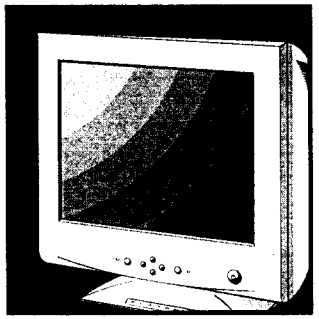
LG Electronics Inc.

http://www.lge.co.kr

Color Monitor

FLATRON

995FT



User's Guide
Benutzerhandbuch
Manuel d'utilisation
Guida Utente
Guia del Usuario
Manual do preprietário
Handleiding

Please read this manual carefully before operating your set.
Retain it for future reference.
Record model number and serial number of the set.
See the label attached on the back cover and quote this information to your dealer when you require service.

P/NO : 3828TUL083B (S-0006)

Printed in Korea

LG

Contents

ENGLISH

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 19 inches (18.0 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 96kHz, and vertical scan frequencies between 50-160Hz.
- This monitor is capable of producing a maximum horizontal resolution of 1600 dots and a maximum vertical resolution of 1200 lines.
- The microprocessor-based digital controls allow you to adjust conveniently a variety of image controls by using the OSD (On Screen Display).
- USB (Universal Serial Bus) ports at the back 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.
- Plug and play capability if supported by your system
- This monitor has DDC 1 and DDC 2B function.*
- Compliant with the following regulated specifications :*
  - FCC Compliance Statement
  - CE Conformity Notice
  - EPA ENERGY STAR
  - Swedish MPR II
  - Swedish TCO'99

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

Connecting the Monitor

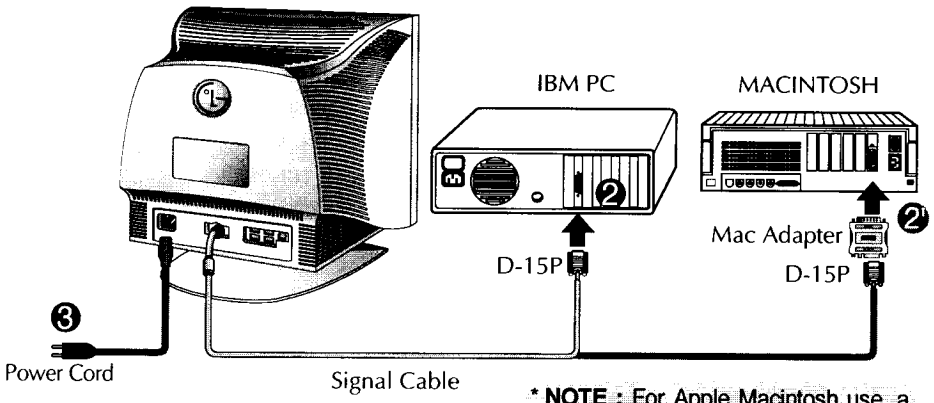
On the back of the monitor are two plug-in connections; one for the AC power cord, and the other for the signal cable from the video card.

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 **NO SINGNAL** message, check the signal cable and connectors.
6. After using the system, power OFF the monitor, then the PC.



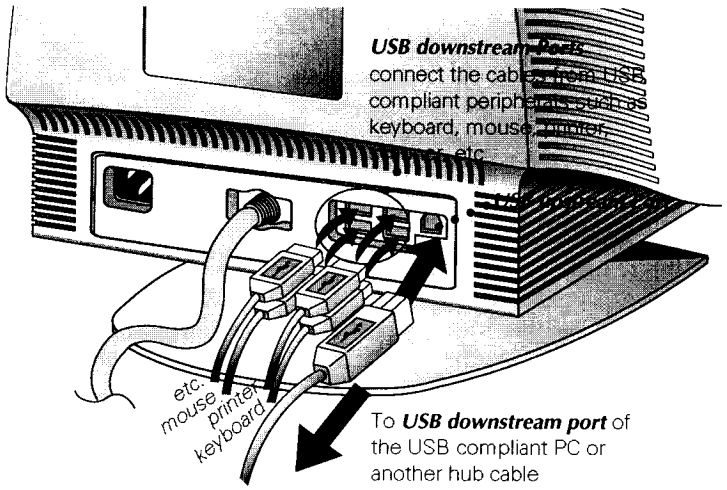
* **NOTE :** For Apple Macintosh use, a separate plug adapter is needed to change the 15 pin high density (3 row) D-sub VGA connector on the supplied cable to a 15 pin 2 row connector.

Making use of USB (Universal Serial Bus)

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 Plug 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

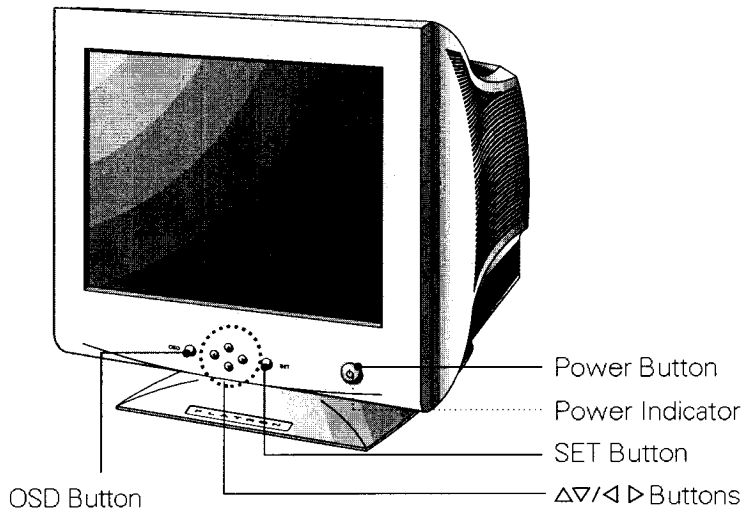
1. Connect the upstream port of the monitor to the downstream port of the USB compliant PC or another hub using the USB cable (Computer must have a USB port).
2. Connect the USB compliant peripherals to the downstream ports of the monitor.



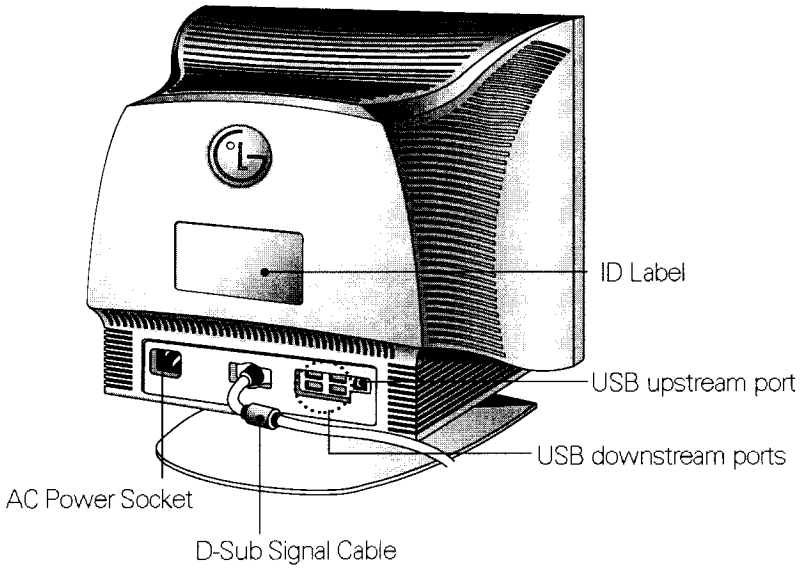
NOTE

- 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.

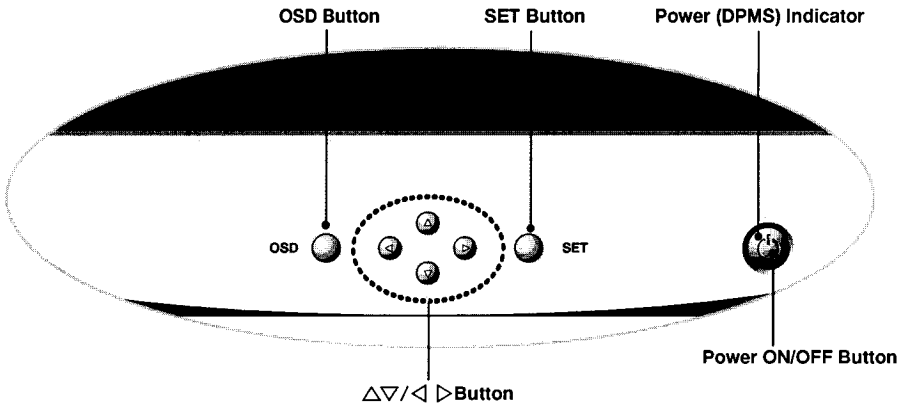
Front View

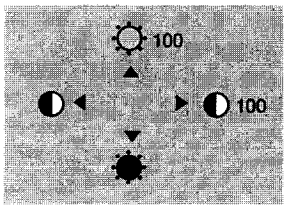


Rear View



Front Panel Controls





<Shortcut Keys>

- Brightness and Contrast can be adjusted directly without entering the On Screen Display (OSD) system. Touch the ◁/▷/△/▽ buttons to adjust the settings and then the **OSD button** to save all changes. The Brightness and Contrast functions are also available in the On Screen Display (OSD) menu.

Control		Function
OSD	**OSD Button**	Use this button to enter or exit the on screen display.
	△▽/◁ ▷ Buttons	Use these buttons to choose or adjust items in the on screen display.
SET	**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/off), this indicator color changes to amber.

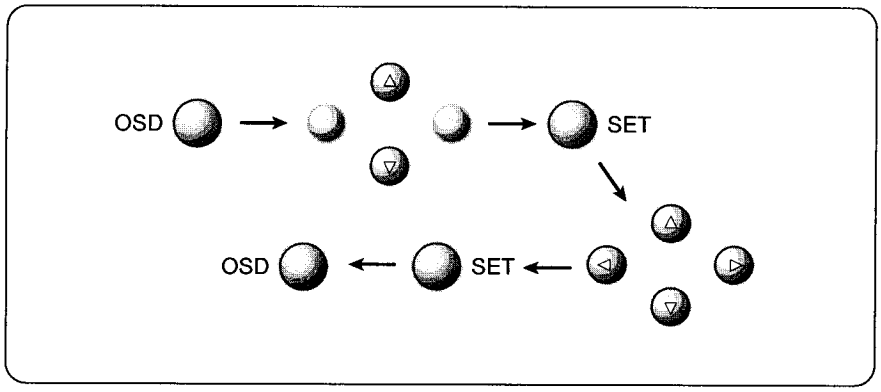
On Screen Display (OSD) Control Adjustment

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.

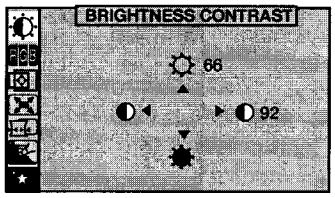
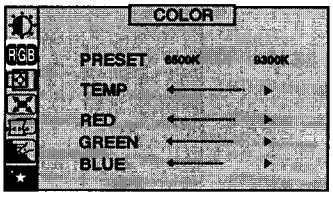
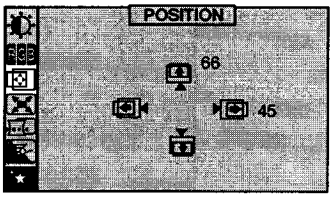
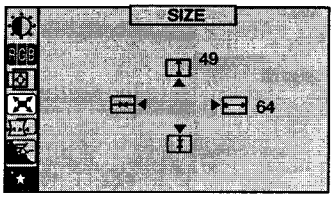
To make adjustments in the On Screen Display, follow these steps:



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

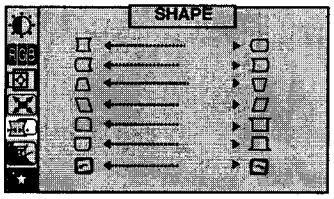
On Screen Display(OSD) Selection and Adjustment

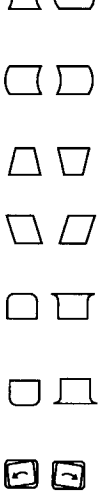
You were introduced to the procedure of selection and adjusting an item using the OSD system. Listed below are the icons, icon names, and icon descriptions of the items that are shown on the Menu.

OSD Adjust	Description
	**Brightness** Used to adjust the brightness of the screen. **Contrast** Adjust the display to the contrast desired.
	**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** **GREEN** To set your own color levels. **BLUE**
	**Vertical Position** To move image up and down. **Horizontal Position** To move picture image left and right.
	**Vertical Size** To adjust image height. **Horizontal Size** To adjust image width.

On Screen Display(OSD) Selection and Adjustment

OSD Adjust	Description





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

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

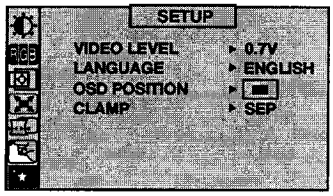
Trapezoid
To correct geometric distortion.

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

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

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

Tilt
To correct image rotation.



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.

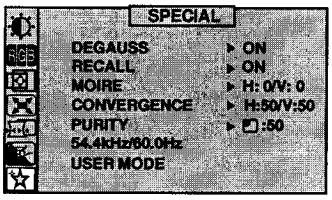
LANGUAGE To choose the language in which the control names are displayed. OSD Menus are available in 8 language: English, Deutsch, Français, Español, Italiano, Svenska, Suomi and Português.

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

CLAMP In case of input SOG(Sync On Green) Video Signal, the back raster will appear the green. Then, to select the SOG(Sync On Green) in the clamp, will take you back to the original back raster.

On Screen Display(OSD) Selection and Adjustment

OSD Adjust	Description



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.

CONVERGENCE Use to adjust the alignment of red and blue fields.

PURITY Use to adjust the purity on the screen if the color appears uneven.

(1) Adjust the purity of the upper left corner of the screen.
(2) Adjust the purity of the upper right corner of the screen.
(3) Adjust the purity of the lower left corner of the screen.
(4) Adjust the purity of the lower right corner of the screen.

Video Memory Modes

The monitor has 31 memory locations for display modes, 5 of which are factory preset to popular video modes.

Preset Modes (Resolution)

Display Modes (Resolution)			Horizontal Freq.(kHz)	Vertical Freq.(Hz)
1	VESA	640 x 480	43.269	85
2	VESA	800 x 600	53.674	85
3	VESA	1024 x 768	68.677	85
4	VESA	1280 x 1024	91.146	85
5	VESA	1600 x 1200	93.750	75

User Modes

- Modes 6-31 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 6.

  If you use up the 26 blank modes and still have more new video modes, the monitor replaces the information in the user modes starting with mode 6.

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 5 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 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 : 30-96kHz**
  *** 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 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.

FCC Warning

Class B Computing Device

Information to the User

This equipment has been tested and found to comply with the limits for a class B digital device pursuant to part 15 of 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 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 and for additional suggestions.

The user may find the following booklet prepared by the Federal Communications Commission helpful: "How to Identify and Resolve Radio-TV interference Problems." This booklet is available from the U.S. Government Printing Office, Washington, D.C. 20402, Stock No. 004-000-00345-4.

FCC Warning

The user is cautioned that changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

NOTE: In order for an installation of this product to maintain compliance with the limits for a Class B device, **shielded** cables must be used.

Specifications

Picture Tube	19 inch (18.0 inches viewable) Perfect Flat Yube	
	90 degree deflection	
	0.24mm Slot pitch	
	ARAS(Anti-Reflective Anti-Static) coating	
Sync Input	**Horizontal Freq.**	30 - 96kHz (Automatic)
	Vertical Freq.	50 - 160Hz (Automatic)
	Input Form	Separate TTL, Positive/Negative Composite TTL, Positive/Negative SOG (Sync On Green)
	Signal Input	15 pin D-Sub Connector
Video Input	**Input Form**	Separate, RGB Analog, 0.7Vp-p/75 ohm, Positive
	Resolution(max)	1600 x 1200@75Hz
USB specifications	**USB standard**	Rev. 1.0 complied self-powered hub
	Downstream power supply	500mA for each (MAX)
	Communication speed	12 Mbps (full), 1.5 Mbps (low)
	USB port	1 Upstream port 4 Downstream ports
Power Consumption	**Normal(Max.)**	≤ 140W
	Stand-by/Suspend	≤ 8W
	Power Off	≤ 3W
Dimensions (with tilt/ swivel stand)	**Width**	47.0 cm / 18.5 inches
	Height	40.9 cm / 16.1 inches
	Depth	47.0 cm / 18.5 inches
Power Input	AC 100-240V 50/60Hz 2.5/1.2A	
Weight	**Net**	26.5 kg (58.4 lbs)
Environmental Conditions	**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 and does not represent a commitment on the part of LG Electronics Inc.