>.

The <Temperature> can be set from 4,000 K to 10,000 K, in 500 K increments (including 9,300 K). Default setting is off (normal white).

### NOTE

- The values shown in the Kelvin are available only as a reference tool.
- Setting the temperature under 4,000 K or over 10,000 K invalidates the color temperature setting. (The color temperature's setting turns "OFF".)

# <Custom> mode: To adjust the color settings according to your preference

#### To change the saturation

## $\rightarrow \blacksquare$ Use the <Saturation> adjustment.

The <Saturation> can be selected from -16 ~ 16. Setting the minimum level (-16) turns the image to the monochrome.

### NOTE

• The <Saturation> adjustment may cause undisplayable color tone.

### To change the flesh color, etc.

### $\rightarrow$ <sup>(()</sup> Use the <Hue> adjustment.

The <Hue> can be selected from -20 to 20.

### NOTE

• The <Hue> adjustment may cause undisplayable color tone.

### To change each color (red, green and blue)

### $\rightarrow$ **①** Use the <Gain> (p.44) adjustment.

By adjusting the red, green and blue color tones for each mode, custom colors can be defined. The 100 % indicates unadjusted condition. Display a white or gray background image and adjust the <Gain>.

### NOTE

- The values shown in the percentage are available only as a reference tool.
- Setting the <Temperature> (p.28) invalidates the <Gain> adjustment. <Gain> setting returns to the default: All the color indicates 100 %.

## To select <sRGB>

### $\rightarrow$ Select <sRGB> from the <Color Mode>.

During selecting the <sRGB>, color and contrast cannot be changed.

## 4-4. Power-save Setup

The <PowerManager> menu in the ScreenManager enables to set the power-save setup.

### NOTE

- Do your part to conserve energy, turn off the monitor when you are finished using it. Disconnecting the monitor from the power supply is recommended to save energy completely.
- Even if the monitor is in a power saving mode, USB compliant devices function when they are connected to the monitor's USB (both the upstream and the downstream ports). Therefore, power consumption of the monitor will change according to the connected devices even if the monitor is in a power saving mode.

## Analog input

This monitor complies with the <VESA DPMS> (p.45) standard and adopts a power saving method, <EIZO MPMS> (p.44), which works with a blank screen (totally black screen) like "Blank Screen" ScreenSaver software.

### To use the PC's power saving system (VESA DPMS ).

[Procedure]

- (1) Set the PC's power saving settings.
- (2) Select "VESA DPMS" in the <PowerManager> menu.

#### [Power saving system]

PC		Monitor	LED
Operation		Operation	Green
Power saving	STAND-BY SUSPEND OFF	Power saving	Yellow

Operate the mouse or keyboard to return to a normal screen.

#### To set the power save with ScreenSaver (EIZO MPMS) software.

#### [Procedure]

- (1) Set the PC's appropriate ScreenSaver settings or blank the screen (totally black screen).
- (2) Select <EIZO DPMS> in the <PowerManager> menu.

#### [Power saving system]

PC	Monitor	LED
Operation	Operation	Green
Blank the screen (ScreenSaver or Macintosh Energy Saver)	Power saving	Yellow

Operate the mouse or keyboard to return to a normal screen.

### NOTE

• EIZO MPMS should be used with Macintosh "EnergySaver".

## **Digital input**

This monitor complies with the DVI DMPM (p.44).

### [Procedure]

- (1) Set the PC's power saving settings.
- (2) Select "VESA DPMS" in the <PowerManager> menu.

#### [Power saving system]

PC	Monitor	LED
On	Operation	Green
Power saving	Power saving	Yellow
Off mode	Power saving <sup>*1</sup>	Flashing yellow (2 times for each)

<sup>1</sup>Power saving through the PC's off mode is only supported when "Manual" is selected on the ScreenManager's <Input Priority>.

#### [Procedure]

Operate the mouse or keyboard to return to a normal screen.

Power on the PC to return a normal screen from the Off mode of the PC.

# 5. MAKING USE OF USB (Universal Serial Bus)

This monitor provides a hub which supports the USB standard. When connecting to a USB compliant PC or another hub, the monitor functions as a hub to which the USB compliant peripherals can be easily connected.

## **Required system environment**

- PC equipped with USB ports or another USB hub connected to the USB compliant PC
- Windows 98/2000 // Mac OS 8.5.1 or later
- EIZO USB Cable (Optional)

### NOTE

- The USB hub function may not work properly depending on the PC, OS or peripherals. Please consult the manufacturer of each device about the USB support.
- When the monitor is not on, the peripherals connected to the downstream ports will not operate.
- Even if the monitor is in a power saving mode, the devices connected to the monitor's USB ports (both the upstream and the downstream) will function.
- The followings are procedures for the Windows 98/Me/2000 and Mac OS.

## Connecting to the USB HUB

- **1.** Connect the monitor to the PC with the signal cable (See page 13) first, then turn on the PC.
- **2.** Connect the upstream port of the monitor to the downstream port of the USB compliant PC or another hub by using the USB cable.



To Downstream Ports of the PC or Another Hub

Upstream port:
Connect the USB compliant PC or another hub using the USB cable.

After connecting the USB cable, the USB function can be set up automatically.

# **3.** After setting up, the monitor's USB hub is available for connecting USB compliant peripherals to the downstream ports of the monitor.



### **Connecting Examples**

# 6. ATTACHING AN ARM STAND

The LCD monitor can be used with an arm stand by removing the tilt stand and attaching the arm stand to the LCD monitor.

### NOTE

- Use an arm stand that satisfies the followings.
  - When using the LCD monitor with an arm stand, the arm stand must be VESA approved:

\*Use an arm stand with a 75 mm x 75 mm hole spacing on the arm mounting pad.

\*Weight: Use an arm stand that is able to support an object weighting 8.0 kg (17.6 lbs.).

- Use an arm stand with sufficient stability (mechanical firmness) to support the weight of the monitor.
- Use an arm stand remaining that position where it is manually moved.
- Use an arm stand with the ability to tilt the monitor forward and backward.
- Please connect cables after attaching an arm stand.

### **Setup Procedure**

**1.** Hold the center of the stand mounting cover and slide them rightward or leftward to remove the mounting cover.



- **2.** Lay the LCD monitor down. Do not scratch the panel.
- **3.** Remove the tilt stand by loosening the screws. (4 pcs of M4 x 8 Zn/Fe)

# **4.** Attach an arm stand to the LCD monitor securely.



M4 Mounting Screws: M4 x 12 (mm) Zn/Fe

# 7. TROUBLESHOOTING

If a problem persists even after applying the suggested remedies, contact an EIZO dealer.

- No picture problems  $\rightarrow$  See No.1 ~ No.2
- Imaging problems  $\rightarrow$  See No.3 ~ No.13
- Other problems  $\rightarrow$  See No.14 ~ No.18
- USB problems  $\rightarrow$  See No.19 ~ No.20

	Problems	Points to check with possible solutions
1.	<ul><li>No picture</li><li>Indicator status: Off</li></ul>	□ Check that the power cord is correctly connected. If the problem persists, turn off the monitor power for a few minutes, then turn it back on and try again.
	<ul><li>Indicator status: Green</li><li>Indicator status: Yellow</li></ul>	<ul> <li>Check the "Contrast and Brightness" settings.</li> <li>Switch the signal input by pressing the input signal selection button on the front control panel.</li> </ul>
		□ Try pressing a key on the keyboard, or clicking the mouse. (p.30)
	• Indicator status: Slowly flashing Yellow	Try pressing the power button.
	• Indicator status: Flashing Yellow (twice for each)	□ Try turning the PC on.
2.	Error messages shown below will remain on the screen for 40 seconds. Signal Check Signal 2 fH: 0.0kHz fV: 0.0Hz	<ul> <li>This message appears when the signal is not inputted correctly, even if the monitor functions properly.</li> <li>When the image is displayed correctly after a short time, there is no problem with the monitor. (Some PCs do not output the signal soon after powering on.)</li> <li>Check that the PC is turned ON.</li> <li>Check that the signal cable is properly connected to the PC or graphics board.</li> <li>Switch the signal input by pressing the input signal selection button on the front control panel.</li> </ul>
	<ul> <li>Whenever an error signal message appears, the signal frequency will be displayed in red. (Example)</li> <li>Signal Error</li> <li>Signal 2</li> <li>fH:110.0kHz</li> <li>fU: 75.0Hz</li> </ul>	Use the graphics board's utility software to change the frequency setting. (Refer to the manual of the graphics board.)
	Problems	Points to check with possible solutions
-----	--	---
3.	Display position is incorrect.	Adjust the image position using the <position> (p.23) If the problem persists, use the graphics board's utility software to change the display position if available.</position>
4.	Screen image is smaller or larger than the actual screen images.	$\Box$ Adjust the resolution using the <resolution> (p.23)</resolution>
5.	Vertical bars of distortion appear.	$\Box$ Decrease the vertical bars using the <clock>. (p.22)</clock>
	ուն ու	
6.	Horizontal bars of distortion appear.	Decrease the horizontal bars using the <phase>. (p.22)</phase>
7.	Letters and lines appear blurred.	$\Box$ Adjust the blurred lines using <smoothing> (p.26)</smoothing>
8.	Distortion appears like the figure below.	□ This happens when both composite (X-OR) input signal and separate vertical synchronizing signal are input. Please select one of the two.
9.	The screen is too bright or too dark.	<ul> <li>Adjust the <contrast and="" brightness=""> (The backlight of the LCD monitor has a fixed life span. When the screen becomes dark or begins to flicker, please contact your dealer.)</contrast></li> </ul>
10.	. Afterimages appear.	□ When the screen image is changed after displaying the same image for a long period, an afterimage may appear. The "Afterimage" can be removed gradually by changing the displayed image. Use the "Off Timer" function and avoid keeping the screen on all the time. (p.19)

Problems	Points to check with possible solutions
11. The screen has defective pixels (e.g. slightly light or dark).	□ This is due to the characteristics of the panel itself, and not the LCD product.
12. Fingerprints remain on the screen.	□ Leaving the screen white may solve the problem.
13. The noise appears on the screen.	□ Change the mode in <signal filter=""> in the <screen> menu.</screen></signal>
14. The <smoothing> can not be selected.</smoothing>	□ <smoothing> is disabled when the screen is displayed in the 1024 x 768.</smoothing>
15. The utility disk is unable to be opened (for Macintosh only).	□ Some PCs without PC-Exchange do not allow the utility disk to be opened. Please set the desktop pattern to every-other-dot before adjustment. (p.22)
16. The Enter button does not operate.	□ The adjustment lock is probably on. To unlock: switch the LCD monitor off. Then, while pressing the Auto adjustment button, switch the power on. (p.19)
17. The Auto adjustment button does not operate.	□ The adjustment lock is probably on. To unlock: switch the LCD monitor off. Then, while pressing the Auto adjustment button, switch the power on. (p.19)
	<ul> <li>The Auto sizing function is intended for use on the Macintosh and on AT-compatible PC running Windows. It may not work properly in either of the following cases.</li> <li>When running an AT-compatible PC on MS-DOS (Not windows). The background color for the "wall paper" or "desktop" pattern is set to black. Some signals from a graphics board may not function properly.</li> </ul>
18. Frequency does not change after installing "Monitor information file" in the attached utility disk on Windows 95/98/2000.	Use the graphics board's utility software to change the input signal frequency.

Problems	Points to check with possible solutions			
19. USB function cannot be setup.	□ Check that the USB cable is correctly connected.			
	□ Check that the PC and OS are USB compliant. (For verification of USB support, consult the manufacturer of each system.)			
	□ Check the PC's BIOS setting for USB. (For details, refer to the manual of the PC.)			
20. PC is hung up. / The peripherals	□ Check that the USB cable is correctly connected.			
connected to the downstream ports do not operate.	□ Check the downstream ports by connecting the peripherals to other downstream ports. If the problem is solved by doing this, contact an EIZO dealer. (For details, refer to the manual of the PC.)			
	□ Try executing the following method.			
	• Restarting the PC - Restarting the PC			
	• Connecting the PC and peripherals directly			
	If the problem is solved by doing this, contact an EIZO dealer.			
	□ The power button of the APPLE keyboard does not operate if it is connected to the EIZO USB Hub. Please connect the keyboard directly with the PC. Refer to the instruction of the PC for details.			

# 8. CLEANING

Periodic cleaning is recommended to keep the monitor looking new and to prolong its operation lifetime.

## NOTE

• Never use thinner, benzene, alcohol (ethanol, methanol, or isopropyl alcohol), abrasive cleaners, or other strong solvents, as these may cause damage to the cabinet or LCD panel.

## Cabinet

To remove stains, wipe the cabinet with a soft, lightly moistened cloth using a mild detergent. Do not spray wax or cleaner directly into the cabinet. (For details, refer to the manual of the PC.)

## LCD Panel

- The LCD surface can be cleaned with a soft cloth, such as cotton or lens paper.
- If necessary, stubborn stains can be removed by moistening part of a cloth with water to enhance its cleaning power.

# 9. SPECIFICATIONS

LCD Panel	38 cm (15 inch), TFT color LCD panel with Anti-Glare Hard Coating, Viewing Angle: Horizontal: 160°, Vertical: 150°			
	(at Contrast Ratio $\geq$ 5)			
Dot Pitch	0.280 mm			
Horizontal Scan Frequency	31 ~ 61 kHz (Automatic) (Digital): 31 ~ 49 kHz			
Vertical Scan Frequency	50 Hz ~ 85 Hz (Automatic) (1024 x 768: up to 75 Hz) (Digital): 60 Hz, (VGA TEXT : 70 Hz)			
Resolution	1024 dots x 768 lines			
Dot Clock (Max.)	80 MHz (Digital: 65 MHz)			
Display Colors	16 million colors (max)			
Display Area	304 mm (H) x 228 mm (V) (12.0" (H) x 9.0" (V)) (Viewable image size: 380 mm (15.0"))			
Power Supply	100-120/200-240 VAC±10%, 50/60 Hz, 0.8 /0.5 A			
Power Consumption	Min.: 35 W			
	Max.: 50 W (With speaker and USB hub) Power Saving Mode: Less than 5 W (When the optional speaker and the USB hub are not connected.)			
Input Connector	DVI-I x 2			
Analog Input Signal (Sync)	a) Separate, TTL, Positive/Negative			
	b) Composite, TTL, Positive/Negative			
	c) Sync on Green, 0.3 Vp-p, Negative			
Analog Input Signal (Video)	0.7Vp-p/75Ω Positive			
Input Signal (Digital)	TMDS (Single Link))			
Signal registration	28 (Factory preset: 15)			
Plug & Play	VESA DDC 2B			
Dimensions	340 mm (W) x 369 mm (H) x 175 mm (D) (13.4"(W) x 14.5"(H) x 6.9"(D))			
Dimensions (without stand)	340 mm (W) x 267 mm (H) x 61 mm (D) (13.4"(W) x 10.5"(H) x 2.4"(D))			
Weight	4.3 kg (9.5 lbs.)			
Weight (without stand)	3.2 kg (7.1 lbs.)			
Temperature	Operating: 0°C ~ 35°C (32°F ~ 95°F) Storage: -20°C ~ 60°C (-4°F ~ 140°F) Humidity 30% to 80% R.H. Non-condensing			
USB standard	Rev. 1.1 complied self-powered hub			
Communication speed	12 Mbps (full), 1.5 Mbps (low)			
Downstream power supply	500 mA for each (Max.)			
USB ports	Upstream port x 1, Downstream port x 2			
Certifications and Standards				
100-120 VAC	NRTL/C-TÜV, FCC-B, TCO'99 <sup>11</sup> , EPA ENERGY STAR Program, TÜV/Rheinland Ergonomics Approved			
200-240 VAC	CE, CB, TÜV Rheinland/GS, TCO'99 <sup>11</sup> , EPA ENERGY STAR Program, TÜV/Rheinland Ergonomics Approved			

<sup>1</sup> Applicable to gray (standard) color version only.

## **Default settings**

		Analog input	Digital input	
Contrast		100%	100%	
Brightness		100%	100%	
Smoothing		3		
ColorManagement	Color Mode	Standard		
	Temperature	Off (Normal white)		
PowerManager		VESA DPMS	DVI DMPM	
Screen Size		Full		
Input Priority		Signal 1		
Menu Off Timer		Disable		
Menu Settings	Menu Size	Normal		
Menu Off Timer		45 seconds		
Веер		On		
Language		English		

## Beeper settings

Short beep	ScreenManager item selected.			
	ScreenManager parameter adjusted to minimum or maximum limit.			
	Input signal selection button pressed.			
Long beep	Auto Adjustment button pressed.			
	ScreenManager data-save executed.			
4 short beeps	Monitor not connected correctly.			
	PC turned off.			
	Monitor received unsupported signal frequency.			
2 short beeps every 15 sec.	Monitor is in the advance notice mode of the Off Timer. The power will be off within fifteen minutes.			

## Dimensions

## mm (inches)



## **Pin Assignment**

## **DVI-I** Connector

O 1234567855 910111213141516 17181920212232465	>
--	---

Pin No.	Signal	Pin No.	Signal	Pin No.	Signal
1	TMDS Data2-	11	TMDS Data1/3 Shield	21	NC
2	TMDS Data2+	12	NC	22	TMDS Clock shield
3	TMDS Data2/4 Shield	13	NC	23	TMDS Clock+
4	NC*	14	+5V Power	24	TMDS Clock-
5	NC	15	Ground (return for +5V, Hsync and Vsync)	C1	Analog Red
6	DDC Clock (SCL)	16	Hot Plug Detect	C2	Analog Green
7	DDC Data (SDA)	17	TMDS Data0-	C3	Analog Blue
8	Analog Vertical Sync	18	TMDS Data0+	C4	Analog Horizontal Sync
9	TMDS Data1-	19	TMDS Data0/5 Shield	C5 Analog Ground	
					(analog R, G, & B return)
10	TMDS Data1+	20	NC		

No.

(\*NC: No Connection)

Signal

## **USB** Ports

### Upstream

2	1
3	4
Series B	



1	VCC	Cable power			
2	- Data	Serial data			
3	+ Data	Serial data			
4	Ground	Cable Ground			

Signal

# **10. GLOSSARY**

## Afterimage

The Afterimage is particular to LCD monitors when the monitor screen is left on for a long period without use. The "Afterimage" can be removed gradually by changing the displayed image.

### Clock

With the analog input signal display, the analog signal is converted to a digital signal by the LCD circuitry. To convert the signal correctly, the LCD monitor needs to produce the same number clock pulse as the dot clock of the graphics system. When the clock pulse is not correctly set, some vertical bars of distortion are displayed on the screen.

### DVI

(Digital Visual Interface)

A digital flat panel interface. DVI can transmit digital data from the PC directly without loss with the signal transition method "TMDS".

There are two kinds of DVI connectors. One is DVI-D connector for digital signal input only. The other is DVI-I connector for both digital and analog signal inputs.

#### **DVI DMPM**

(DVI Digital Monitor Power Management)

The Power management system for the digital interface. The "Monitor ON" status (operation mode) and the "Active Off" status (power-saving mode) are indispensable for the DVI-DMPM as the monitor's power mode.

#### **EIZO MPMS**

(EIZO Monitor PowerManager Signaling)

EIZO MPMS, "EIZO Monitor PowerManager Signaling" also enables power saving on the monitor side. EIZO MPMS recognizes video signals from the PC when the PC is in a power saving mode, and reduces energy consumption of the monitor.

### **Gain Adjustment**

Adjusts each color parameter for red, green and blue. The color of the LCD monitor is displayed through the color filter of the LCD panel. Red, green and blue are the three primary colors. The colors on the monitor are displayed by combining these three colors. The color tone can change by adjusting the illumination amount passed through each color's filter.

#### Phase

The phase adjustment decides the sampling timing point for converting the analog input signal to a digital signal. Adjusting the phase after the clock adjustment will produce a clear screen.

### **Range Adjustment**

The Range Adjustment controls the level of output signal range to display the whole color gradation.

### Resolution

The LCD panel consists of a fixed number of pixel elements which are illuminated to form the screen image. The EIZO L375 display panel consists of 1024 horizontal pixels and 768 vertical pixels. At a resolution of 1024 x 768, all pixels are displayed as a full screen.

## sRGB (Standard RGB)

"International Standard for Red, Green, and Blue color space" A color space was defined with the aim of the color matching between applications and hardware devices, such as monitors, scanners, printers and digital cameras. As a standard default space, sRGB allows Internet users to closely match colors.

### Temperature

Color temperature is a method to measure the white color tone, generally indicated in degrees Kelvin. At high temperatures the white tone appears somewhat blue, while at lower temperatures it appears somewhat red. Computer monitors generally give best performance at high temperature settings.

5,000K: Often used in printing industry.

6,500K: Good for video-image display.

9,300K: Default setting for your EIZO monitor.

## TMDS

(Transition Minimized Differential Signaling) A signal transition method for the digital interface

## VESA DPMS

(Video Electronics Standard Association – Display Power Management Signaling) The acronym VESA stands for "Video Electronics Standards Association", and DPMS stands for "Display Power Management Signaling." DPMS is a communication standard that PCs and graphics boards use to implement power savings on the monitor side.

# **APPENDIX/ANHANG/ANNEXE**

## Preset Timing Chart for Analog input Timing-Übersichten für Analog Eingang Synchronisation des Signaux pour Analog numerique

Based on the signal diagram shown below 15 factory presets have been registered in the monitor's microprocessor.

Der integrierte Mikroprozessor des Monitors unterstützt 15 werkseitige Standardeinstellungen (siehe hierzu die nachfolgenden Diagramme).

15 signaux ont été enregistrés en usine dans le microprocesseur du moniteur, conformément au diagramme de synchronisation ci-dessous.

А	Front Porch	Vordere Schwarzschulter	Front avant	
В	Sync Period	Synchronimpuls	Délai de synchronisation	
С	Back Porch	Hintere Schwartzschulter	Front arrière	
D	Blanking Period	Austastzeit	Délai de clignotement	
Е	Display period	Displya-Zeit	Délai d'affichage	
F	Total cycle	Kompletter Zyklus	Cycle total	
Н	Sync signal level	Sync-Signalpegel	Niveau du signal de synchronisation	
V	Video signal level	Video-Signalpegel	Niveau du signal vidéo	

Mode	Dot Clock MHz	Sync Polarity		Freque	Frequencies		A: Front Porch		B: Sync Period	
wode		н	v	H kHz	V Hz	H µs/Dot	V ms/Line	Η μs/ Dot	V ms/ Line	
VGA 640 × 480	25.175	Nega.	Nega.	31.469	59.940	0.318/ 8	0.064/ 2	3.813/ 96	0.054/ 2	
VGA 720 × 400	28.322	Nega.	Posi.	31.468	70.087	0.636/ 18	0.381/ 12	3.813/ 108	0.064/ 2	
Macintosh 640 × 480	30.24	Posi.	Posi.	35.00	66.67	2.116/ 64	0.086/ 3	2.116/ 64	0.086/ 3	
Macintosh 832 × 624	57.28	Posi.	Posi.	49.73	74.55	0.559/ 32	0.020/ 1	1.117/ 64	0.060/ 3	
VESA 640 × 480	31.5	Nega.	Nega.	37.86	72.81	0.508/ 16	0.026/ 1	1.270/ 40	0.079/ 3	
VESA 640 × 480	31.5	Nega.	Nega.	37.50	75.00	0.508/ 16	0.027/ 1	2.032/ 67	0.080/ 3	
VESA 640 × 480	36.0	Nega.	Nega.	43.27	85.01	1.556/ 56	0.023/ 1	1.556/ 56	0.069/ 3	
VESA 800 × 600	36.0	Posi.	Posi.	35.16	56.25	0.667/ 24	0.028/ 1	2.000/ 72	0.057/ 2	
VESA 800 × 600	40.0	Posi.	Posi.	37.88	60.32	1.000/ 40	0.026/ 1	3.200/ 128	0.106/ 4	
VESA 800 × 600	50.0	Posi.	Posi.	48.08	72.19	1.120/ 56	0.770/ 37	2.400/ 120	0.125/ 6	
VESA 800 × 600	49.5	Posi.	Posi.	46.88	75.00	0.323/ 16	0.021/ 1	1.616/ 80	0.064/ 3	
VESA 800 × 600	56.25	Posi.	Posi.	53.674	85.061	0.569/ 32	0.019/ 1	1.138/ 64	0.056/ 3	
VESA 1024 × 768	65.0	Nega.	Nega.	48.36	60.00	0.369/ 24	0.062/ 3	2.092/ 136	0.124/ 6	
VESA 1024 × 768	75.0	Nega.	Nega.	56.48	70.07	0.320/ 24	0.053/ 3	1.813/ 136	0.106/ 6	
VESA 1024 × 768	78.75	Posi.	Posi.	60.02	75.03	0.203/ 16	0.017/ 1	1.219/ 96	0.050/ 3	

C: Back Porch		D: Blanking Period		E: Display Period		F: Total Cycle	
Η μs/ Dot	V ms/ Line	Η μs/ Dot	V ms/ Line	Η μs/ Dot	V ms/ Line	Η μs/ Dot	V ms/ Line
1.589/	0.794/	5.720/	0.922/	25.442/	15.253/	31.778/	16.683/
40	25	144	29	640	480	800	525
1.907/	1.111/	6.356/	1.556/	25.422/	12.711/	31.778/	14.267/
54	35	180	49	720	400	900	449
3.175/	1.114/	7.407/	1.286/	21.164/	13.714/	28.571/	15.000/
96	39	224	45	640	480	864	525
3.911/	0.784/	5.587/	0.865/	14.525/	12.550/	20.112/	13.415/
224	39	320	43	832	624	1152	667
3.810/	0.528/	5.587/	0.634/	20.317/	12.678/	26.413/	13.735/
120	20	176	24	640	480	832	520
3.810/	0.427/	6.349/	0.533/	20.317/	12.800/	26.667/	13.333/
120	16	200	20	640	481	840	500
2.222/	0.578/	5.333/	0.670/	17.778/	11.093/	23.111/	11.764/
80	25	192	29	640	480	832	509
3.556/	0.626/	6.222/	0.711/	22.222/	17.067/	28.444/	17.778/
128	22	224	25	800	600	1024	625
2.200/	0.607/	6.400/	0.739/	20.000/	15.840/	26.400/	16.579/
88	23	256	28	800	600	1056	628
1.280/	0.478/	4.800/	1.373/	16.000/	12.480/	20.800/	13.853/
64	23	240	66	800	600	1040	666
3.232/	0.448/	5.172/	0.533/	16.162/	12.800/	21.333/	13.333/
160	21	256	25	800	600	1056	625
2.702/	0.503/	4.409/	0.578/	14.222/	11.179/	18.631/	11.756/
152	27	248	31	800	600	1048	631
2.462/	0.600/	4.923/	0.786/	15.754/	15.880/	20.677/	16.666/
160	29	320	38	1024	768	1344	806
19.20/	0.513/	4.053/	0.673/	13.653/	13.599/	17.707/	14.272/
144	29	304	38	1024	768	1328	806
2.235/	0.466/	3.657/	0.533/	13.003/	12.795/	16.660/	13.328/
176	28	288	32	1024	768	1312	800

[Applicable to gray (standard color version only).]



### **Congratulations!**

You have just purchased a TCO'99 approved and labelled product! Your choice has provided you with a product developed for professional use. Your purchase has also contributed to reducing the burden on the environment and also to the further development of environmentally adapted electronics products.

## Why do we have environmentally labelled computers?

In many countries, environmental labelling has become an established method for encouraging the adaptation of goods and services to the environment. The main problem, as far as computers and other electronics equipment are concerned, is that environmentally harmful substances are used both in the products and during their manufacture. Since it is not so far possible to satisfactorily recycle the majority of electronics equipment, most of these potentially damaging substances sooner or later enter nature.

There are also other characteristics of a computer, such as energy consumption levels, that are important from the viewpoints of both the work (internal) and natural (external) environments. Since all methods of electricity generation have a negative effect on the environment (e.g. acidic and climate-influencing emissions, radioactive waste), it is vital to save energy. Electronics equipment in offices is often left running continuously and thereby consumes a lot of energy.

### What does labelling involve?

This product meets the requirements for the TCO'99 scheme which provides for international and environmental labelling of personal computers. The labelling scheme was developed as a joint effort by the TCO (The Swedish Confederation of Professional Employees), Svenska Naturskyddsforeningen (The Swedish Society for Nature Conservation) and Statens Energimyndighet (The Swedish National Energy Administration).

Approval requirements cover a wide range of issues: environment, ergonomics, usability, emission of electric and magnetic fields, energy consumption and electrical and fire safety.

The environmental demands impose restrictions on the presence and use of heavy metals, brominated and chlorinated flame retardants, CFCs (freons) and chlorinated solvents, among other things. The product must be prepared for recycling and the manufacturer is obliged to have an environmental policy which must be adhered to in each country where the company implements its operational policy.

The energy requirements include a demand that the computer and/or display, after a certain period of inactivity, shall reduce its power consumption to a lower level in one or more stages. The length of time to reactivate the computer shall be reasonable for the user.

Labelled products must meet strict environmental demands, for example, in respect of the reduction of electric and magnetic fields, physical and visual ergonomics and good usability.

You will find a brief summary of the environmental requirements met by this product on the right. The complete environmental criteria document may be ordered from:

TCO Development SE-114 94 Stockholm, Sweden Fax: +46 8 782 92 07 Email (Internet): development@tco.se Current information regarding TCO'99 approved and labelled products may also be obtained via the Internet, using the address: http://www.tco-info.com/

#### **Environmental Requirements**

#### Flame retardants

Flame retardants are present in printed circuit boards, cables, wires, casings and housings. Their purpose is to prevent, or at least to delay the spread of fire. Up to 30% of the plastic in a computer casing can consist of flame retardant substances. Most flame retardants contain bromine or chloride, and those flame retardants are chemically related to another group of environmental toxins, PCBs. Both the flame retardants containing bromine or chloride and the PCBs are suspected of giving rise to severe health effects, including reproductive damage in fish-eating birds and mammals, due to the bio-accumulative\* processes. Flame retardants have been found in human blood and researchers fear that disturbances in foetus development may occur.

The relevant TCO'99 demand requires that plastic components weighing more than 25 grams must not contain flame retardants with organically bound bromine or chlorine. Flame retardants are allowed in the printed circuit boards since no substitutes are available.

#### Cadmium\*\*

Cadmium is present in rechargeable batteries and in the colour-generating layers of certain computer displays. Cadmium damages the nervous system and is toxic in high doses.

The relevant TCO'99 requirement states that batteries, the colour-generating layers of display screens and the electrical or electronics components must not contain any cadmium.

#### Mercury\*\*

Mercury is sometimes found in batteries, relays and switches. It damages the nervous system and is toxic in high doses.

The relevant TCO'99 requirement states that batteries may not contain any mercury. It also demands that mercury is not present in any of the electrical or electronics components associated with the labelled unit.

### CFCs (freons)

The relevant TCO'99 requirement states that neither CFCs nor HCFCs may be used during the manufacture and assembly of the product. CFCs (freons) are sometimes used for washing printed circuit boards. CFCs break down ozone and thereby damage the ozone layer in the stratosphere, causing increased reception on earth of ultraviolet light with e.g. increased risks of skin cancer (malignant melanoma) as a consequence.

#### Lead\*\*

Lead can be found in picture tubes, display screens, solders and capacitors. Lead damages the nervous system and in higher doses, causes lead poisoning.

The relevant TCO'99 requirement permits the inclusion of lead since no replacement has yet been developed.

\* Bio-accumulative is defined as substances which accumulate within living organisms.

\*\* Lead, Cadmium and Mercury are haevy metals which are Bio-accumulative.

For U.S.A, Canada, etc. (rated 100-120 Vac) Only

## FCC Declaration of Conformity

We, the Responsible Party

EIZO NANAO TECHNOLOGIES INC. 5710 Warland Drive, Cypress, CA 90630 Phone: (562) 431-5011

declare that the product

Trade name: EIZO Model: FlexScan L375

is in conformity with Part 15 of the FCC Rules. Operation of this product is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures.

- \* Reorient or relocate the receiving antenna.
- \* Increase the separation between the equipment and receiver.
- \* Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- \* Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### Note

Use the attached specified cable below or EIZO signal cable with this monitor so as to keep interference within the limits of a Class B digital device.

- AC Cord
- Shielded Signal Cable (enclosed)

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## Canadian Notice

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de le classe B est comforme à la norme NMB-003 du Canada.

#### Hinweis zur Ergonomie :

Dieser Monitor erfüllt die Anforderungen an die Ergonomie nach EK1-ITB 2000 mit dem Videosignal, 1024 Punkte × 768 Zeilen, RGB analog, 0,7 Vp-p und mindestens 75,0 Hz Bildwiederholfrequenz, non interlaced. Weiterhin wird aus ergonomischen Gründen empfohlen, die Grundfarbe Blau nicht auf dunklem Untergrund zu verwenden (schlechte Erkennbarkeit, Augenbelastung bei zu geringem Zeichenkontrast.)

#### **Recycle Auskunft**

Die Rücknahme dieses Produktes nach Nutzungsende übernimmt EIZO in Deutschland zusammen mit dem Partner von Roll MBB Recycling GmbH.Dort werden die Geräte in ihre Bestandteile zerlegt, die dann der Wiederverwertung zugeführt werden. Um einen Abholtermin zu vereinbaren und die aktuellen Kosten zu erfahren, benutzen Sie bitte folgende Rufnummer: 02153-73 35 00. Weitere Informationen finden Sie auch unter der Internet-Adresse: www.eizo.de.