

ATTACHMENT J – USER’S MANUAL

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.



<http://www.lge.com>

Color Monitor

FLATRON

LCD 568LM

User's Guide

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 : 3828TUL193T (S-0107)

Printed in Korea



Introduction

The Monitor has an active matrix TFT (Thin-Film Transistor) LCD (Liquid Crystal Display).

This monitor is designed for use in small working areas or for those who need more working space on the desk.

ENGLISH

Features

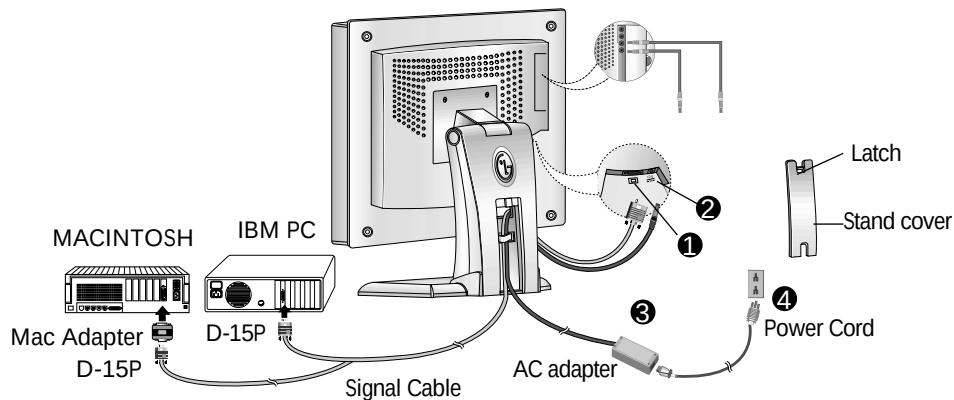
- The Monitor is a 15inch (15 inches viewable) intelligent microprocessor based monitor.
- Digitally controlled auto-scanning is done with the microprocessor for horizontal scan frequencies between 31 and 61kHz, and vertical scan frequencies between 56 and 75Hz.
- The microprocessor-based digital controls allow you to adjust conveniently a variety of image controls by using the OSD (On Screen Display).
- The monitor is shipped with 14 factory pre-programmed video modes that are permanently resident. In addition, there are 16 user-storable modes, for a total of 30 memory modes.
- 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 TCO'99

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

Connecting the Monitor

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:

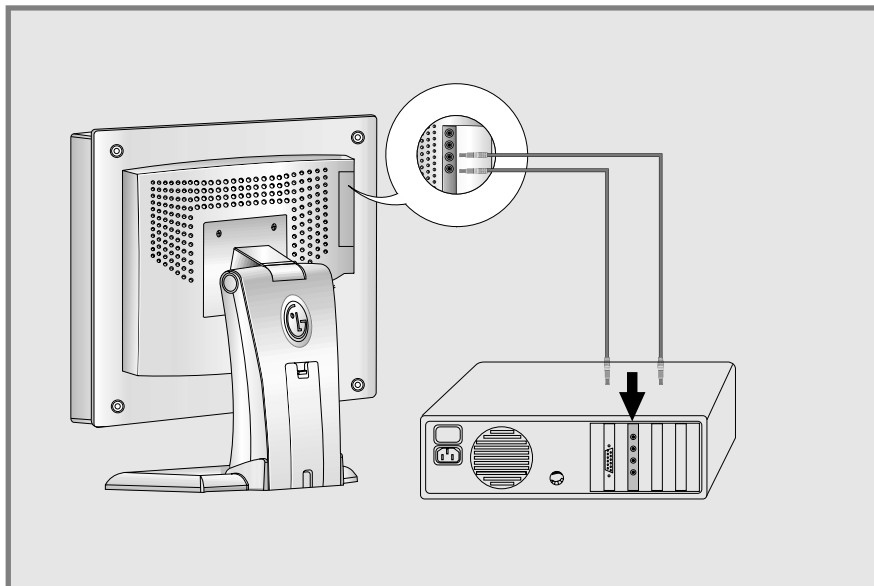
- ① Place the monitor in a convenient, well-ventilated location near your computer.
- ② Power off both the monitor and Computer.
- ③ Slightly press and pull the latch on Stand cover.
- ④ Connect the end of monitor signal cable to the connector ① at the rear panel of your monitor through the slot and cable holder on Stand. Connect the other end to the 15-pin connector on the rear panel of the computer and tighten the screws. Be sure the signal cable aligns with the 15-pin connector.
- ④ Connect the end of monitor signal cable to the connector ① at the rear panel of your monitor through the slot and cable holder on Stand. Connect the other end of the monitor signal cable to the rear panel of Macintosh computer through a Macintosh adapter and then tighten screws.
- ⑤ Connect the plug from the AC adapter into the base of the monitor. ② Connect one end of the AC power cord to the AC adapter ③ and the other end to a properly grounded AC outlet that is easily accessible and close to the monitor. ④
- ⑥ After connecting cables, put stand cover correctly into the holes unders stand. If securely connected, you can hear click sound from the latch.
- ⑦ Power ON the PC, then the monitor.
- ⑧ If you see the NO SIGNAL message, check the signal cable and connectors.
- ⑨ After using the system, power OFF the monitor, then the PC.



* **NOTE** : If you see the "OUT OF RANGE" message, check to make sure your system is set to one of the factory preset modes.(see page A9)

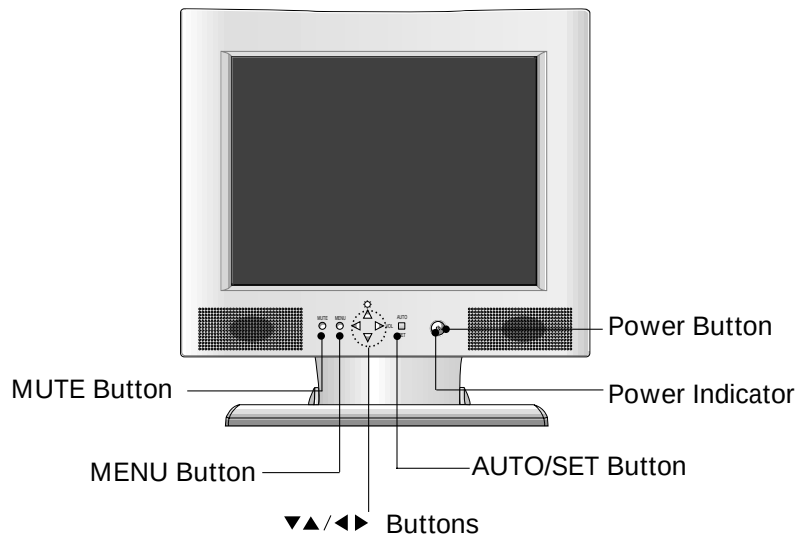
Connecting the Monitor

Connection the Audio

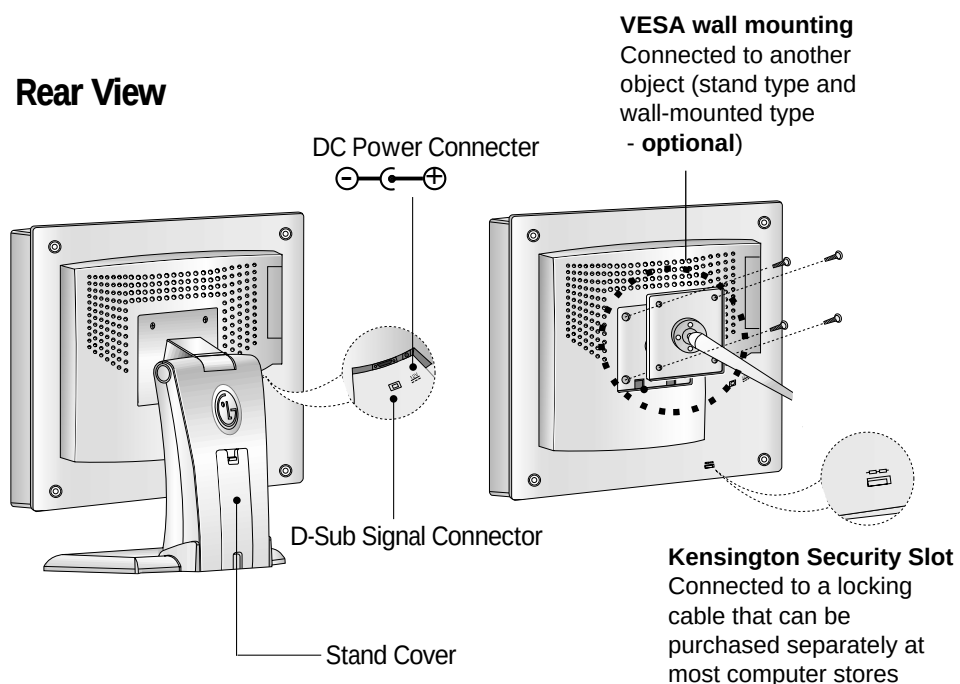


Location and Function of Controls

Front View



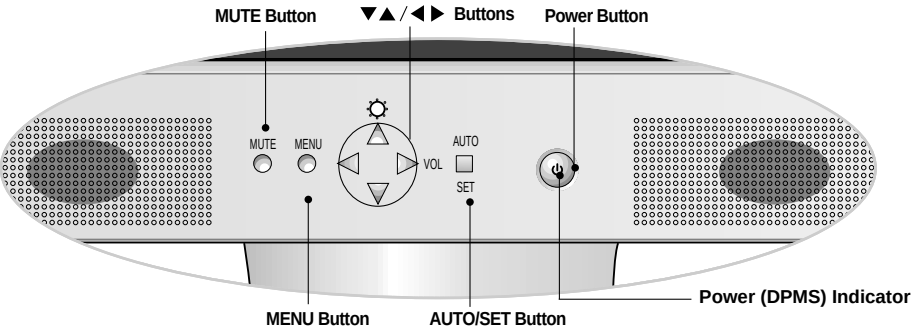
Rear View



NOTE : This monitor accept a 75mm x 75mm VESA-compliant mounting interface pad.

Control Panel Function

Front Panel Controls



Control	Function	
	MUTE Button	Use this button to turn the audio on or off.
	MENU Button	Use this button to enter and from the on screen display (OSD).
	▼▲/◀▶ Buttons	Use these buttons to choose or adjust items in the on screen display.
	AUTO/SET Button	Use this button to enter a selection in the on screen display.
		* AUTO adjustment function Touch the AUTO/SET button before using OSD menu. This button is for the automatic adjustment of the screen position, clock and phase. Note: Some signal from some graphics boards may not function properly. If the results are unsatisfactory, adjust your monitor's Position, Clock and Phase manually.
	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.
	Power Button	Use this button to turn the monitor on or off.

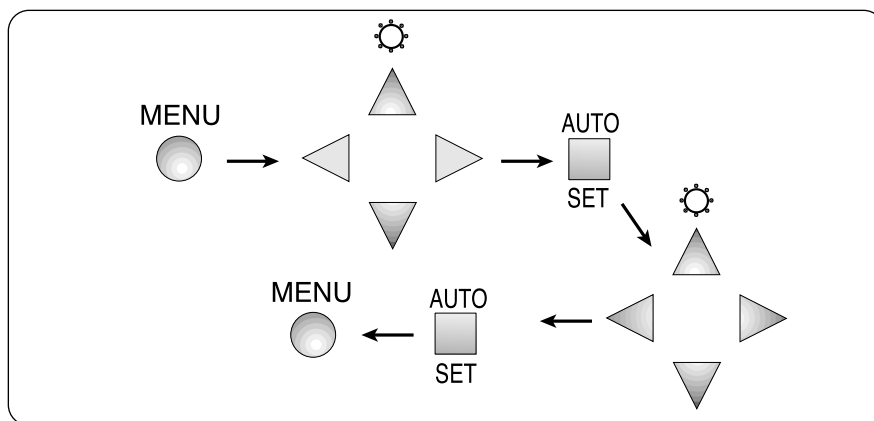
On Screen Display (OSD) Control Adjustment

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.

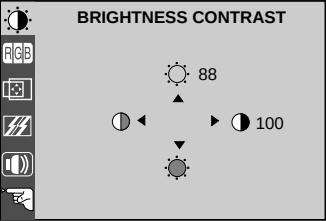
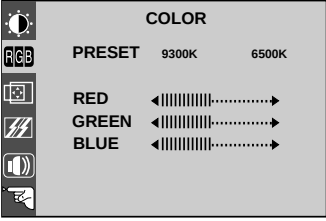
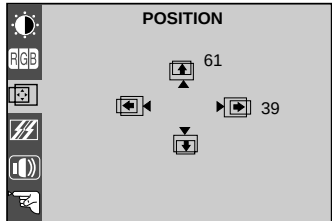
To make adjustments in the On Screen Display, follow these steps:



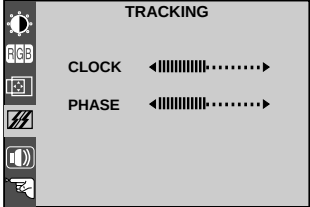
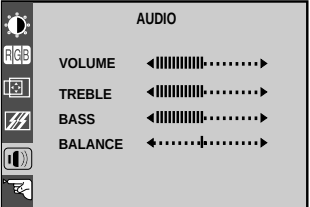
- 1 Press the MENU Button, then the main menu of the OSD appears.
- 2 To access a control, use the ▼▲ Buttons. When the icon you want becomes highlighted, press the AUTO/SET Button.
- 3 Use the ▼▲/◀▶ Buttons to adjust the item to the desired level.
- 4 Accept the changes by pressing the AUTO/SET Button.
- 5 Exit the OSD by Pressing the MENU 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 9300K/ 6500K To appear the displays color temperature. • 9300K:Slightly bluish white. • 6500K:Slightly reddish white. RED To set your own color levels. GREEN To set your own color levels. BLUE To set your own color levels.
	  Vertical Positio To move image up and down.   Horizontal Position To move picture image left and right.

On Screen Display(OSD) Selection and Adjustment

OSD Adjust	Description
 The TRACKING menu is displayed on the left side of the OSD. It contains two adjustable items: CLOCK and PHASE, each with a horizontal bar graph and arrowheads for adjustment. The menu is titled 'TRACKING' at the top.	CLOCK To minimize any vertical bars or stripes visible on the screen background. The horizontal screen size will also change. PHASE To adjust the focus of the display. This item allows you to remove any horizontal noise and clear or sharpen the image of characters.
 The AUDIO menu is displayed on the left side of the OSD. It contains four adjustable items: VOLUME, TREBLE, BASS, and BALANCE, each with a horizontal bar graph and arrowheads for adjustment. The menu is titled 'AUDIO' at the top.	VOLUME Used to adjust the volume TREBLE Used to adjust the treble BASS Used to adjust the bass BALANCE Used to adjust the balance
 The SETUP menu is displayed on the left side of the OSD. It contains several items: LANGUAGE (set to ENGLISH), OSD POSITION (with a small square icon), BEEP (set to ON), ELAPSED TIME (set to 0H), and 1024x768/70Hz PRESET MODE. The menu is titled 'SETUP' at the top.	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. ELAPSED TIME To display the use time of monitor

Video Memory Modes

The monitor has 30 memory locations for display modes, 14 of which are factory preset to popular video modes.

Display Modes (Resolution)

	Display Modes (Resolution)		Horizontal Freq.(kHz)	Vertical Freq.(Hz)
1	VGA	640 x 350	31.47	70
2	VGA	720 x 400	31.47	70
3	VGA	640 x 480	31.47	60
4	MAC	640 x 480	35.00	67
5	VESA	640 x 480	37.86	73
6	VESA	640 x 480	37.50	75
7	VESA	800 x 600	35.16	56
8	VESA	800 x 600	37.88	60
9	VESA	800 x 600	48.08	72
10	VESA	800 x 600	46.88	75
11	MAC	832 x 624	49.72	75
12	VESA	1024 x 768	48.36	60
13	VESA	1024 x 768	56.48	70
14	VESA	1024 x 768	60.02	75

Note : This LCD monitor has been pre-adjusted to the video mode of VESA 1024x768 @75Hz.

User Modes

- Modes 15-30 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 15.

If you use up the 16 blank modes and still have more new video modes, the monitor replaces the information in the user modes starting with mode 15.

Troubleshooting

Check the following before calling for service.

Display Position is incorrect.

- Push the AUTO/SET Button.
- If the results are unsatisfactory, adjust the image position using the H position and V position icon in the on screen display.

On the screen background, vertical bars or stripes are visible.

- Push the AUTO/SET Button.
- If the results are unsatisfactory, decrease the vertical bars or stripes using the CLOCK icon in the on screen display.

Any horizontal noise appearing in any image or characters are not clearly portraided.

- Push the AUTO/SET Button.
- If the results are unsatisfactory, decrease the horizontal bars using the PHASE icon in the on screen display.

NO SIGNAL message.

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

OUT OF RANGE message appears.

Picture is blank.

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

Horizontal Frequency: 31kHz-61kHz

Vertical Frequency: 56Hz-75Hz

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

* You can change the setup to the supported resolution using the Safe Mode (Press the F8 key during booting the system).

The power LED is illuminated amber.

- The monitor is in its 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 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.

Specifications

Display	Type	15inch (38.1cm) Flat Panel Active matrix-TFT LCD
		Anti-Glare coating
	Viewable Size	15inch (38.1cm)
	Pixel pitch	0.297 x 0.297mm
	True color	16 million color
Sync Input	Horizontal Freq.	31kHz - 61kHz (Automatic)
	Vertical Freq.	56Hz - 75Hz (Automatic)
	Input form	Separate, TTL, Positive/Negative
	Signal input	15 pin D-Sub connector
Video Input	Display Area	304 x 228mm / 12.0 x 9.0inch
	Input Form	Separate, RGB Analog, 0.714Vp-p/75ohm, Positive
	Resolution (max.)	VESA 1024 x 768 @ 75Hz
Audio	RMS Audio Output	2W(R + L)
	Input Sensitivity	0.7Vrms
	Speaker Impedance	4Ω
Power Consumption	Normal(Max.)	≤ 36W
	Stand-by/Suspend	≤ 3W
	Power Off	≤ 3W
Dimensions	Width	389.2 cm / 15.3 inches
	Height	382.4 cm / 15 inches
	Depth	16.18 cm / 6.37 inches
Power Input	DC 12V 3A	
AC Adapter	Input	AC 100-240V, 50 - 60Hz, 1.2A - 0.6A
	Output	DC 12V  3A
Weight	Net	4.8 kg / 10.6 lbs
Tilt Range	Down	5°
	Up	30°
Environment Conditions	Operating condition	
	Temperature	10°C to 35°C
	Humidity	10% to 80% non-condensing
	Storage condition	
	Temperature	-20°C to 60°C
	Humidity	5% to 95% non-condensing

NOTE

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