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.

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.

- We accomplished to adapt the fusion design and technology to the monitor. Soft touch buttons on the front panel are simple and allow you to conveniently adjust a variety of image controls. The absolute flat screen and screen surface treatment eliminate distracting glares.

- USB(Universal Serial Bus) ports at the side of the monitor are prepared for the USB cable and hub. You can easily and flexibly connect USB - designed devices-such as a mouse, keyboard or printer- to the monitor for true Plug and Play function.

- This monitor provides audio function. Thanks to built in audio function in the speaker, you can easily separate speakers from the monitor and place them where you want.

- 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.

- 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 MPR II
  - Swedish TCO'95

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

A1

To set up the monitor, ensure that the power is turned off to the monitor, computer system, and other attached devices, then follow these steps:

● Connect the speakers as described in below picture.

● 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.

● 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.

● 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.

● Power ON the PC, then the monitor.

● If you see the SELF DIAGNOSTICS message, check the signal cable and connectors.

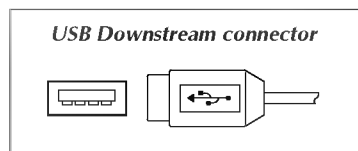● After using the system, power OFF the monitor, then the PC.

IBM PC   MACINTOSH

Mac Adapter

D-15P   D-15P

Audio In
Mic Out
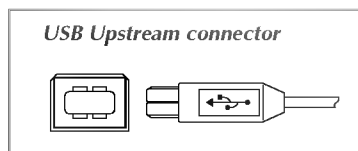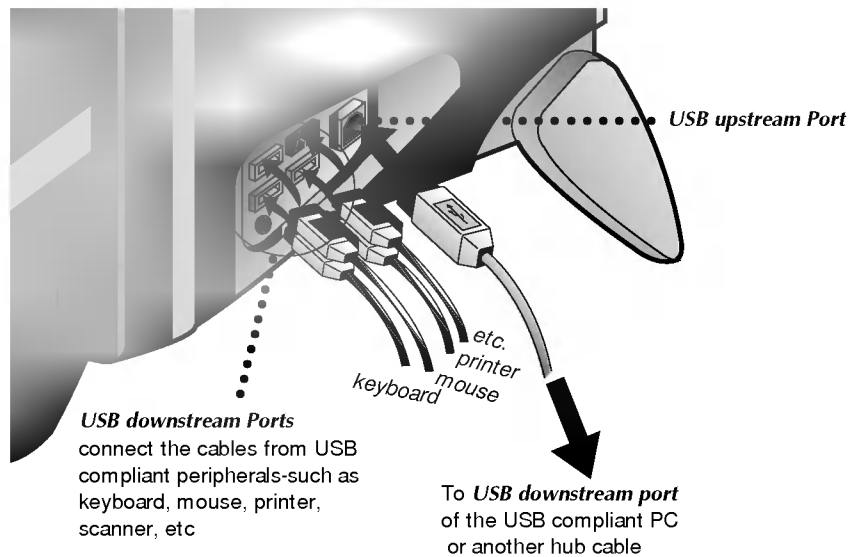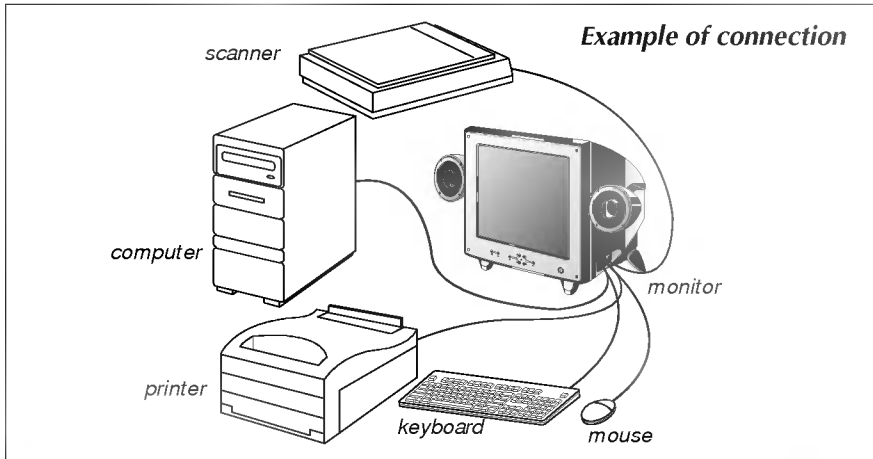
Power Cord   Signal Cable
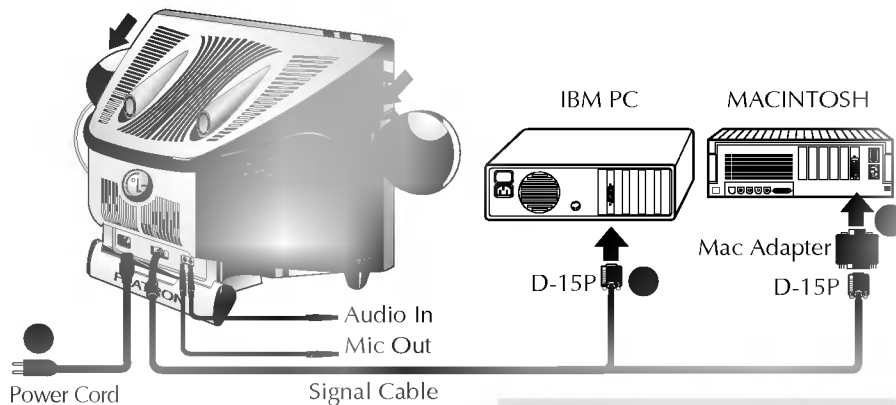
* **NOTE :** For Apple Macintosh use, a separate plug adapter is needed to change the 15 pin high density (3 row) D-sub VGA connector on the supplied cable to a 15 pin 2 row connector.

USB (Universal Serial Bus) is an innovation in connecting your different desktop peripherals conveniently to your computer. By using the USB, you will be able to connect your mouse, keyboard, printer, and other peripherals to your monitor instead of having to connect them to your computer. This will give you greater flexibility in setting up your system. USB allows you to connect chain up to 120 devices on a single USB port, and you can "hot" plug (attach them while the computer is running) or unplug them while maintaining Plug and Play auto detection and configuration. This monitor has an integrated self-powered USB hub, allowing up to 4 other USB devices to be attached it.

USB connection

1. Connect the upstream port of the monitor to the downstream port of the USB compliant PC or another hub using the USB cable (Computer must have a USB port).

2. Connect the USB compliant peripherals to the downstream ports of the monitor.

USB upstream Port

etc.
printer
mouse
keyboard

USB downstream Ports
connect the cables from USB compliant peripherals-such as keyboard, mouse, printer, scanner, etc

To **USB downstream port** of the USB compliant PC or another hub cable

USB Upstream connector

USB Downstream connector

Example of connection

scanner

computer

printer

monitor

keyboard   mouse

NOTE

■ To activate the USB hub function, the monitor must be connected to a USB compliant PC(OS) or another hub with the USB cable(enclosed).

■ When connecting the USB cable, check that the shape of the connector at the cable side matches the shape at the connecting side.

■ When the monitor is not plugged into an electric socket, the peripherals connected to the downstream ports will not operate.

■ Even if the monitor is in a power saving mode, USB compliant devices will function when they are connected the USB ports(both the upstream and downstream) of the monitor.

USB specifications

USB standard	Rev. 1.1 complied self-powered hub
Downstream power supply	500mA for each (MAX)
	12 Mbps (full), 1.5 Mbps (low)
	1 Upstream port
	4 Downstream ports

Front View

Speaker

Speaker

Speaker Jack

USB ports

Front Panel Controls

Rear View

FLATRON

AC Power Socket

D-Sub Signal Cable

Audio In

Mic Out

Speaker Jack

Headphone Jack

Front Panel Controls

Sound Mute   MIC   SET Button   Power ON/OFF Button

Sound Menu   OSD Button   ▲▼/◀ ▶ Button   Power (DPMS) Indicator
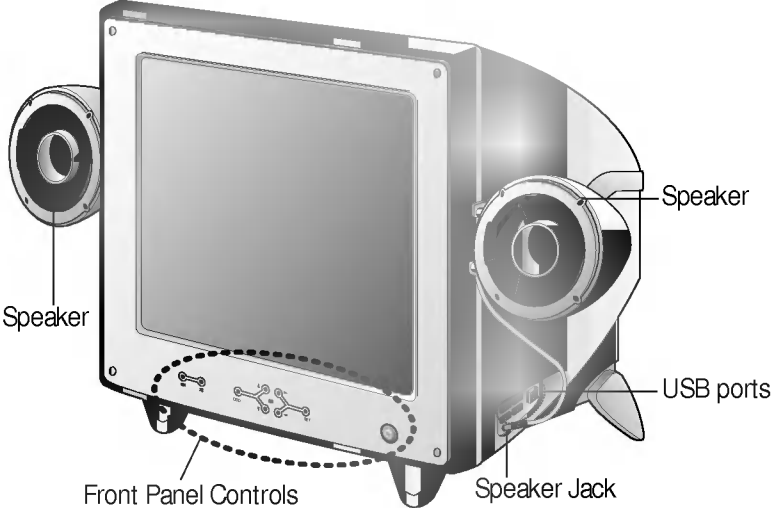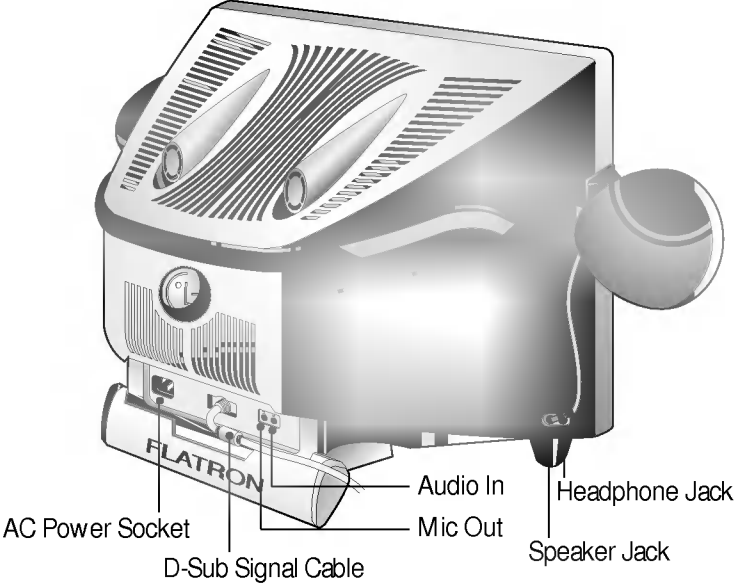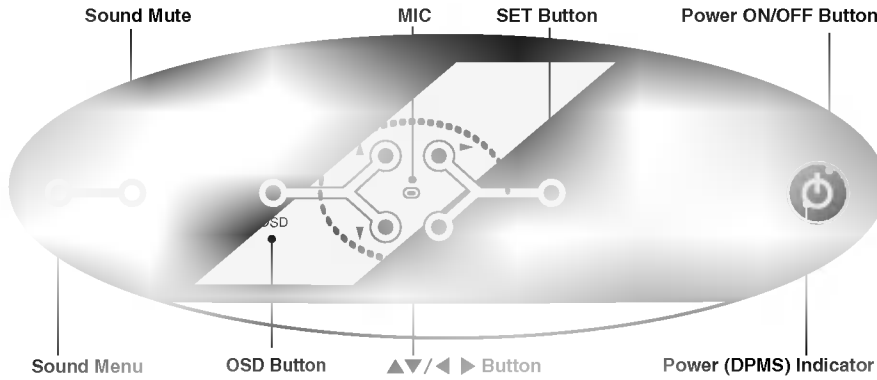
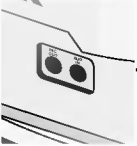| Control		Function
	Sound Menu	To adjust sound menu.
	Sound Mute	Used to select mute on (means sound off) and mute off (means sound on).
	MIC	Built-in Microphone.
	OSD Button	Use this button to enter or exit the on screen display.
	▲▼/◀ ▶ Button	Use these buttons to choose or adjust items in the on screen display.
	SET Button	Use this button to enter a selection in the on screen display.
	Power ON/OFF Button	Use this button to turn the monitor on or off.
	Power (DPMS) Indicator	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.

Left Side Jacks

	Headphone Jack ⌒	Headphone Jack that automatically mutes the speaker volume when headphone is attached.
	Speaker Jack	Used to connect the speaker(supplied).

Rear Panel Jacks

	Mic. Out	Connects microphone sound to PC via cable.
	Audio In	Connects speaker sound to PC via cable attachment.

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.

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:
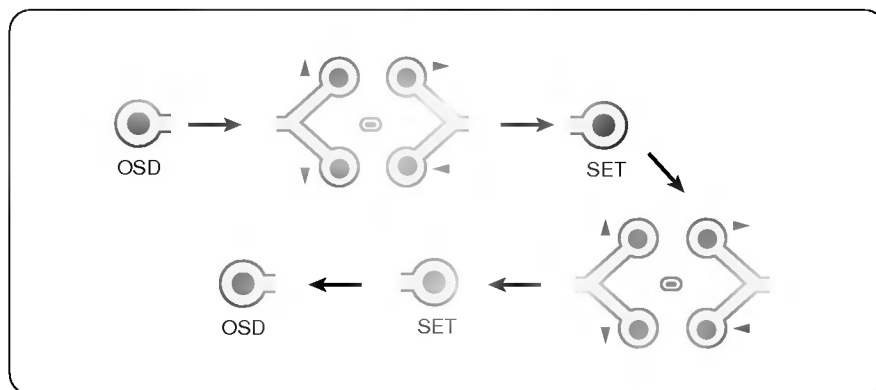
1 Press the **OSD Button**, then the main menu of the OSD appears.

2 To acces 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**.

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.
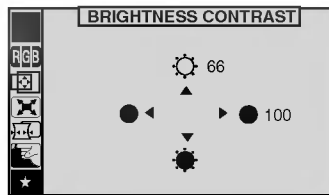
BRIGHTNESS CONTRAST ☼ 66 ▲ ● ◄ ► ● 100 ▼ ☀	**Brightness** Used to adjust the brightness of the screen. **Contrast** Adjust the display to the contrast desired.
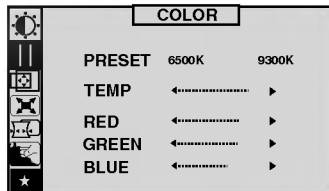
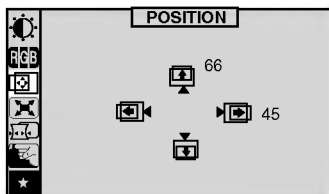|		
COLOR PRESET 6500K 9300K TEMP ◄·········· ► RED ◄·········· ► GREEN ◄·········· ► BLUE ◄········· ►	**PRESET**	**6500K/ 9300K** To appear the displays color temperature. • 6500K:Slightly reddish white. • 9300K:Slightly bluish white.
	TEMP	User easily color set without adjustment Red, Green and Blue (R/G/B).
	RED	To set your own color levels.
	GREEN	To set your own color levels.
	BLUE	To set your own color levels.

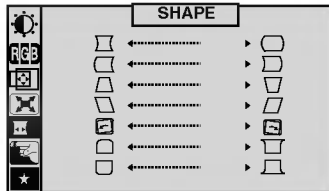|	
POSITION 66 ◄ ► 45	**Vertical Position** To move image up and down. **Horizontal Position** To move picture image left and right.
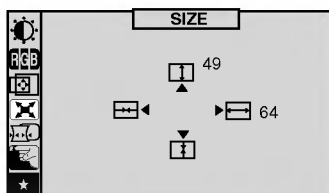
|	
SIZE 49 ◄ ► 64	**Vertical Size** To adjust image height. **Horizontal Size** To adjust image width.

SHAPE

Side Pincushion
To correct the bowing in and out of the image.

Side pincushion balance
To correct the balance of both sides bowling.

Trapezoid
To correct geometric distortion.

Parallelogram
This control adjusts for a skewing of the screen image.

Tilt
To correct image rotation.

Corner Top
To correct the irregular distortion of the displayed image.

Corner Bottom
To correct the irregular distortion of the displayed image.

SETUP

VIDEO LEVEL	▸ 0.7V
DDC	▸ ON
LANGUAGE	▸ ENGLISH
OSD POSITION	▸ ■
BEEP	▸ ON
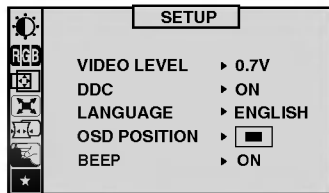
VIDEO LEVEL This item is used to select the monitor's input signal level. The normal level used for most PC's is 0.7V. When the screen suddenly gets brightened or blurry, please select 1.0V and try again.

DDC To select the DDC function(ON/OFF).

LANGUAGE To choose the language in which the control names are displayed.

OSD POSITION To adjust position of the OSD window on the screen.

BEEP To select beep ON or OFF.

SPECIAL

DEGAUSS	▸ ON
RECALL	▸ ON
MOIRE	▸ H: 0/V: 0
PURITY	▸ 50

68.6kHz/85.0Hz
PRESET MODE
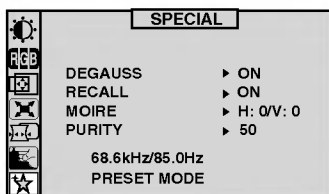
DEGAUSS To manually demagnetize the screen which may show some image or color incorrectly.

RECALL If the monitor is operating in a factory preset mode, this control will reset the image to the factory preset mode.

MOIRE 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.

PURITY Use to adjust the overall purity of the image if the color appears uneven.

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:
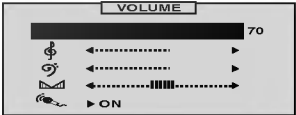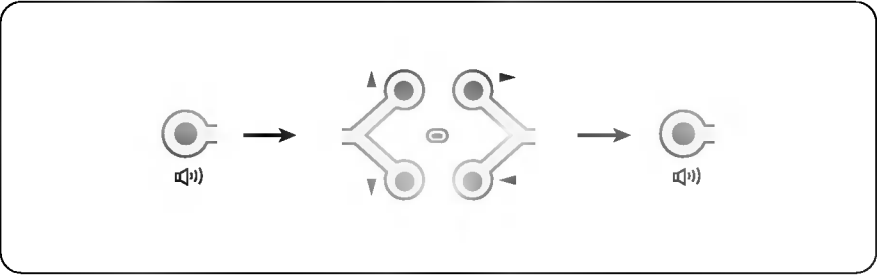
	VOLUME	Raises or lowers audio level.
	TREBLE	Raises or lowers treble level.
	BASS	Raises or lowers Bass level.
	BALANCE	Changes balance of left/right speaker level.
	MICROPHONE	Enables or disables microphone usage.
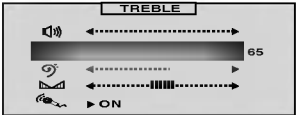
The monitor has 36 memory locations for display modes, 11 of which are factory preset to popular video modes.

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	MAC	832 x 624	49.75	75
10	VESA	1024 x 768	60.02	75
11	VESA	1280 x 1024	63.98	60

User Modes

- Modes 12-36 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 12.
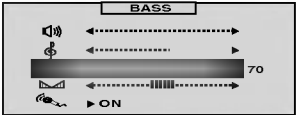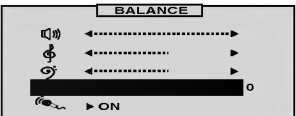
If you use up the 25 blank modes and still have more new video modes, the monitor replaces the information in the user modes starting with mode 12.

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 11 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.

Check the following before calling for service.

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

OUT OF FREQUENCY 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 △▽/◁ ▷ 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 abnomal condition of the monitor.
- Then press a power ON/OFF button on the front panel control and call your service technician for more information.

Picture Tube	17 inch (16.0 inches viewable)	
	90 degree deflection	
	0.24mm Slot pitch	
	W-ARAS(Wide Anti-Reflective Anti-Static) coating	
Sync Input	Horizontal Freq.	30 - 70kHz (Automatic)
	Vertical Freq.	50 - 160Hz (Automatic)
	Input Form	Separate TTL, Positive/Negative
	Signal Input	15 pin D-Sub Connector
Video Input	Input Form	Separate, RGB Analog, 0.7Vp-p/75 ohm, Positive
	Resolution(max)	1280 x 1024@60Hz
Audio	RMS Audio Output	6W (R+L)
	Input Sensitivity	0.7 Vrms
	Built-in MIC	E.C.M type (Electrect Condenser Microphone)
	Speaker Impedance	4Ω
Power Consumption	Normal(Max.)	≤ 125W
	Stand-by/Suspend	≤ 30W
	Power Off	≤ 8W
Dimensions (with tilt/ swivel stand)	Width	43.7 cm / 17.2 inches (without speaker) 69.2 cm / 27.2 inches
	Height	46.3 cm / 18.2 inches
	Depth	41.6 cm / 16.4 inches
	Europe	AC 200-240V 50Hz 1.5A
	Others	AC 100-240V 50/60Hz 2.0A
	The products should be used according to the Power requirements of each ID LABEL.	
	Net	19 kg (41.9 lbs)
	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	