# User's Manual



# **Color LCD Monitor**

## Important

Please read this User's Manual and Setup Manual (separate volume) carefully to familiarize yourself with safe and effective usage.

#### PRECAUTIONS

#### **Chapter 1 Features and Overview**

- 1-1 Features
- 1-2 Buttons and Indicators
- 1-3 Functions and Basic Operation

#### **Chapter 2 Settings and Adjustments**

- 2-1 Utility Disk
- 2-2 Screen Adjustment
- 2-3 Color Adjustment
- 2-4 Speaker Volume Adjustment
- 2-5 Off Timer/Power Saving Settings
- 2-6 EIZO Logo Display Setting
- 2-7 Locking Buttons
- 2-8 Setting Adjustment menu Display
- 2-9 Viewing Information/Setting Language
- 2-10 Resumption of Default Setting

#### **Chapter 3 Connecting Cables**

- 3-1 Connecting Two PCs to the Monitor
- 3-2 Connecting Speaker

#### Chapter 4 Troubleshooting

#### **Chapter 5 Reference**

- 5-1 Attaching an Arm (Option)
- 5-2 Cleaning
- 5-3 Specifications
- 5-4 Glossary
- 5-5 Preset Timing

#### How to Setup

Please read the Setup Manual (separate volume)



# 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.



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

Indicates to ground for safety.

Indicates a prohibited action.

Copyright© 2005 EIZO NANAO CORPORATION All rights reserved.

No part of this manual may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, or otherwise, without the prior written permission of EIZO NANAO CORPORATION. EIZO NANAO CORPORATION is under no obligation to hold any submitted material or information confidential unless prior arrangements are made pursuant to EIZO NANAO CORPORATION's receipt of said information Although every effort has been made to ensure that this manual provides up-to-date information, please note that EIZO monitor specifications are subject to change without notice.

ENERGY STAR is a U.S. registered mark.

Apple and Macintosh are registered trademarks of Apple Computer, Inc.

VGA is a registered trademark of International Business Machines Corporation.

DPMS is a trademark and VESA is a registered trademark of Video Electronics Standards Association.

Windows is a registered trademark of Microsoft Corporation.

PowerManager is a trademark of EIZO NANAO CORPORATION. FlexScan, ScreenManager and EIZO are registered trademarks of EIZO NANAO CORPORATION.

As an ENERGY STAR<sup>®</sup> Partner, EIZO NANAO CORPORATION has determined that this product meets the ENERGY STAR guidelines for energy efficiency.



## **IMPORTANT**

- This product has been adjusted specifically for use in the region to which it was originally shipped. If the product is used outside the region, it may not operate as specified in the specifications.
- To ensure personal safety and proper maintenance, please read carefully this section and the caution statements on the monitor.

# [Location of Caution Statement]



# 

#### 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 may result in fire, electric shock, or equipment damage.

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

Opening the cabinet or modifying the unit may result in fire, 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 result in fire, electric shock, or equipment damage.

#### 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 at the strong and stable place.

A unit placed on an inadequate surface may fall and result in injury or equipment damage. If the unit falls, disconnect the power immediately and 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 result in fire, electric shock, or equipment damage.

- Do not place outdoors.
- Do not place in the transportation system (ship, aircraft, trains, automobiles, etc.)
- Do not place 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 result in fire or electric shock.

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

Tugging on the cord may damage and result in fire or electric shock.

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

Failure to do so may result in fire or electric shock.

#### Use the correct voltage.

- 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 equipment 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 become 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 that may leak 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.

# 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 any objects on the ventilation slots.
- Do not install the unit in a closed space.
- Do not use the unit laid down or upside down.

Blocking the ventilation slots prevents proper airflow and may result in fire, electric shock, or equipment damage.

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

Doing so may result in electrical 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.

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.



OK<sup>.</sup>



# LCD Panel

In order to suppress the luminosity change by long-term use and to maintain the stable luminosity, use of a monitor in lower brightness is recommended.

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

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 may 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.

When the monitor is cold and brought into a room or the room temperature goes up quickly, dew condensation may occur inside and outside the monitor. In that case, do not turn the monitor on and wait until dew condensation disappears, otherwise it may cause damage to the monitor.

## To use the monitor comfortably

An excessively dark or bright screen may affect your eyes. Adjust the brightness of the monitor according to the environmental conditions.

Staring at the monitor for a long time tires your eyes. Take a 10-minute rest every hour.

# CONTENTS

PRECA	UTIONS 1
LCD	Panel5
To us	se the monitor comfortably5
Chapte	r 1 Features and Overview7
1-1	Features7
1-2	Buttons and Indicators7
1-3	Functions and Basic Operation8
Chapte	r 2 Settings and Adjustments 10
2-1	Utility Disk 10
٠	Disk contents and software overview
2-2	Screen Adjustment11
Di	gital Input11
An	alog Input11
2-3	Color Adjustment 14
Sir	nple adjustment [FineContrast menu]
٠	FineContrast Mode 14
٠	To select FineContrast mode 14
Ad	vanced Adjustments [Adjustment menu] 15
٠	To select an appropriate mode for images 15
٠	To set/adjust color 16
2-4	Speaker Volume Adjustment 16
•	Adjust speaker volume [Volume] 16
٠	Mute the speaker temporarily [Mute] 16
	Off Timer/Power Saving Settings 17

i	2-6	EIZO Logo Display Setting 19
	٠	To display EIZO logo
	•	[EIZO Logo Appearing Function] 19
	2-7	Locking Buttons 19
	2-1	To lock operation [Adjustment Lock]
	•	
1	2-8	Setting Adjustment menu Display 20
	•	To update menu settings [Menu Position/
	•	Translucent/Menu Off Timer] 20
	2-9	Viewing Information/Setting Language 21
	•	To check settings, usage time, etc
	•	To set a language to be displayed
ł		[Language]
1		
	2-10	Resumption of Default Setting 21
	•	To reset color adjustment [Reset]
	•	To reset all settings [Reset] 21
	Chapte	er 3 Connecting Cables 22
	3-1	Connecting Two PCs to the Monitor
	•	To set auto-switching of input signals
	•	[Input Signal]
	3-2	Connecting Speaker 23
	5-2	Somecting Opeaker
	Chapte	r 4 Troubleshooting24
		5
	Chapte	r 5 Reference
	5-1	Attaching an Arm (Option)26
	5-2	Cleaning 26
	<u> </u>	20
	5-3	Specifications 27
	5-4	Glossary
		-
	5-5	Preset Timing 31
	•	

• • • • • • • • • • • • • • • • • • •

. . .

# **Chapter 1 Features and Overview**

Thank you very much for choosing an EIZO color LCD monitor.

## 1-1 Features

- Dual-input compliant (DVI-D and D-sub mini 15-pin connectors)
- DVI digital input (TMDS) compliant Resolution: 1280 dots × 1024 lines
- Easy screen adjustment with Auto Adjustment function
- FineContrast mode to allow the best mode for screen display
- Height adjustable stand
- sRGB compatible
- Built-in speaker

## 1-2 Buttons and Indicators



- 1. Adjustment menu (\*ScreenManager ®)
- 2. Input signal selection button
- 3. Auto adjustment button
- 4. Control buttons (Left, Down, Up, Right)
- 5. Enter button
- 6. FineContrast button
- 7. Power button
- 8. Power indicator

Indicator status	Operation status	
Blue	The screen is displayed	
Yellow	Power saving	
Off	Power off	

\* ScreenManager <sup>®</sup> is an EIZO's nickname of the Adjustment menu.

#### NOTE

• For the power indicator status with "Off Timer" set, refer to "To set monitor power-off time" on page 17.

## 1-3 Functions and Basic Operation

## To adjust the screen and color



# To make useful settings/adjustments



## Basic operation of Adjustment menu

#### [Displaying Adjustment menu and selecting function]

- (1) Press  $\bigcirc$ . The main menu appears.
- (2) Select a function with  $(a)(\overline{O})(\overline{O})(\overline{O})$ , and press (O). The sub menu appears.
- (3) Select a function with (a)/(a)/(b), and press (a). The adjustment/setting menu appears.
- (4) Adjust the selected item with ()/()/()/(), and press (). The setting is saved.

#### [Exiting Adjustment menu]

- (1) Choose <Return> from the sub menu and press  $\bigcirc$ , or press  $\bigcirc$  twice. The main menu appears.
- (2) Choose <Menu Off> from the main menu and press (2), or press (2) twice. The Adjustment menu quits.

#### NOTE

• The Adjustment menu can also be exited by pressing  $\bigodot$  twice quickly.

# 2-1 Utility Disk

An "EIZO LCD Utility Disk" (CD-ROM) is supplied with the monitor. The following table shows the disk contents and the overview of the application software programs.

........

#### • Disk contents and software overview

The disk includes a monitor information file, application software programs for adjustment, and User's Manual. Refer to "readme.txt" or the "Readme" file on the disk for software startup procedures or file access procedures.

Item Overview		For Windows	For Macintosh
A "readme.txt" or "Readme" file	0	0	
Monitor information file (INF file)	Available for setting the best resolution and refresh rate for the monitor.	0	_
Color Profiles (ICC Profiles)	Color profiles	0	0
Screen Adjustment Program	Available for easy adjustments of the monitor screen following adjustment patterns and procedures on the screen.	0	0
User's Manual of this monitor (PDF file)			

# 2-2 Screen Adjustment

## **Digital Input**

When digital signals are input, images are displayed correctly based on the preset data of the monitor.

## Analog Input

The monitor screen adjustment is used to suppress flickering of the screen or adjust screen position and screen size correctly according to the PC to be used. To use the monitor comfortably, adjust the screen when the monitor is set up for the first time or when the settings of the PC in use are updated.

#### [Adjustment Procedure]

# **1** Press (A).

A message "Your setting will be lost, if you press again now" appears for five seconds.

## ${f 2}\,$ Press ${\scriptscriptstyle m (A)}$ again while the message is displayed.

The Auto Adjustment function begins (showing a running status message) to adjust clock, phase, display position, and resolution automatically.

If satisfactory adjustment cannot be obtained with the (A) button, perform the adjustment following the procedure below. When the screen is displayed correctly, go to step 5 "Range Adjustment".

## **3** Run the Screen Adjustment Program.

Load the EIZO LCD Utility Disk on the PC, and start the Screen Adjustment Program compatible with the PC in use. After the program starts up, perform the adjustment in step 4 following the instructions of the program.

#### Attention

• Wait 20 minutes or more from monitor power on before starting adjustments.

(This period of time is required to stabilize the operation of internal electronic components.)

#### NOTE

Auto adjustment is available using

 A is a stisfactory adjustment cannot be obtained with this button, perform advanced adjustments using the Adjustment menu.

#### Attention

- This function works correctly when an image is fully displayed over the Windows or Macintosh display area. It does not work properly when an image is displayed only on a part of the screen (DOS prompt window, for example) or when a black background (wallpaper, etc.) is in use.
- This function does not work correctly with some graphics boards.

#### NOTE

- For how to start the Screen Adjustment Program, refer to "readme.txt" or the "Readme" file. When you are using a Windows PC, you can run the program directly from the start menu of the disk.
- If no adjustment program is available for your PC, display a checkerboard pattern on the screen (see below) and go to the following steps.



**4** Perform advanced adjustments for the following using the

<Screen> menu of the Adjustment menu.

- To eliminate vertical bars [Clock]
  - Choose <Clock> from the <Screen> menu, and press (). The <Clock> menu appears.
  - (2) Adjust the clock with ④ or ▷, and press ○. The adjustment is completed.



#### • To remove flickering or blurring [Phase]

- Choose <Phase> from the <Screen> menu, and press O.
   The <Phase> menu appears.
- (2) Adjust the phase with ④ or ▷, and press ○.The adjustment is completed.



#### • To correct screen position [Position]

Since the number of pixels and the pixel positions are fixed on the LCD monitor, only one position is provided to display images correctly. The position adjustment is made to shift an image to the correct position.

- Choose <Position> from the <Screen> menu, and press O. The <Position> menu appears.
- (2) Adjust the position with  $(a)(\overline{O})(\overline{O})(\overline{O})$  to display the image properly in the display area of the monitor.



#### NOTE

- Press the control button slowly so as not to miss the adjustment point.
- When blurring, flickering or bars appear on the screen after adjustment, proceed to [Phase] to remove flickering or blurring.

#### Attention

• Flickering or blurring may not be eliminated depending on your PC or graphics board.

#### NOTE

When vertical bars appear on the screen after adjustment, go back to
 "To eliminate vertical bars [Clock]."
 (Clock → Phase → Position)

# **5** Adjust the signal output range

- **To adjust color gradation automatically [Range Adjustment]** Every color gradation (0 to 255) can be displayed by adjusting the signal output level.
  - Choose <Range Adjustment> from the <Screen> menu, and press
     O.

A message "Your setting will be lost it you press AUTO button" appears.

(2) Press (A) again while the message is displayed. The output range is adjusted automatically to display images with the maximum color gradation.

All the adjustments using the "Screen Adjustment Program" are completed.

## **6** Change the smoothing setting.

- **To modify blurred characters/lines [Smoothing]** When a low-resolution image is displayed, the characters or lines of the displayed image may be blurred.
  - (1) Choose <Screen> from the Adjustment menu, and press <sup>(</sup>).
  - (2) Choose <Smoothing> from the <Screen> menu, and press O. The <smoothing> menu appears.
  - (3) Select a suitable level from 1 to 5 (where 1 = soft and 5 = sharp) with ④ or ▶, and press ◎.
    The <smoothing> menu appears.

#### Attention

- [Smoothing] is disabled when the screen is displayed with a resolution of  $1280 \times 1024$ .
- Blurring is not eliminated completely because the screen is enlarged display.

# 2-3 Color Adjustment

## Simple adjustment [FineContrast menu]

This function allows you to select the best display mode for monitor brightness, etc.

#### FineContrast Mode

An appropriate display mode is selectable out of five modes.

Mode	Purpose
Custom	Available for making desired setting.
sRGB	Suitable for color matching with sRGB compatible peripherals.
Text	Suitable for displaying texts for word processing or spreadsheets.
Picture	Suitable for displaying images such as photos or picture images.
Movie	Suitable for playing back animated images.

#### FineContrast menu



#### • To select FineContrast mode

(1) Press (F).

The FineContrast menu appears at the lower left of the screen.

- (2) One of five modes is displayed in turn each time F is pressed.
- (3) Press  $\bigcirc$  to quit the operation.

#### NOTE

- The Adjustment menu and the FineContrast menu cannot be displayed at the same time.
- This menu ends automatically when five seconds pass after the (F) button is pressed.

## Advanced Adjustments [Adjustment menu]

Independent setting and saving of color adjustment are available for each FineContrast mode.

#### • To select an appropriate mode for images

#### ✓: Adjustment/setting available —: Factory setting

lcon	Function	FineContrast mode				
		Custom	sRGB	Text	Picture	Movie
ò.	Brightness	1	~	1	1	~
₿ĸ	Temperature	<	I	1	1	>
ÿ	Gamma	<	I	1	_	I
	Saturation	<	-	1	1	~
( <b>Q</b> )	Hue	<	-	1	1	1
0	Gain	~	-	_	_	-
Ð	Reset	~		1	1	~

Menu	Description	Adjustment range
Brightness -`Ċ'-	To adjust the full screen brightness as desired	0 to 100%
	<ul> <li>NOTE</li> <li>You can also adjust the br Press (○) after adjustment.</li> </ul>	ightness by pressing ④ or ᠑.
Temperature <b>₿K</b>	To select a color temperature 4000K to 10000K in units of (including 9300K). Default: Off (natural color of panel).	
	<ul> <li>NOTE</li> <li>The values shown in the K reference.</li> <li>The setting automatically t or over 10,000K is set.</li> </ul>	Celvin (K) are available only as curns "OFF" if a value under 4,000K
Gamma	To set a gamma value	1.8 to 2.6 (in increments of 0.2)
NOTE     Digital signal input is recommended for gamma va		mmended for gamma value setting.
Saturation	To adjust color saturation	-128 to 127 Setting the minimum (-128) turns the image to a monochrome screen.
	Attention <ul> <li>This function does not ena</li> </ul>	ble to display every color gradation.
Hue ()	To change the flesh color, etc.	-32 to 32
	Attention <ul> <li>This function does not ena</li> </ul>	ble to display every color gradation.

#### Attention

• Perform [Range Adjustment] before starting color adjustment for analog input signals. Refer to "To adjust color gradation

automatically" on page 13.
The FineContrast mode cannot be changed during color adjustment. Set the FineContrast mode in advance with (F).

• Wait 20 minutes or more from monitor power on before starting the color adjustment.

(It takes about 20 minutes for stable operation of internal electronic components.)

- Choose [Reset] from the Color menu to revert to the default setting (factory setting) of the color tone of the FineContrast mode selected.
- The same image may be seen in different colors on multiple monitors due to their monitor-specific characteristics. Make fine color adjustment visually when matching colors on multiple monitors.

#### NOTE

- The Adjustment menu and the FineContrast menu cannot be displayed at the same time.
- Adjustable functions vary depending on the type of FineContrast mode.

Menu	Description	Adjustment range
Gain ①	To adjust red, green, and blue to a desired color tone respectively	0 to 100% Adjust the respective brightness of red/green/blue to make a desired color tone. Display an image with white or gray background for adjustment.
	<ul> <li>NOTE</li> <li>Values shown in percentage</li> <li>The <temperature> setting <gain> setting returns to the setting</gain></temperature></li> </ul>	ge are available only as reference. g invalidates this setting. The he default setting.
Reset	To reset the color settings of the selected FineContrast mode to the default settings.	Select [Reset].

#### To set/adjust color

- (1) Choose  $\langle \text{Color} \rangle$  from the Adjustment menu, and press  $\bigcirc$ .
- (2) Select a desired function from the <Color> menu, and press O. The selected function menu appears.
- (3) Adjust the selected item with △/⑦/④/ⓑ, and press ○. The adjustment is completed.

# 2-4 Speaker Volume AdjustmentAdjust speaker volume [Volume]

- (1) Choose  $\langle$ Sound $\rangle$  from the Adjustment menu, and press  $\bigcirc$ .
- (2) Choose <Volume> from the <Sound> menu, and press O.
   The volume adjustment window appears.
- (3) Adjust speaker volume with (4) or (b).Change the speaker volume with (4) to decrease or (b) to increase.
- (4) Press (2) at the desired volume. The volume adjustment is completed.

#### • Mute the speaker temporarily [Mute]

#### [Setting]

- (1) Choose <Sound> from the Adjustment menu, and press <sup>(</sup>).
- (2) Choose <Mute> from the <Sound> menu, and press O. The Mute menu appears.
- (3) Select "On" with a or , and press .
   The mute setting is completed.

#### [Canceling]

Display the volume adjustment window and press 3 or 5 to cancel muting.

#### NOTE

Volume adjustment or mute setting is possible only by using (④, (▷), (△) or
 (▽). Refer to "1-3.Function and Basic Operation" (page 8).

# 2-5 Off Timer/Power Saving Settings

# • To set monitor power-off time [Off Timer]

This function allows the monitor to automatically turn off after a specified time has passed. This function serves to reduce afterimages caused when the monitor screen is left on for a long time period without use. Use this function when an image is displayed throughout the day.

#### [Off Timer System]

Timer	Monitor	Power Indicator
ON time (1H - 23H)	Operating	Blue
Last 15 min. in "ON time"	Advance Notice*1	Flashing blue
"ON time" expired	Power Off	Off

\*1 When (b) is pressed during the advance notice period, the monitor continues to operate for additional 90 minutes. Extension of operation time can be set without limitation.

#### [Procedure]

- (1) Choose < Others> from the Adjustment menu, and press ().
- (2) Choose <Off Timer> from the <Others> menu, and press (). The <Off Timer> menu appears.
- (3) Select "Enable" with  $\triangle$  or  $\overline{\heartsuit}$ .
- (4) Set a monitor ON time (1 to 23 hours) with ④ or 𝔅), and press ○. The Off Timer setting is completed.

#### [Resumption Procedure]

Press (b).

#### • To set monitor power-saving [VESA DPMS/DVI DMPM]

#### Analog input

This monitor complies with the VESA DPMS standard.

#### [Power Saving System]

PC		Monitor	Power Indicator
Operating		Operating	Blue
Power saving	STAND-BY SUSPENDED OFF	Power saving	Yellow

#### [Procedure]

- Choose <PowerManager> from the Adjustment menu, and press O.
   The <Set> menu appears.
- (2) Select "VESA DPMS" with (△) or (▽), and press (○).
   The power saving setting is completed.

#### [Resumption Procedure]

Operate the mouse or keyboard to resume the normal screen.

#### Attention

• The Off Timer functions even in the power saving mode, but the advance notice is disabled. The monitor power is turned off without advance notice.

#### Attention

• For the maximum power saving, it is recommended that the Main Power switch be turned off. Unplugging the power cord completely shuts off power supply to the monitor.

#### Digital input

This monitor complies with the "DVI DMPM" standard.

#### [Power Saving System]

PC	Monitor	Power Indicator
Operating	Operating	Blue
Power saving	Power saving	Yellow

#### [Procedure]

- Choose <PowerManager> from the Adjustment menu, and press O.
   The <Set> menu appears.

#### [Resumption Procedure]

Operate the mouse or keyboard.

#### • To mute the speaker with power-saving setting [Power-saving mute]

The speaker output can be muted when the monitor enters the power-saving mode.

- (1) Perform the monitor power-saving setting.
- (2) Choose <Sound> from the <PowerManager> menu, and press O. The <Sound> menu appears.
- (3) Select "Disable" with a) or , and press .
   The power-saving mute setting is completed.
   To make the speaker output effective, select "Enable" and press .

# 2-6 EIZO Logo Display Setting

## To display EIZO logo [EIZO Logo Appearing Function]

When this unit is turned on, the EIZO logo appears at the center of the screen. Selection to display or not to display the logo is available with this function.

#### [Procedure]

- (1) Press to power off the unit.
- (2) Press (2) again while pressing (2). The EIZO logo does not appear on the screen.

## [Resetting]

- (1) Press to power off the unit.
- (2) Press (2) again while pressing (2). The logo appears again.

# 2-7 Locking ButtonsTo lock operation [Adjustment Lock]

This function locks the buttons to retain the status adjusted or set once.

Buttons that can be locked	<ul> <li>O (Enter button) Adjustments/settings using Adjustment menu</li> <li>A (Auto Adjustment button)</li> </ul>
Buttons that cannot	<ul> <li>(b) (Power button)</li> <li>(c) (FineContrast button) FineContrast menu selection/</li></ul>
be locked	adjustment <li>(c) (Control buttons) Brightness adjustment</li> <li>(c) (Control buttons) Volume adjustment and mute</li> <li>(c) (Input Signal Selection button)</li>

#### [Procedure]

- (1) Press to turn off the unit.
- (2) Press (b) again while pressing (A).The screen is displayed with the adjustment lock.

#### [Unlocking]

- (1) Press to turn off the unit.
- (2) Press (b) again while pressing (A).

The screen is displayed with the adjustment lock released.

#### NOTE

• The logo appears with the default setting.

# 2-8 Setting Adjustment menu Display

 To update menu settings [Menu Position/Translucent/Menu Off Timer]

#### **Menu Position**

Adjust the menu position using the following procedure.

- (1) Choose <Others> from the Adjustment menu, and press ().
- (2) Choose <Menu Settings> from the <Others> menu, and press <sup>(</sup>).
- (3) Choose <Menu Position> from the <Menu Settings> menu, and press <sup>(</sup>O). The <Menu Position> menu appears.
- (4) Select a menu position with (△/(▽)/ ④/(▷), and press (○). The menu position setting is completed.

#### Translucent

Set the transparency for menu display using the following procedure.

- (1) Choose <Others> from the Adjustment menu, and press ().
- (2) Choose <Menu Settings> from the <Others> menu, and press <sup>(</sup>).
- (3) Choose <Translucent> from the <Menu Settings> menu, and press (). The <Translucent> menu appears.
- (4) Adjust the transparency for menu display with ④ or ▷, and press ○. The transparency setting is completed.

#### Menu Off Timer

Set the menu display time using the following procedure.

- (1) Choose < Others> from the Adjustment menu, and press (2).
- (2) Choose <Menu Settings> from the <Others> menu, and press (2).
- (3) Choose <Menu Off Time> from the <Menu Settings> menu, and press <sup>(</sup>). The <Menu Off Time> menu appears.
- (4) Choose "Enable" with  $\triangle$  or  $\heartsuit$ .
- (5) Choose an Off Time (15/30/45/60 seconds) with ④ or ▷, and press ○. The menu off timer setting is completed.

#### NOTE

• The display time of the FineContrast menu remains unchanged.

# 2-9 Viewing Information/Setting Language

#### • To check settings, usage time, etc.

#### [Information]

This function allows you to check settings, model name, serial number, and usage time of the monitor.

- Choose <Information> from the Adjustment menu, and press O.
   The <Information> menu appears.
- (2) Then, press  $\bigodot$  to check settings, etc.

#### • To set a language to be displayed [Language]

Select the Adjustment menu language.

#### Selectable languages

English/German/French/Spanish/Italian/Swedish/Japanese

- Choose <Language> menu from the Adjustment menu, and press O. The <Language> menu appears.
- (2) Select a language with (△/♥/ (④/(▷), and press (○). The language setting is completed.

# 2-10 Resumption of Default Setting

#### To reset color adjustment [Reset]

Resume the default settings (factory settings) for color adjustment.

- (1) Choose <Color> from the Adjustment menu, and press <sup>(</sup>).
- (2) Choose <Reset> from the <Color> menu, and press O. The <Reset> menu appears.
- (3) Select <Reset> with  $\triangle$  or  $\heartsuit$ , and press  $\bigcirc$ . The reset operation is completed.

#### To reset all settings [Reset]

Reset all adjustments/settings to the factory default settings.

- (1) Choose < Others> from the Adjustment menu, and press ().
- (2) Choose <Reset> from the <Others> menu, and press O. The <Reset> menu appears.
- (3) Select <Reset> with △ or ⑦, and press ○. The reset operation is completed.

#### NOTE

• The usage time is not always "0" when you purchase the monitor due to factory inspection.

#### NOTE

• For default settings, refer to "Main default settings (factory settings)" on page 29.

# **Chapter 3 Connecting Cables**

# 3-1 Connecting Two PCs to the Monitor

Two PCs can be connected to the monitor through the DVI-I and the D-Sub

mini 15 pin connector on the back of the monitor.

#### **Connection examples**



PC 1			PC 2		
Digital	DVI	Signal cable (FD-C39 supplied)	Signal cable (supplied MD-C87)	D-sub mini 15-pin	Analog

#### Selecting input signal



Switch the input signal with (S). Input signal switches each time (S) is pressed. When the signal is switched, the active signal type (Analog or Digital) appears at the top right corner of the screen for two seconds.

#### • To set auto-switching of input signals [Input Signal]

The monitor recognizes the connector through which PC signals are input. When either PC is turned off or enters the power-saving mode, the monitor automatically displays signals of another PC.

Priority setting	Function
Auto	When either PC is turned off or enters the power-saving mode, the monitor automatically displays signals of another PC.
Manual	The monitor does not detect the PC's signals automatically. Select an active input signal with (\$).

#### [Input signal setting]

- (1) Choose <Others> from the Adjustment menu, and press ().
- (2) Choose <Input Signal> from the <Others> menu, and press O. The <Input Signal> menu appears.
- (3) Select "Auto" or "Manual" with (△) or (♥), and press (○). The Input Priority setting is completed.

# 3-2 Connecting Speaker

- **1** Connect the stereo mini-jack cable to the audio input connector on the rear of the monitor.
- **2** Connect the other end of the cable to the audio output connector of a peripheral device such as a PC or CD player.



#### To listen to audio

The input audio can be listened to through speakers or headphones. When headphones are connected, no audio is output from the speakers.



#### Attention

- When connecting/disconnecting a peripheral device (PC, CD player, etc.) to/from the monitor, be sure to turn off the monitor and the device.
- Use the supplied stereo mini-jack cable to connect a peripheral device.

# **Chapter 4 Troubleshooting**

If a problem still remains after applying the suggested remedies, contact your local dealer.

. . . . .

. . . . . . . . . .

- No-picture problems  $\rightarrow$  See No.1 No.2.
- Imaging problems  $\rightarrow$  See No.3 No.11.
- Other problems  $\rightarrow$  See No.12 No.15.

Problems	Possible cause and remedy		
<ol> <li>No picture</li> <li>Power indicator does not light.</li> </ol>	• Check whether the power cord is connected correctly. If the problem persists, turn off the monitor, and then turn it on again a few minutes later.		
Power indicator is lighting blue.	Check brightness setting.		
Power indicator is lighting yellow.	<ul> <li>Turn on the PC.</li> <li>Switch the input signal with (S).</li> <li>Operate the mouse or keyboard.</li> </ul>		
<ul> <li>2. The message below appears for about 40 seconds.</li> <li>This message appears when no signal is input.</li> <li>Signal Check</li> <li>Analog</li> <li>No Signal</li> </ul>	<ul> <li>This message appears when the signal is not input correctly even when the monitor functions properly.</li> <li>The message shown left may appear, because some PCs do not output the signal soon after power-on.</li> <li>Check whether the PC is turned on.</li> <li>Check whether the signal cable is connected properly.</li> <li>Switch the input signal with (S).</li> </ul>		
<ul> <li>The message below shows that the input signal is out of the specified frequency range. (Such signal frequency is displayed in red.) Example:</li> <li>Signal Error</li> <li>Digital fD:135.0MHz fH: 80.0KHz fU: 75.0Hz</li> </ul>	<ul> <li>Select an appropriate display mode using the graphics board's utility software. Refer to the manual of the graphics board for details.</li> </ul>		
3. Display position is incorrect.	<ul> <li>Align the top left corner of the image with the marker on the screen using the <position> adjustment.</position></li> <li>Choose a resolution (720 × 400 or 320 × 200) of the signal that is input by <vga selection=""> to display the screen at a proper position. This function is available with a resolution of 720 × 400 or 320 × 200 only.</vga></li> <li>If the problem persists, use the graphics board's utility software if available to change the display position.</li> </ul>		
<ul> <li>4. Vertical bars appear on the screen or a part of the image is flickering.</li> <li>         Image is flickering.         Image is flickering.         Image is flickering.         5. Whole screen is flickering or blurring.     </li> </ul>	<ul> <li>Adjust using <clock> from <screen> menu at the Adjustment menu.</screen></clock></li> <li>Adjust using <phase>.</phase></li> </ul>		
6. Characters are blurred.	Aajust using <smoothing>.</smoothing>		

	Problems	Possible cause and remedy			
7.	The screen is too bright or too dark.	<ul> <li>Adjust <brightness>. (The LCD monitor backlight has a fixed life span. When the screen becomes dark or begins to flicker, contact your local dealer.)</brightness></li> </ul>			
8.	Afterimages appear.	<ul> <li>Use a screen saver or off timer function for a long-time image display.</li> <li>Afterimages are particular to LCD monitors. Avoid displaying the same image for a long time.</li> </ul>			
9.	Green/red/blue/white dots or defective dots remain on the screen.	<ul> <li>This is due to LCD panel characteristics and is not a failure.</li> </ul>			
10.	Interference patterns or fingerprints remain on the screen.	<ul> <li>Leave the monitor with a white screen. The symptom may disappear.</li> </ul>			
11.	The [Smoothing] icon on the Adjustment menu [Screen] cannot be selected.	<ul> <li><smoothing> is disabled with a resolution of 1280 x 1024</smoothing></li> </ul>			
12.	The Main menu of Adjustment menu does not start.	<ul> <li>Check for Adjustment Lock function.</li> <li>Check whether the FineContrast menu is running. (Refer to "Simple adjustment [FineContrast mode]" on page 15.)</li> </ul>			
13.	The FineContrast menu does not start.	<ul> <li>Check whether the Main menu of Adjustment menu is running. (Refer to "Advanced Adjustments [Adjustment menu]" on page 16.)</li> </ul>			
14.	The A button does not function.	<ul> <li>The (A) button does not function when digital signal is input.</li> <li>Check whether the buttons are lockd.</li> <li>This function works correctly when an image is fully displayed over the Windows or Macintosh display area. It does not work properly when an image is displayed only on a part of the screen (DOS prompt window, for example) or when a black background (wallpaper, etc.) is in use.</li> <li>This function does not work correctly with some graphics boards.</li> </ul>			
15.	No audio.	<ul> <li>Check whether the stereo mini-jack cable is connected properly.</li> <li>Check whether <volume> is set to "0".</volume></li> <li>Check whether <mute> is set to "On".</mute></li> <li>Check the settings of the PC and the audio software.</li> </ul>			

# **Chapter 5 Reference**

# 5-1 Attaching an Arm (Option)

The stand can be removed and replaced with an arm (or another stand) to be attached to the monitor. Use an arm or stand of EIZO option.

#### [Attaching]

**1** Lay the LCD monitor on a soft cloth spread over on a stable surface with the panel surface facing down.

#### Remove the stand. (Prepare a screwdriver.)

Unscrew the two screws (M4  $\times$  10mm) securing the unit and the stand with the screwdriver.

#### Attach the monitor to the arm or stand.

Secure the stand to the monitor with four screws (M4  $\times$  12mm) using a screwdriver.



Fixing screws: M4 × 12mm 4 pcs

# 5-2 Cleaning

Clean the monitor periodically to keep the monitor clean and extend its life.

#### Cabinet

Clean the cabinet with a soft cloth dampened with little mild detergent.

#### LCD Panel

- Clean the LCD panel with a soft cloth such as cotton cloth or lens cleaning paper.
- Remove persistent stains gently with a cloth dampened with little water, and then clean the LCD panel again with a dry cloth for better finishing.

#### Attention

- When using another manufacturer's arm or stand, confirm the following in advance.
  - Clearance between the holes of the arm fixing screws: 100 mm × 100 mm (VESA compliant)
- Strong enough to support weight of the monitor unit (except the stand) and attachments such as cables
- Connect the cables after attaching an arm.

#### Attention

• Never use any solvents or chemicals, such as thinner, benzene, wax, alcohol, and abrasive cleaner, which may damage the cabinet or LCD panel.

#### NOTE

• Optional ScreenCleaner is recommended for cleaning the panel surface.

# 5-3 Specifications

LCD Panel	19.0-inch (480 mm) TFT color LCD with anti-glare hard coating Viewing angle: Horizontal: 170°; Vertical: 155° (CR>5)
Dot Pitch	0.294 mm
Horizontal Scan Frequency	Analog: 24.8 - 80 kHz (Automatic) Digital: 31 - 64 kHz
Vertical Scan Frequency	Analog: 50 - 75.1 Hz (Automatic) Digital: 59 - 61 Hz (VGA TEXT: 69 - 71 Hz)
Resolution	1280 dots x 1024 lines
Max. Dot Clock	Analog: 135 MHz Digital: 108 MHz
Max. Display Colors	16 million colors
Display Area (H × V)	376.3 mm × 301 mm
Power Supply	100 - 120 VAC ± 10% 50/60 Hz 0.8 A 200 - 240 VAC ± 10% 50 Hz 0.45 A
Power Consumption	Max.: 50 W (normal mode) Mini.: 45 W (normal mode) Power saving mode: 2 W or less (for single signal input) Power button Off: 1 W or less
Input Signal Connectors	DVI-D connector, D-sub mini 15-pin connector
Analog Input Signal (Video)	Separate, TTL, positive/negative
Digital Input Signal	TMDS (Single Link)
Video Signal Memory	45 (preset: 20)
Plug & Play	VESA DDC 2B
Max. amplifier output	1 W + 1 W
Line input	Input impedance: 47 kΩ (typical) Input sensitivity: 500 mV
Headphone output level	6 mW + 6 mW (amplifier output: 1 W + 1 W)
Dimensions (Main unit)	415 mm (W) × 406 - 456 mm (H) × 216 mm (D) (16.3" (W) × 16.0" - 18.0" (H) × 8.5" (D))
Dimensions (without stand)	415 mm (W) × 374 mm (H) × 54 mm (D) (16.3" (W) × 14.7" (H) × 2.1" (D))
Weight (Main unit)	6.3 kg (13.9 lbs)
Weight (without stand)	4.8 kg (10.6 lbs)
Environmental Conditions	Operating temperature: -0 °C - 35 °C (32 °F - 95 °F) Storage temperature: -20 °C - 60 °C (-4 °F - 140 °F) Relative humidity: 30% - 80% (no condensation)

#### Main default settings (factory settings)

	Analog Input	Digital Input	
Brightness	100%	100%	
Smoothing	3		
FineContrast Mode	Custom		
PowerManager	VESA DPMS DVI DMPM		
Input Signal	Auto		
Off Timer Disabled			
Language	English		

#### **Outside Dimensions**





unit : mm (inch)



#### **Connector Pin Assignment**

• DIV-D connector



Pin No.	Signal	Pin No.	Signal	Pin No.	Signal
1	TMDS Data 2-	11	TMDS Data1/3 Shield	21	NC*
2	TMDS Data 2+	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 (For +5V)	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	NC*	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*		
(NC*: No Connection)					

#### • D-sub mini 15-pin connector



Pin No.	Signal	Pin No.	Signal	Pin No.	Signal
1	Red	6	Red ground	11	(Short-circuited to pin 10)
2	Green	7	Green ground	12	Data (SDA)
3	Blue	8	Blue ground	13	H. Sync
4	Ground	9	NC	14	V. Sync
5	NC	10	Ground	15	Clock (SCL)

#### **Option List**

## 5-4 Glossary

#### Clock

The analog input monitor needs to reproduce a clock of the same frequency as the dot clock of the graphics system in use, when the analog input signal is converted to a digital signal for image display.

This is called clock adjustment. If the clock pulse is not set correctly, some vertical bars appear on the screen.

#### **DVI (Digital Visual Interface)**

DVI is a digital interface standard. DVI allows direct transmission of the PC's digital data without loss. This adopts the TMDS transmission system and DVI connectors. There are two types of DVI connectors. One is a DVI-D connector for digital signal input only. The other is a DVI-I connector for both digital and analog signal inputs.

#### **DVI DMPM (DVI Digital Monitor Power Management)**

DVI DMPM is a digital interface power-saving function. The "Monitor ON (operating mode)" and "Active Off (power-saving mode)" are indispensable for DVI DMPM as the monitor's power mode.

#### Gain

This is used to adjust each color parameter for red, green and blue. An LCD monitor displays the color by the light passing through the panel color filter. Red, green and blue are the three primary colors. All the colors on the screen are displayed by combining these three colors. The color tone can be changed by adjusting the light intensity (volume) passing through each color's filter.

#### Gamma

Generally, the monitor brightness varies nonlinearly with the input signal level, which is called "Gamma Characteristic". A small gamma value produces a low-contrast image, while a large gamma value produces a high-contrast image.

#### Phase

Phase means the sampling timing to convert the analog input signal to a digital signal. Phase adjustment is made to adjust the timing. It is recommended that phase adjustment be made after the clock is adjusted correctly.

#### **Range Adjustment**

Range adjustment controls the signal output levels to display every color gradation. It is recommended that range adjustment be made before color adjustment.

#### Resolution

The LCD panel consists of numerous pixels of specified size, which are illuminated to form images. The EIZO M1900 monitor consists of 1280 horizontal pixels and 1024 vertical pixels. At a resolution of  $1280 \times 1024$ , all pixels are illuminated as a full screen (1:1).

#### sRGB (Standard RGB)

International standard for "color reproduction and color space" among peripheral devices (such as monitors, printers, digital cameras, scanners). sRGB allows Internet users to closely match colors as a simple color matching means for the Internet use.

#### Temperature

Color temperature is a method to measure the white color tone, generally indicated in degrees Kelvin. The screen becomes reddish at a low temperature, and bluish at a high temperature, like the flame temperature. 5000K: Slightly reddish white 6500K: Warm white like paper white 9300K: Slightly bluish white

#### **TMDS (Transition Minimized Differential Signaling)**

A signal transmission system for digital interface.

#### VESA DPMS (Video Electronics Standards Association - Display Power Management Signaling)

VESA provides the standardization of signals from PC (graphics board) for power saving of PC monitors. DPMS defines the signal status between PC and monitor.

# 5-5 Preset Timing

The following table shows factory preset video timing.

			Frequency	Polarity	
Mode	Dot clock		Horizontal: kHz Vertical: Hz		
VGA Graphic 320x200	25.2 MHz	Horizontal	31.5	Negative	
VGA Graphic 320x200	25.2 1011 12	Vertical	70.1	Positive	
	20 2 MU-	Horizontal	31.47	Negative	
VGA TEXT 720X400	20.3 10172	Vertical	70.09	Positive	
		Horizontal	31.47	Negative	
VGA 040X400	25.2 MHZ	Vertical	59.94	Negative	
Magintoph 640×490	20.2 MH-	Horizontal	35	Negative	
10140X400	30.2 MHZ	Vertical	66.67	Negative	
Magintoph 922v624	57 2 MU-7	Horizontal	49.72	Negative	
Maciniosn 032×024		Vertical	74.55	Negative	
Magintoph 1152v970		Horizontal	68.68	Negative	
		Vertical	75.06	Negative	
Masintash 1000.000	400 0 MU-	Horizontal	74.76	Positive	
Macintosn 1280×960	126.2 MHZ	Vertical	74.76	Positive	
		Horizontal	37.86	Negative	
VESA 640×480	31.5 MHZ	Vertical	72.81	Negative	
		Horizontal	37.5	Negative	
VESA 640×480	31.5 MHZ	Vertical	75	Negative	
	36.0 MHz	Horizontal	35.16	Positive	
VESA 800×600		Vertical	56.25	Positive	
		Horizontal	37.88	Positive	
VESA 000x000	40.0 MHZ	Vertical	60.32	Positive	
		Horizontal	48.08	Positive	
VESA 800×000	50.0 IVII 12	Vertical	72.19	Positive	
		Horizontal	46.88	Positive	
VESA 800×000	49.5 10112	Vertical	75	Positive	
VESA 1024-768	65.0 MH7	Horizontal	48.36	Negative	
VESA 1024x700	05.0 10112	Vertical	60	Negative	
VESA 1024-768	75 0 MHz	Horizontal	56.48	Negative	
VESA 1024x700	75.0 10112	Vertical	70.07	Negative	
		Horizontal	60.02	Positive	
	7 0.0 IVII IZ	Vertical	75.03	Positive	
VESA 1152×864	108 0 MH-	Horizontal	67.5	Positive	
		Vertical	75	Positive	
VESA 1280x960	108.0 MH-	Horizontal	60	Positive	
	100.0 10112	Vertical	60	Positive	
VESA 1280×1024	108.0 MH-	Horizontal	63.98	Positive	
	100.0 10112	Vertical	60.02	Positive	
VESA 1280×1024	135 0 MH-	Horizontal	79.98	Positive	
	100.0 10112	Vertical	75.03	Positive	

#### Attention

- Display position may be deviated depending on the PC connected, which may require screen adjustment using Adjustment menu.
- If a signal other than those listed in the table is input, adjust the screen using the Adjustment menu. However, screen display may still be incorrect even after the adjustment.
- When interlace signals are used, the screen cannot be displayed correctly even after screen adjustment using the Adjustment menu.

#### [Applicable to gray cabinet.]



#### Congratulations!

The display you have just purchased carries the TCO'03 Displays label. This means that your display is designed, manufactured and tested according to some of the strictest quality and environmental requirements in the world. This makes for a high performance product, designed with the user in focus that also minimizes the Impact on our natural environment.

Some of the features of the TCO'03 Display requirements:

#### Ergonomics

• Good visual ergonomics and image quality in order to improve the working environment for the user and to reduce sight and strain problems. Important parameters are luminance, contrast, resolution, reflectance, colour rendition and image stability.

#### Energy

- Energy-saving mode after a certain time beneficial both for the user and environment
- Electrical safety

#### Emissions

- Electromagnetic fields
- Noise emissions

#### Ecology

- The products must be prepared for recycling and the manufacturer must have a certified environmental management system such as EMAS or ISO 14000
- Restrictions on
  - chlorinated and brominated flame retardants and polymers
  - heavy metals such as cadmium, mercury and lead.

The requirements includes in this label have been developed by TCO Development in co-operation with scientists, experts, users as well as manufacturers all over the world. Since the end of the 1980s TCO has been involved in influencing the development of IT equipment in a more user-friendly direction. Our labeling system with displays in 1992 and is now requested by users and IT-manufacturers all over the world.

For more information, please visit www.tcodevelopment.com

#### **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.tcodevelopment.com/

# 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 M1900 Model: FlexScan M1900

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 (D-SUB mini 15 pin D-SUB mini 15 pin, the enclesed signal cable)
- Stereo mini-jack cable

## **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.

#### Hinweise zur Auswahl des richtigen Schwenkarms für Ihren Monitor

Dieser Monitor ist für Bildschirmarbeitsplätze vorgesehen. Wenn nicht der zum Standardzubehör gehörige Schwenkarm verwendet wird, muss statt dessen ein geeigneter anderer Schwenkarm installiert werden. Bei der Auswahl des Schwenkarms sind die nachstehenden Hinweise zu berücksichtigen:

- Der Standfuß muß den nachfolgenden Anforderungen entsprechen:
- a)Der Standfuß muß eine ausreichende mechanische Stabilität zur Aufnahme des Gewichtes vom Bildschirmgerät und des spezifizierten Zubehörs besitzen. Das Gewicht des Bildschirmgerätes und des Zubehörs sind in der zugehörenden Bedienungsanleitung angegeben.
- b)Die Befestigung des Standfusses muß derart erfolgen, daß die oberste Zeile der Bildschirmanzeige nicht höher als die Augenhöhe eines Benutzers in sitzender Position ist.
- c)Im Fall eines stehenden Benutzers muß die Befestigung des Bildschirmgerätes derart erfolgen, daß die Höhe der Bildschirmmitte über dem Boden zwischen 135 – 150 cm beträgt.
- d)Der Standfuß muß die Möglichkeit zur Neigung des Bildschirmgerätes besitzen (max. vorwärts: 5°, min. nach hinten  $\geq 5^{\circ}$ ).
- e)Der Standfuß muß die Möglichkeit zur Drehung des Bildschirmgerätes besitzen (max. ±180°). Der maximale Kraftaufwand dafür muß weniger als 100 N betragen.
- f) Der Standfuß muß in der Stellung verharren, in die er manuell bewegt wurde.
- g)Der Glanzgrad des Standfusses muß weniger als 20 Glanzeinheiten betragen (seidenmatt).
- h)Der Standfuß mit Bildschirmgerät muß bei einer Neigung von bis zu 10° aus der normalen aufrechten Position kippsicher sein.

#### Hinweis zur Ergonomie :

Dieser Monitor erfüllt die Anforderungen an die Ergonomie nach EK1-ITB2000 mit dem Videosignal, 1280 × 1024 (M1900) 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.)

"Maschinenlärminformations-Verordnung 3. GPSGV: Der höchste Schalldruckpegel beträgt 70 dB(A) oder weniger gemäss EN ISO 7779"

#### **Recycle Auskunft**

Die Rücknahme dieses Produktes nach Nutzungsende übernimmt EIZO in Deutschland zusammen mit dem Partner eds-r gmbh rucknahmesysteme. 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.

#### **Recycling Information for customers in Switzerland:**

All recycling information is placed in the SWICO's website. http://www.swico.ch

#### Recycling-Information für Kunden in der Schweiz:

Alle Informationen zum Thema Recycling finden Sie auf der Homepage des Brancheverbandes SWICO. http://www.swico.ch

#### Renseignements de recyclage pour les clients en Suisse:

Vous trouvez tous les renseignements pour le sujet de recyclage sur la page WEB de l'UNION DE BRAN CHE SWICO.

http://www.swico.ch

#### **Recycling Information for customers in USA:**

All recycling information is placed in the EIZO Nanao Technologies, Inc's website. http://www.eizo.com

#### Återvinnings information för kunder i Sverige:

All information om återvinning finns på Eizo Europe AB:s hemsida: www.eizo.se



#### EIZO NANAO CORPORATION

153 Shimokashiwano, Hakusan, Ishikawa 924-8566 Japan Phone: +81 76 277 6792 Fax: +81 76 277 6793

#### EIZO NANAO TECHNOLOGIES INC.

5710 Warland Drive, Cypress, CA 90630, U.S.A. Phone: +1 562 431 5011 Fax: +1 562 431 4811

#### EIZO EUROPE AB

Lovangsvagen 14 194 61, Upplands Väsby, Sweden Phone: +46 8 590 80 000 Fax: +46 8 590 91 575

#### EIZO NANAO AG

Moosacherstrasse 6, Au CH - 8820 Wadenswil, Switzerland Phone: +41-0-44 782 24 40 Fax: +41-0-44 782 24 50

#### Avnet Technology Solutions GmbH

Lötscher Weg 66, D-41334 Nettetal, Germany Phone: +49 2153 733-400 Fax: +49 2153 733-483

http://www.eizo.com/

1st Edition-September, 2005 03V21715A2 (U.M-M1900-EN)