

# **APPENDIX F :**

## **USER'S MANUAL**

## Regulatory Information

### FCC Compliance Statement

This equipment has been tested and found to comply within the limits of 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 on and off), the user is encouraged to try to correct the interference by using one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the 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.

Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the user's (or your) authority to operate the equipment. Only peripherals (digital input/output devices, terminals, printers, etc.) certified to comply with the Class B limits may be attached to this monitor. Operation with non-certified peripherals is likely to result in interference to radio and TV reception.

Only shielded signal cables may be used with this System.

#### NOTICE

The regulations are applied only to the products with the ID LABEL indicating specific requirements.

### Canadian DOC Notice

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations. Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

#### NOTICE

The regulations are applied only to the products with the ID LABEL indicating specific requirements.

### CE Conformity Notice (for Europe)

Products with the "CE" Marking comply with the EMC Directive(89/336/EEC) and LOW VOLTAGE Directive (73/23/EEC) issued by the Commission of the European Community.

Compliance with these directives implies conformity to the following European Norms :

- EN 55022:1998 ; Radio Frequency Interference
- EN 55024:1998 ; Electromagnetic Immunity
- EN 61000-3-2 ; Power Line Harmonics
- EN 61000-3-3 ; Voltage Fluctuations
- EN 60950 ; Product Safety

#### NOTICE

The regulations are applied only to the products with the ID LABEL indicating specific requirements.

### Low Radiation Compliance (MPR II)

This monitor meets one of the strictest guidelines available today for low radiation emissions, offering the user extra shielding and an antistatic screen coating. These guidelines, set forth by a government agency in Sweden, limit the amount of emission allowed in the Extremely Low Frequency (ELF) and Very Low Frequency (VLF) electromagnetic range.

### TCO95



#### Congratulations!

You have just purchased a TCO'95 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 to the further development of environmentally-adapted electronic 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 electronic equipment are concerned is that environmentally harmful substances are used both in the products and during their manufacture. Since it has not been possible so far for the majority of electronic equipment to be recycled in a satisfactory way, 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 both the working and natural environment viewpoints. Since all types of conventional electricity generation have a negative effect on the environment (acidic- and climatic-influencing emissions, radioactive waste, etc.), it is vital to conserve energy. Electronic equipment in offices consumes an enormous amount of energy, since it is often routinely left running continuously.

#### What does the environmental labelling involve?

This product meets the requirements for the TCO'95

## Regulatory Information cont.

scheme, which provides for international environmental labelling of personal computers. The labelling scheme was developed as a joint effort by the TCO (The Swedish Confederation of Professional Employees), Naturkyddsforeningen (The Swedish Society for Nature Conservation), and NUTEK (The National Board for Industrial and Technical Development in Sweden), and SEMKO AB (an international certification agency).

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

The environmental demands concern, among other things, restriction on the presence and use of heavy metals, brominated and chlorinated flame retardants, CFCs (freons), and chlorinated solvents. The product must be prepared for recycling, and the manufacturer is obliged to have an environmental plan, 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.

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

The following is a brief summary of the environmental requirements met by this product. The complete environmental criteria document may be ordered from:

TCO Development Unit  
Lindegatan 14, S-11494 Stockholm, Sweden  
FAX +46-8 782 92 07  
E-mail (Internet): development@tco.se

Current information regarding TCO'95 approved and labelled products may also be obtained on the Internet using the address: <http://www.tco-info.com/>

TCO'95 is a co-operative project between:



Naturkydds  
foreningen



NUTEK

SEMKO

Närings- och teknikutvecklingsverket

### Environmental requirements

Brominated flame retardants are present in printed circuit boards, cabling, casings, and housings, and are added to delay the spread of fire. Up to 30% of the plastic in a computer casing can consist of flame-retardant substances. These are related to another group of environmental toxins, PCBs, and are suspected of giving rise to similar harm, including reproductive damage in fish-eating birds and mammals. Flame retardants have been found in human blood, and researchers fear that they can disturb fetus development.

Bio-accumulative<sup>1</sup> TCO'95 demands require that plastic components weighing more than 25 grams must not contain flame retardants with organically bound chlorine or bromine.

Lead can be found in picture tubes, display screens, solder, and capacitors. Lead damages the nervous system and in higher doses causes lead poisoning. The relevant bio-accumulative TCO'95 requirement permits the inclusion of lead, as no replacement has yet been developed.

Cadmium is present in rechargeable batteries and in the color-generating layers of certain computer displays. Cadmium damages the nervous system and is toxic in high doses. The relevant bio-accumulative TCO'95 requirement states that batteries may not contain more than 25 ppm (parts per million) of cadmium. The color-generating layers of display screens must not contain any cadmium.

Mercury is sometimes found in batteries, relays and switches. Mercury damages the nervous system and is toxic in high doses. The relevant bio-accumulative TCO'95 requirement states that batteries may not contain more than 25 ppm of mercury and that no mercury is present in any of the electrical or electronic components concerned with the display unit.

CFCs (freons) are sometimes used for washing printed circuit boards and in the manufacture of expanded foam for packaging. CFCs break down ozone and thereby damage the ozone layer in the atmosphere, causing increased reception on Earth of ultra-violet light with consequent increased risks of skin cancer (malignant melanoma). The relevant TCO'95 requirement: Neither CFCs nor HCFCs may be used during the manufacture of the product or its packaging.

<sup>1</sup> Bio-accumulative means that the substance accumulates within living organisms.

### Shipping Package

The packaging material can be recycled, or you can save it to return the monitor to a service center for repair or disposal.

### CFC Compounds in Distribution Packaging

Cushioning material used for shipping finished monitors are not manufactured with nor do they contain any CFC compounds.

### Design for Disassembly/Recycling

These monitors have been designed for easy end-of-life disassembly and recycling. Fasteners are generally of the same type for efficient disassembly. Components made of different materials can be easily separated and plastics have been identified using international symbols to aid in recycling.

### Monitor Disposal

#### WARNING

If you need to dispose of a monitor, ask a qualified service representative for the proper procedure. Improper disposal could result in personal injury from implosion.

## Regulatory Information cont.

### TCO'99



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.

Below you will find a brief summary of the environmental requirements met by this product. 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](mailto: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.

## Regulatory Information cont.

### 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 heavy metals which are Bio-accumulative.

## EPA (U.S.A only)

ENERGYSTAR is a set of power-saving guidelines issued by the U.S. Environmental Protection Agency(EPA).



EPA POLLUTION PREVENTER

As an ENERGY STAR Partner LG Electronics U.S.A.,Inc. has determined that this product meets the ENERGY STAR guidelines for energy efficiency.

## NOM MARK (Mexico only)



## GOST MARK



BZ03

Internet Address:<http://www.lg.ru>

Информационная служба LG

Electronics (095)742-77-77

## Introduction

**Thank you for purchasing a high resolution monitor. It will give you high resolution performance and convenient reliable operation in a variety of video operating modes.**

ENGLISH

### Features

- The monitor is a 17 inches (16.0 inches viewable ) intelligent, microprocessor based monitor compatible with most analog RGB (Red, Green, Blue) display standards, including IBM PC®, PS/2®, Apple®, Macintosh®, Centris®, Quadra®, and Macintosh II family.
- The monitor provides crisp text and vivid color graphics with VGA, SVGA, XGA, and VESA Ergonomic modes (non-interlaced), and most Macintosh compatible color video cards when used with the appropriate adaptor. The monitor's wide compatibility makes it possible to upgrade video cards or software without purchasing a new monitor.
- Digitally controlled auto-scanning is done with the micro-processor for horizontal scan frequencies between 30 and 70kHz, and vertical scan frequencies between 50-160Hz.
- This monitor is capable of producing a maximum horizontal resolution of 1280 dots and a maximum vertical resolution of 1024 lines.
- The microprocessor-based digital controls allow you to adjust conveniently a variety of image controls by using the OSD (On Screen Display).
- On Screen Display (OSD) adjustments in 11 languages: English, German, French, Spanish, Italian, Swedish, Finnish, Portuguese, Korean, Chinese and Russian.
- Plug and play capability if supported by your system.
- This monitor has DDC 2B function.\*
- Compliant with the following regulated specifications :\*
  - EPA ENERGY STAR
  - Swedish MPRII
  - Swedish TCO'99

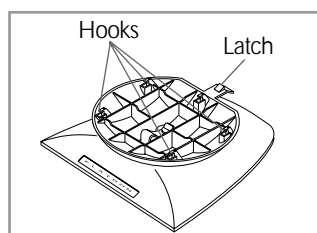
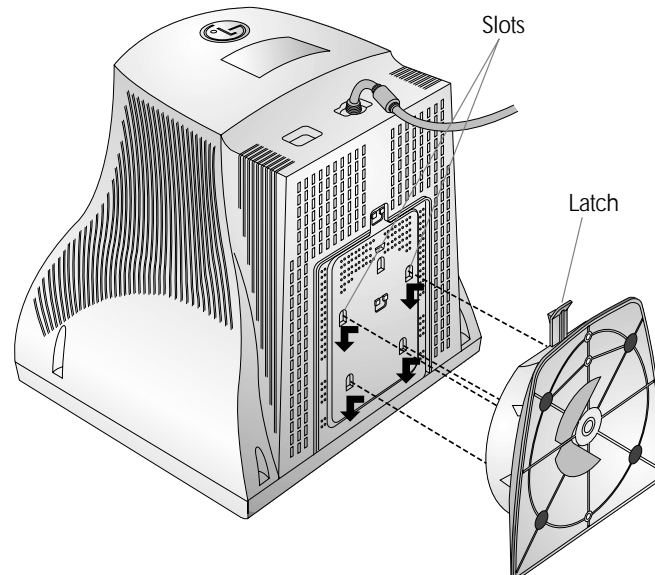
*\*For detailed information, please refer to the Reference Guide provided .*

## Connecting the Monitor

- Turn off the equipment and all attached options.
- Carefully set the monitor face-down with the underside facing you.

### Installation

1. Align the hooks on the tilt/swivel stand with the matching slots in the base of the monitor.
2. Insert the hooks into slots.
3. Slide the tilt/swivel stand toward the front of the monitor until the latches click into the locked position.



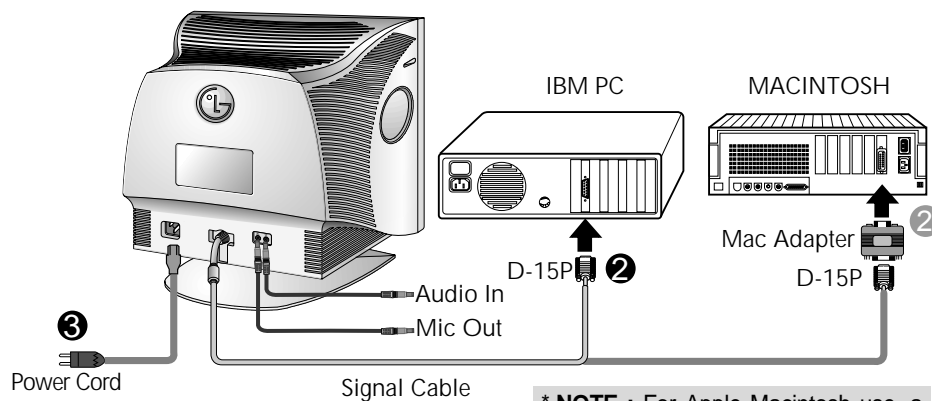
## Connecting the Monitor

**On the back of the monitor are two plug-in connections; one for the AC power cord, and the other for the signal cable from the video card.**

- 1 Power off both the monitor and PC.
- 2 Connect the 15 pin VGA connector of the supplied signal cable to the output VGA video connector on the PC and the matching input connector on the rear of the monitor. The connectors will mate only one way. If you cannot attach the cable easily, turn the connector upside down and try again. When mated, tighten the thumbscrews to secure the connection.
- 2' Locate the appropriate MAC to VGA adapter block at your local computer store. This adapter changes the high density 3 row 15 pin VGA connector to the correct 15 pin 2 row connection to mate with your MAC. Attach the other end of the signal cable to the side of the adapter block with 3 rows.

Connect the attached adapter block/signal cable to the video output on your MAC.

- 3 One end of the AC power cord is connected into the AC power connector on the back of the monitor. The other end is plugged into a properly grounded three-prong AC outlet.
- 4 Power on the PC, then the monitor.
- 5 If you see the **SELF DIAGNOSTICS** message, check the signal cable and connectors.
- 6 After using the system, power off the monitor, then the PC.

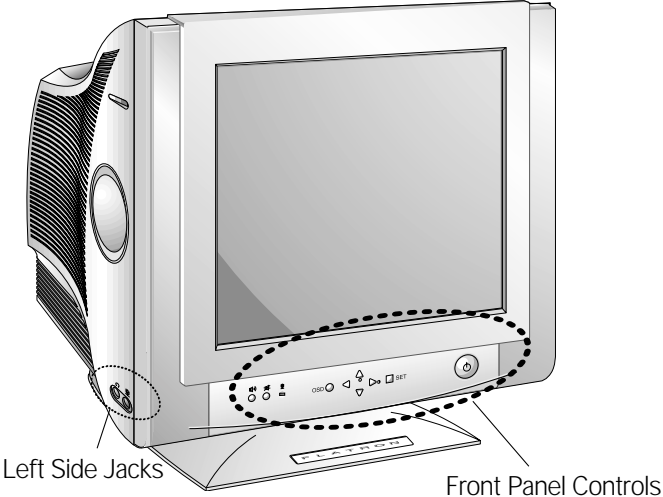


**\* NOTE :** For Apple Macintosh use, a separate plug adapter is needed to change the 15 pin high density (3 row) D-sub VGA connector on the supplied cable to a 15 pin 2 row connector.

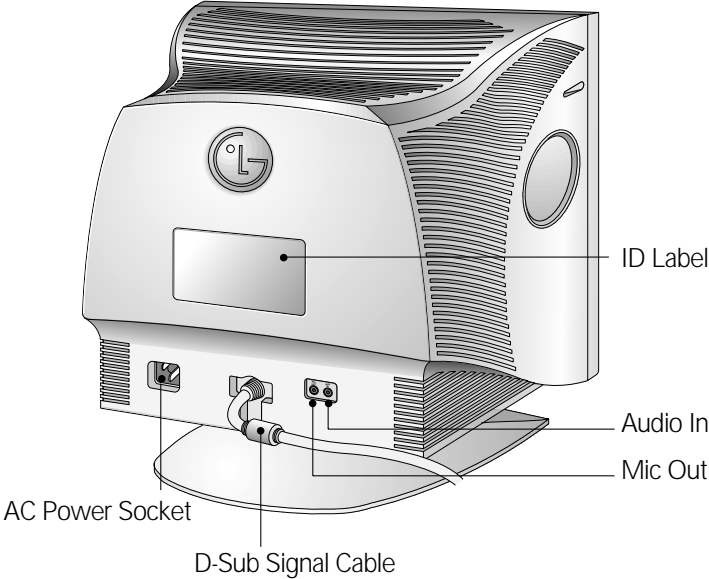


# Location and Function of Controls

## Front View

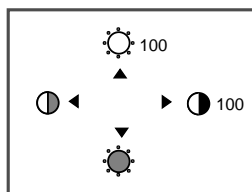
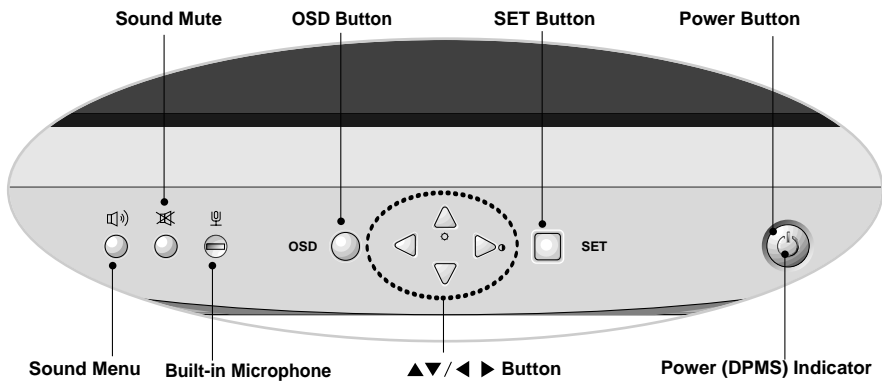


## Rear View



# Control Panel Function

## Front Panel Controls



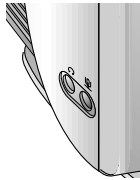


### <Shortcut Keys>

- Brightness and Contrast can be adjusted directly without entering the On Screen Display (OSD) system. Press the  $\Delta/\triangleright$  buttons to display the menu and then the  $\Delta/\triangleright/\triangleleft/\triangleright$  buttons to adjust the settings. To save all changes, press the **OSD button**. The Brightness and Contrast functions are also available in the On Screen Display (OSD) menu.


Control	Function
<b>Sound Menu</b>	To adjust sound menu.
<b>Sound Mute</b>	Used to select mute on (means sound off) and mute off (means sound on).
<b>Built-in Microphone</b>	Built-in Microphone.
<b>OSD Button</b>	Use this button to enter or exit the on screen display.
<b>▲▼/◀▶ Button</b>	Use these buttons to choose or adjust items in the on screen display.
<b>SET Button</b>	Use this button to enter a selection in the on screen display.
<b>Power Button</b>	Use this button to turn the monitor on or off.
<b>Power (DPMS) Indicator</b>	The power indicator light is shown in the power button. This Indicator lights up green when the monitor operates normally. If the monitor is in DPM (Energy Saving) mode (stand-by/suspend/power off), this indicator color changes to amber.

## Control Panel Function

### Left Side Jacks

	<b>Headphone Jack</b> 	Headphone Jack that automatically mutes the speaker volume when headphone is attached.
	<b>Microphone Jack</b> 	An external microphone can be used instead of the built-in microphone.

### Rear Panel Jacks

	<b>Mic. Out</b>	Connects microphone sound to PC via cable.
	<b>Audio In</b>	Connects speaker sound to PC via cable attachment.

### Microphone Operation

On the left side there is a MIC (Microphone) jack. By plugging a microphone in here, it may reduce the long length of cable needed to reach the PC's sound card. In order to use this MIC jack, you need to use a cable (supplied) to plug into the rear of the monitor (MIC OUT) and into the MIC input jack of your sound card (if available).

### Audio Features

A major feature of this monitor is its built-in audio system. This conveniently integrates a stereo audio amplifier and speakers without taking up any more space. Because the monitor is designed like this, you can easily upgrade to audio capable multimedia applications by attaching your PC with sound card to the back of this monitor. It will result in significantly less cabling and space requirements.

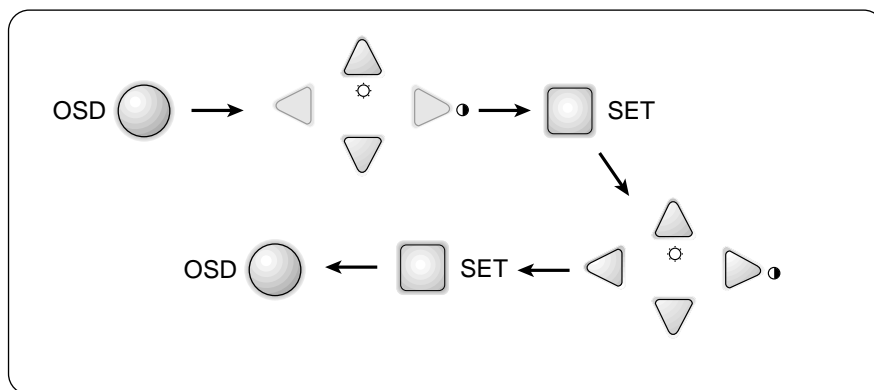
## On Screen Display (OSD) Control Adjustment

**Making adjustments to the image size, position and operating parameters of the monitor are quick and easy with the On Screen Display Control system. A quick example is given below to familiarize you with the use of the controls. Following section is an outline of the available adjustments and selections you can make using the OSD.**

### NOTE

- Allow the monitor to stabilize for at least 30 minutes before making image adjustment.

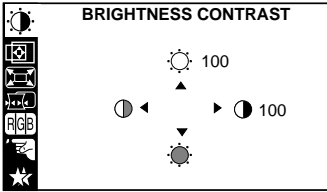




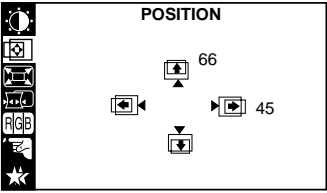




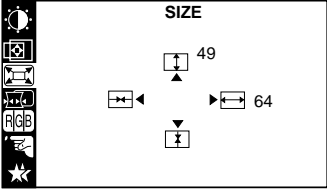




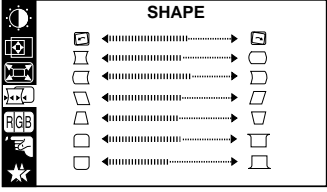














To make adjustments in the On Screen Display, follow these steps:



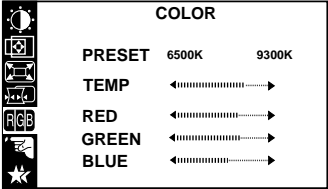
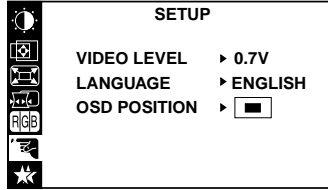
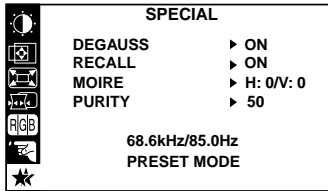
- 1** Press the **OSD Button**, then the main menu of the OSD appears.
- 2** To access a control, use the **△** or **▽** **Buttons**. When the icon you want becomes highlighted, press the **SET Button**.
- 3** Use the **△▽/◀▶** **Buttons** to adjust the item to the desired level.
- 4** Accept the changes by pressing the **SET Button**.
- 5** Exit the OSD by pressing the **OSD Button**.

# On Screen Display(OSD) Selection and Adjustment

You were introduced to the procedure of selection and adjusting an item using the OSD system. Listed below are the icons, icon names, and icon descriptions of the items that are shown on the Menu.

OSD Adjust	Description
	<p>  <b>Brightness</b> Used to adjust the brightness of the screen.</p> <p>  <b>Contrast</b> Adjust the display to the contrast desired.</p>
	<p>  <b>Vertical Position</b> To move image up and down.</p> <p>  <b>Horizontal Position</b> To move picture image left and right.</p>
	<p>  <b>Vertical Size</b> To adjust image height.</p> <p>  <b>Horizontal Size</b> To adjust image width.</p>
	<p>  <b>Tilt</b> To correct image rotation.</p> <p>  <b>Side Pincushion</b> To correct the bowing in and out of the image.</p> <p>  <b>Side pincushion balance</b> To correct the balance of both sides bowling.</p> <p>  <b>Parallelogram</b> This control adjusts for a skewing of the screen image.</p> <p>  <b>Trapezoid</b> To correct geometric distortion.</p> <p>  <b>Corner Top</b> To correct the irregular distortion of the displayed image.</p> <p>  <b>Corner Bottom</b> To correct the irregular distortion of the displayed image.</p>

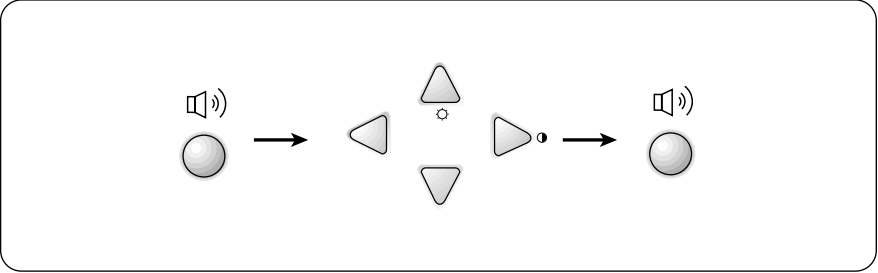
## On Screen Display(OSD) Selection and Adjustment

OSD Adjust	Description
 <p><b>COLOR</b></p> <p>PRESET 6500K 9300K</p> <p>TEMP ←————→</p> <p>RED ←————→</p> <p>GREEN ←————→</p> <p>BLUE ←————→</p>	<p><b>PRESET 6500K / 9300K</b> To appear the displays color temperature.</p> <ul style="list-style-type: none"> <li>• 6500K : Slightly reddish white.</li> <li>• 9300K : Slightly bluish white.</li> </ul> <p><b>TEMP</b> User easily color set without adjustment Red, Green and Blue (R/G/B).</p> <p><b>RED</b> To set your own color levels.</p> <p><b>GREEN</b> To set your own color levels.</p> <p><b>BLUE</b> To set your own color levels.</p>
 <p><b>SETUP</b></p> <p>VIDEO LEVEL ▶ 0.7V</p> <p>LANGUAGE ▶ ENGLISH</p> <p>OSD POSITION ▶ <input type="checkbox"/></p>	<p><b>VIDEO LEVEL</b> This item is used to select the monitor's input signal level. The normal level used for most PC's is 0.7V. When the screen suddenly gets brightened or blurry, please select 1.0V and try again.</p> <p><b>LANGUAGE</b> To choose the language in which the control names are displayed.</p> <p><b>OSD POSITION</b> To adjust position of the OSD window on the screen.</p>
 <p><b>SPECIAL</b></p> <p>DEGAUSS ▶ ON</p> <p>RECALL ▶ ON</p> <p>MOIRE ▶ H: 0/V: 0</p> <p>PURITY ▶ 50</p> <p>68.6kHz/85.0Hz</p> <p>PRESET MODE</p>	<p><b>DEGAUSS</b> To manually demagnetize the screen which may show some image or color incorrectly.</p> <p><b>RECALL</b> You can use this function when you want to go back to the screen display of the time you purchased the product after adjusting to modify it in the Preset Mode. When you are in the User mode, you can recall only <input type="checkbox"/>, <input type="checkbox"/>, <input type="checkbox"/>, <input type="checkbox"/>, <input type="checkbox"/>, <input type="checkbox"/> items. After using Recall, adjust the screen display again if necessary. If you want more information on the Preset Mode, refer to A11 page.</p> <p><b>MOIRE</b> This item allows you to reduce the moire (Moire is caused by interference Horizontal Scan Line with the periodical dot screen). It is normally OFF(H:0/V:0). The moire adjustments may affect the focus of the screen. The screen image may shake slightly while the moire reduction function is on.</p> <p><b>PURITY</b> Use to adjust the overall purity of the image if the color appears uneven.</p>

# Sound Selection and Adjustment

You were introduced to the procedure of selection and adjusting an item using the OSD system. Listed below are the icons, icon names, and icon descriptions of the items that are shown on the main Menu.

To make adjustments in the On Screen Display, follow these steps:



OSD Adjust		Description
	<b>VOLUME</b>	Raises or lowers audio level.
	<b>TREBLE</b>	Raises or lowers treble level.
	<b>BASS</b>	Raises or lowers bass level.
	<b>BALANCE</b>	Changes balance of left/right speaker level.
	<b>MICROPHONE</b>	Enables or disables microphone usage.

## Video Memory Modes

The monitor has 34 memory locations for display modes, 10 of which are factory preset to popular video modes.

### Display Modes (Resolution)

	Display Modes (Resolution)	Horizontal Freq.(kHz)	Vertical Freq.(Hz)
1	VESA 640 x 480	37.50	75
2	VESA 800 x 600	46.88	75
3	VESA 800 x 600	53.68	85
4	VESA 1024 x 768	68.677	85
*5	VESA 640 x 400	31.47	70
*6	VESA 640 x 480	31.47	60
*7	VESA 800 x 600	37.88	60
*8	VESA 640 x 480	43.27	85
*9	VESA 1024 x 768	60.02	75
*10	VESA 1280 x 1024	63.98	60

\* Pre-loaded mode

### User Modes

- Modes 11-34 are empty and can accept new video data. If the monitor detects a new video mode that has not been present before or is not one of the preset modes, it stores the new mode automatically in one of the empty modes starting with mode 11.

If you use up the 24 blank modes and still have more new video modes, the monitor replaces the information in the user modes starting with mode 11.

### Recalling Display Modes

- When your monitor detects a mode it has seen before, it automatically recalls the image settings you may have made the last time you used that mode.

You may, however, manually force a recall of each of the 10 preset modes by pressing the Recall button. All preset modes are automatically recalled as the monitor senses the incoming signal.

The ability to recall the preset modes is dependent on the signal coming from your PC's video card or system. If this signal does not match any of the factory modes, the monitor automatically sets itself to display the image.



## Troubleshooting

### **Check the following before calling for service.**

#### **SELF DIAGNOSTICS(NO SIGNAL) message.**

- The signal cable is not connected, or is loose. Check and secure the connection.

#### **OUT OF FREQUENCY(OUT OF RANGE) message appears.**

- The frequency of the signal from the video card is outside the operating range of the monitor.

\* Horizontal Frequency : 30-70kHz

\* Vertical Frequency : 50-160Hz

Use the graphics board's utility software to change the frequency setting (Refer to the manual for graphics board).

#### **The power LED is illuminated amber.**

- Display power management mode.
- There is no active signal coming from the PC.
- The signal cable is not fastened securely.
- Check the computer power and graphics adapter configuration.

#### **The image on the SCREEN is not centered, or too small, or not a rectangle shape.**

- Image adjustment not been done yet in the current operating mode. Use the OSD, SET and  $\Delta \nabla / \triangleleft \triangleright$  buttons to set the image to your liking.

#### **The monitor doesn't enter the power saving off mode (Amber).**

- Computer video signal is not VESA DPMS standard. Either the PC or the video controller card is not using the VESA DPMS power management function.

#### **An abnormal picture is displayed on the screen. For example, the upper part of the picture may be missing or dark.**

- If using certain non-VESA Standard video card, an abnormal picture may be displayed. Try setting it to one of the factory preset modes, or selecting to a resolution and refresh rate within the specification limits of the monitor.

#### **NOTE**

- If the power indicator(LED) light is blinking amber, may result in abnormal condition of the monitor.
- Then press a power ON/OFF button on the front panel control and call your service technician for more information.

## Specifications

<b>Picture Tube</b>	17 inch (16.0 inches viewable) Perfect Flat Tube	
	90 degree deflection	
	0.24mm Slot pitch	
	W-ARAS(Wide Anti-Reflective Anti-Static) coating	
<b>Sync Input</b>	Horizontal Freq.	30 - 70kHz (Automatic)
	Vertical Freq.	50 - 160Hz (Automatic)
	Input Form	Separate, TTL, Positive/Negative
	Signal Input	15 pin D-Sub Connector
<b>Video Input</b>	Input Form	Separate, RGB Analog, 0.7Vp-p/75 ohm, Positive
	Resolution(max)	1280 x 1024@60Hz
<b>Audio</b>	RMS Audio Output	1W + 1W (R+L)
	Input Sensitivity	0.7 Vrms
	Speaker Impedance	4Ω
<b>Power Consumption</b>	Max	≤ 115W
	Normal	≤ 74W
	Stand-by/Suspend	≤ 15W
	Power Off	≤ 8W
<b>Dimensions (with tilt/ swivel stand)</b>	Width	46.0 cm / 18.1 inches
	Height	43.9 cm / 17.28 inches
	Depth	44.0 cm / 17.3 inches
<b>Power Input</b>	AC 100-240V 50/60Hz 2.0A	
<b>Weight</b>	Net	21 kg (46.3 lbs)
<b>Environmental Conditions</b>	Operating Condition	
	Temperature	10 °C to 40 °C
	Humidity	10 % to 90 % non-Condensing
	Storage Condition	
	Temperature	0 °C to 60 °C
	Humidity	5 % to 90 % non-Condensing

### NOTE

- Information in this document is subject to change without notice.