

## APPENDIX 5

### USER'S MANUAL OF EUT

The enclosed manual is for the EUT. As you will notice on the preceding page of this manual is the **FCC WARNING** about radio and television interference as per the requirement set forth in Part 15 of the FCC Rules.



## Important Safety Instructions

1. Please read these instructions thoroughly.
2. Please keep this guide for future use.
3. Please disconnect the device from the main supply before cleaning. Do not use any liquid or aerosol spray cleaners. The best for cleaning is a piece of cloth dampened with water.
4. To avoid damage of the device, you should only use accessory parts permitted by the manufacturer.
5. The device must be protected against moisture.
6. To setup the device, it must be put in a stable stand position. Tipping it over or dropping it may cause injuries. Only use safety setup locations and follow the setup instructions of the manufacturer.
7. The ventilation openings are used for air circulation which protect the device against overheating.
8. To connect the device, follow the connected load values of the main supply.
9. Due to electrical safety, the wall socket must be equipped with a non-fused earthed conductor contact.
10. The power cable must be laid in a way that nobody may trip over it. There should also nothing be resting on the cable.
11. All instructions and warning remarks on the device must be followed.
12. If the device will not be used for a long period of time, you should disconnect it from the main supply to avoid overvoltage damage.
13. Any objects or liquid should never enter the device via its openings for air circulation. This could cause a fire or an electric shock.
14. Do not open the device ever. For electrical safety, the device shall be opened by authorized technical service personnel only.
15. If following conditions occur, the device must be disconnected from the main supply, and it must be checked by a qualified service center:
  - a- Power cable or power plug are damaged;
  - b- Liquid has entered the device;
  - c- The device was exposed to moisture;
  - d- The device does not operate according to the user's guide, or you do not achieve any improvement with the aid of this guide;
  - e- The device has dropped and/or the casing is damaged;
  - f- The device shows obvious signs of a defect.
16. For repair, only original spare parts or parts in accordance with the original parts may be used. Use of unsuitable spare parts can cause more damage.
17. Please turn to your service center for all questions concerning service and repair to guarantee the device's performance reliability.
18. The socket outlet must be installed near the equipment to be easily accessible.

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## FEDERAL COMMUNICATIONS COMMISSION (FCC STATEMENT)

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.

Any changes or modifications not expressly approved by the manufacturers may void the user's authority to operate this equipment.



A shielded-type power cord is required in order to meet the FCC emission limits and also to prevent interference to nearby radio and television reception. It is essential that only the supplied power cord be used.

Use only shielded cables to connect I/O devices to this equipment.



### Canadian DOC Notice

#### For Class B Computing Devices

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.

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# CHAPTER 1

## Introduction

Congratulations on your purchase of the new high performance 15" Monitor. Much consideration has gone into the design of the monitor in order to meet your requirements for full compatibility and versatility as well as quality.

Using state-of-the-art electronics, the monitor can support a resolution of 1280x1024, User display settings will be automatically saved to memory. In addition, at the touch of a button the user can, at any time, return to the factory default display settings.

Other ergonomic features include a non-glare screen, tilt and swivel and *just two* multi-function display controls that allow you to make all monitor display adjustments.

## Unpacking

Please make sure the following items are in the shipping package and found in good condition:

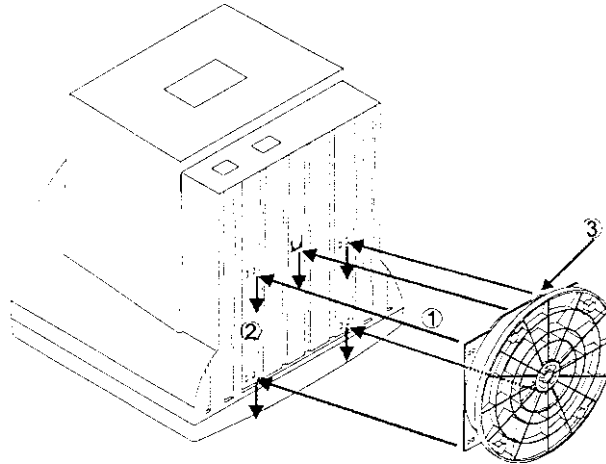
- 15" Monitor
- Tilt and swivel stand
- Power cord
- Signal cable (attached to monitor)
- This manual

If any of the above are missing or appear damaged, please contact your dealer immediately.



## **Connecting the Monitor and Stand**

- Align the stand's four tabs with the slots on the bottom of the monitor.
- Insert the tabs into the slots.
- Slide the stand towards the front of the monitor.



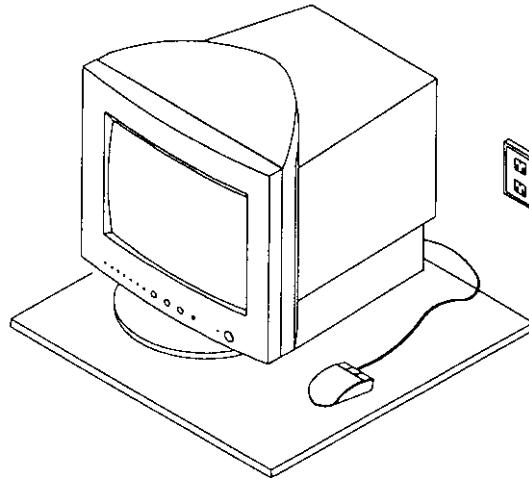
*Figure 1: Monitor and Stand Connection*

## **Choosing A Workstation**

When choosing an appropriate workspace, keep these few things in mind:

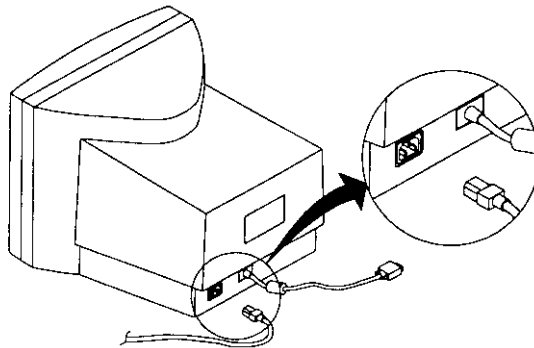
- ◆ A sturdy, level surface.
- ◆ An electrical wall outlet and a telephone wall jack near the computer.
- ◆ At least 3-inch clearance at the back of the computer to allow for the required airflow.
- ◆ Do not place near a window. Exposing the Monitor to direct sunlight for extended periods may damage the unit.
- ◆ You may want to use a desk lamp to adjust the ambient lighting for your viewing comfort.

A viewing filter is recommended to reduce eye stress and fatigue.



### **The AC Connection**

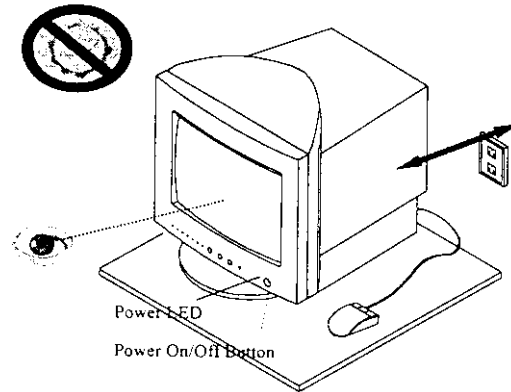
- ◆ Locate the AC port on the rear of the monitor.
- ◆ Plug the female end of the AC cord into the AC port.
- ◆ Plug the male end into the power supply.



*Figure 3: Connecting the Power Cord*

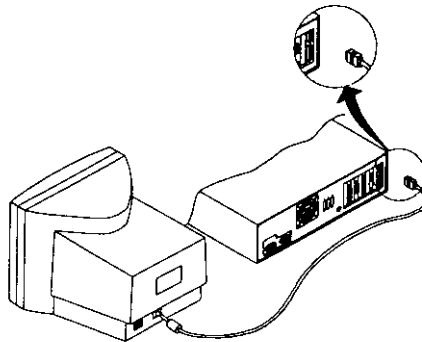
## The Signal Cable Connection

- ◆ Locate the ON/OFF power switch. See Figure 4.
- ◆ Make sure that the Monitor power switch is in the OFF position. The OFF position is indicated with a circular icon.



**Figure 4: ON/OFF Power Switch**

- ◆ Locate the VGA port on the rear of the PC. The signal cable has a standard 15-pin mini D-sub (VGA) connector. If you are having trouble locating the VGA port, please refer to the documentation which came with your PC.
- ◆ Connect the Signal cable to the PC's VGA port.



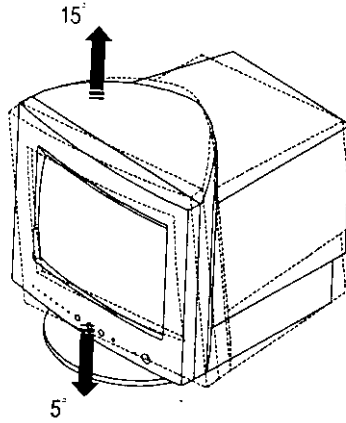
**Figure 5: Connecting the Signal Cable**





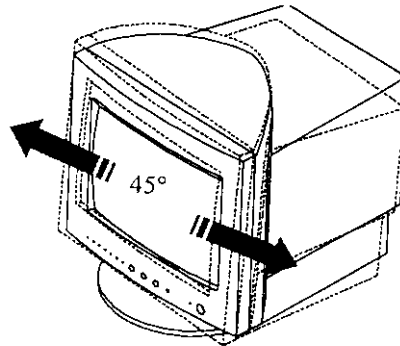
## Monitor Adjustments

The monitor is capable of both tilt and swivel adjustments.



*Figure 5: Tilt Adjustment*

- With the tilt feature, the monitor is capable of vertical adjustments of +15° to -5°.
- The swivel feature allows for horizontal monitor adjustments of +45° to -45°.



*Figure 6: Swivel Adjustment*

# Chapter 2



## User Controls

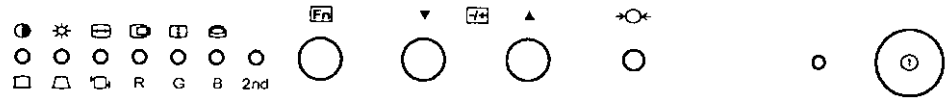
This display device shall have external controls to implement at least the following function:

- ♦ POWER SWITCH
- ♦ POWER INDICATOR
- ♦ BRIGHTNESS CONTROL
- ♦ CONTRAST CONTROL
- ♦ HORIZONTAL WIDTH CONTROL
- ♦ VERTICAL HEIGHT CONTROL
- ♦ PINCUSHION CONTROL
- ♦ TRAPEZOID CONTROL
- ♦ TILT control
- ♦ TILT control
- ♦ R gain control
- ♦ G gain control
- ♦ B gain control
- ♦ HORIZONTAL phase control
- ♦ Vertical center control

A recall function shall be present on the monitor to recall the factory preset.

All this functions as shown in the drawing below:

- Note.*
- When the highest or lowest possible setting for a particular display control has been reached, its corresponding LED will flash.
  - When the 2nd LED light is on, you must follow the 2nd function indication.





## Icon Descriptions

Icon	Description
	<b>Contrast:</b> This control allows you to adjust the display contrast level to accommodate the ambient lighting conditions of your working environment.
	<b>Brightness:</b> This control allows you to fine tune the display brightness level.
	<b>H-Width:</b> This control allows you to stretch or squeeze the display area horizontally.
	<b>H-Phase:</b> This control allows you to adjust the display to the right or to the left.
	<b>V-Height:</b> This control allows you to stretch or squeeze the display area vertically.
	<b>V-Center:</b> This control allows you to adjust the display up or down on the screen.
	<b>Pincushion:</b> This control allows you to alter the image geometry of the display area to prevent the image from curving either inwardly or outwardly.
	<b>TRAPEZOID:</b> This control allows you to adjust the trapezoid of the display.
	<b>Tilt:</b> This control allows you to adjust the display tilt.
<b>R</b>	<b>Red gain:</b> This control allows you to adjust the Red gain.
<b>G</b>	<b>Green gain:</b> This control allows you to adjust the Green gain.
<b>B</b>	<b>Blue gain:</b> This control allows you to adjust the Blue gain.



## Technical Information

### Monitor Specifications

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#### Screen

Size	15" CRT
Dot Pitch (mm)	0.28
Surface	Non-glare
Viewable Display Area (mm)	260 x 195

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#### Input Signal

Video Sys.	RGB Analog 0.7Vp-p/75 Ohm a. Separate H/V, TTL (+/-) b. Composite H+V, TTL (+/-)
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#### Scanning Frequency

Horizontal (KHz)	30-70
Vertical (Hz)	50-120
Video Bandwidth	110MHz
Max. Resolution	1280 x 1024

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#### Compatibility

IBMVGA, VESA VGA, ERGOVGA, SVGA, UVGA and XGA modes.

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#### Plug & Play

DDC1 & DDC2B

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#### Display Colors

Unlimited

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#### Signal Cable

Captive 15 pin, mini D-sub

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#### Power

Consumption	85W for normal tubes
Supply	100-240VAC 50/60Hz
Power Management	
Complies with EPA, VESA DPMS	

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#### Display Modes

Preset	6
User	28

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#### Low Radiation

MPR II or VLMF Optional,  
TCO Optional

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#### Operating Range

Temperature	0-40°C
Relative Humidity	10%-90%
Altitude	Sea level to 8,000ft

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#### Dimensions (including stand)

382mm(L) x 360.4mm (W) x 367 mm (H)

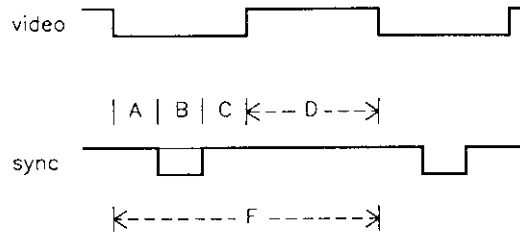
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#### Weight

Net 12.5kg (27.5lb)

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## Preset Timing



## Preset mode timing

	MODE	H Pixels V Lines	Fd (MHz)	Fh (KHz)	Th (us)	Td (us)	Tb (us)	Tp (us)	Tf (us)
			Polar (H/V) d:dot	Fv (Hz)	Tv (ms)	Td (ms)	Tb (ms)	Tp (ms)	Tf (ms)
1	IBM VGA	640 480	25.175 N/N	31.47 59.94	31.778 16.681	25.422 15.253	1.907 1.048	3.813 0.064	0.636 0.318
2	VESA (Primary)*	800 600	49.5 P/P	46.874 75	21.333 13.333	16.162 12.8	3.232 0.448	1.616 0.064	0.323 0.021
3	VESA	800 600	56.25 p/p	53.674 85.061	18.631 11.756	14.222 11.179	2.702 0.503	1.138 0.056	0.569 0.018
4	VESA	1024 768	78.75 P/P	60.023 75.029	16.66 13.328	13.003 12.795	2.235 0.466	1.219 0.05	0.203 0.017
5	VESA	1280 1024	108 P/P	63.981 60.02	15.63 16.661	11.852 16.005	2.296 0.594	1.037 0.047	0.444 0.016
6	VESA	1024 768	94.5 P/P	68.677 84.997	14.561 11.765	10.836 11.183	2.201 0.524	1.016 0.044	0.508 0.015

Figure 9

**Note:**

\* Primary mode is the key timing which is adjusted and compliant to the product specification during the production at the factory.

All other preset timings are secondary and adjusted roughly within the range of product nature. It may require a fine tune to gain optimal settings. for user's application.

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## **Caring For Your Monitor**

### **Cleaning the screen**

To clean your screen follow these steps:

- Never spray liquid cleaners on or around the Monitor.
- Spray the liquid cleaner on a rag while standing away from the computer. Avoid excessive dampening.
- Clean the screen with slightly damp rag

### **Ventilation slots**

The ventilation slots allow air to flow through the Monitor. They protect the unit from overheating. Therefore, do not cover or obstruct the ventilation slots. Likewise, do not place the Monitor on or near a heater.

### **Power Cord**

It is best to place the power cord out of the way. If it must be exposed to traffic, tape it to the floor or use a cord shield.

### **Grounding**

Grounding protects the Monitor from static discharge. Do not defeat the purpose of the plug by cutting off the third prong and jamming it into a two prong outlet.