User's Guide

F920B

Make sure to read the Important Precautions before using the product. Keep the User's Guide(CD) in an accessible place for furture reference.

See the label attached on the back cover and quote this information to your dealer when you require service.



Important Precautions

This unit has been engineered and manufactured to ensure your personal safety, however improper use may result in potential eletrical shock or fire hazards. In order to allow the proper operation of all safeguards incorporated in this monitor, observe the following basic rules for its installation, use, and servicing. Keep it in an accessible place for future reference.

On Safety

Use only the power cord supplied with the unit. In case you use another power cord, make sure that it is certified by the applicable national standards if not being provided by the supplier. If the power cable is faulty in any way, please contact the manufacturer or the nearest authorized repair service provider for a replacement.

The power supply cord is used as the main disconnect device. Ensure that the socket-outlet is easily accessible after installation.

Operate the monitor only from a power source indicated in the specifications of this manual or listed on the monitor. If you are not sure what type of power supply you have in your home, consult with your dealer.

Overloaded AC outlets and extension cords are dangerous. So are frayed power cords and broken plugs. They may result in a shock or fire hazard. Call your service technician for replacement.

Hands must be dry when holding the power plug to avoid an electric shock.

Do not damage the power cord by disassembling, bending, pulling or heating up. It can cause fire or electric shock.

Make sure to completely insert the power plug. Insecure connections can cause fire.

Do not Open the Monitor.

- There are no user serviceable components inside.
- There are Dangerous High Voltages inside, even when the power is OFF.
- Contact your dealer if the monitor is not operating properly.

To Avoid Personal Injury:

- Do not place the monitor on a sloping shelf unless properly secured.
- Use only a stand recommended by the manufacturer.
- Do not try to roll a stand with small casters across thresholds or deep pile carpets.

Important Precautions

To Prevent Fire or Hazards:

- Always turn the monitor OFF if you leave the room for more than a short period of time. Never leave the monitor ON when leaving the house.
- Keep children from dropping or pushing objects into the monitor's cabinet openings. Some internal parts carry hazardous voltages.
- Do not add accessories that have not been designed for this monitor.
- During a lightning storm or when the monitor is to be left unattended for an extended period of time, unplug it from the wall outlet.
- Do not bring magnetic devices such as magnets or motors near the picture tube.

On Installation

Do not allow anything to rest upon or roll over the power cord, and do not place the monitor where the power cord is subject to damage.

Do not use this monitor near water such as near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool.

Monitors are provided with ventilation openings in the cabinet to allow the release of heat generated during operation. If these openings are blocked, built-up heat can cause failures which may result in a fire hazard. Therefore, NEVER:

- Block the bottom ventilation slots by placing the monitor on a bed, sofa, rug, etc.
- Place the monitor in a built-in enclosure unless proper ventilation is provided.
- Cover the openings with cloth or other material.
- Place the monitor near or over a radiator or heat source.
- Do not install the monitor in a dusty area. It can cause fire.

On Cleaning

- Unplug the monitor before cleaning the face of the monitor screen.
- Please wipe off any fingerprints or other marks from the monitor screen with a clean and slightly damp soft-fine-fiber cloth moistened with distilled water (do not use a wet or coarse cloth).
- Fully remove any moisture after cleaning off the monitor screen.
- Do not use abrasives, glass cleaner containing highly concentrated ammonia or strong base chemicals since they damage the anti-static coating on the monitor screen.

On Repacking

 Do not throw away the carton and packing materials. They make an ideal container in which to transport the unit. When shipping the unit to another location, repack it in its original material.

Connecting the Monitor

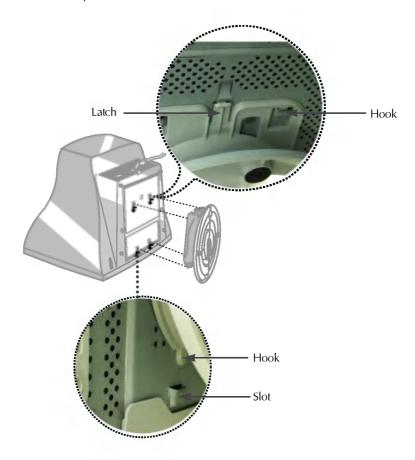
- Before setting up the monitor, ensure that the power is turned off to the monitor, computer system, and other attached devices.
- Carefully set the monitor face-down with the underside facing you.

Connecting the Tilt/Swivel stand

- 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.

NOTE

■ This illustration depicts the general model of connection. Your monitor may differ from the items shown in the picture.

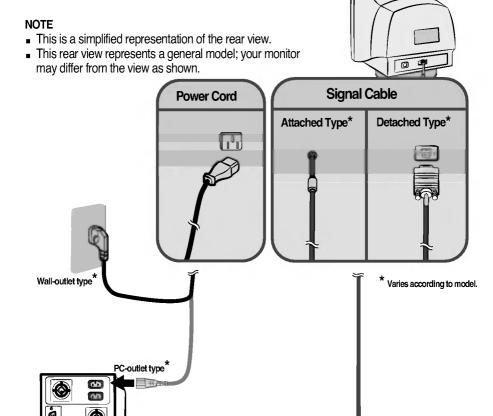


Connecting the Monitor

Using the Computer

 $oldsymbol{1}_{ullet}$ Connect the signal cable. When mated, tighten the thumbscrews to secure the connection.

2. Connect the power cord into a properly power outlet that is easily accessible and close to the monitor.



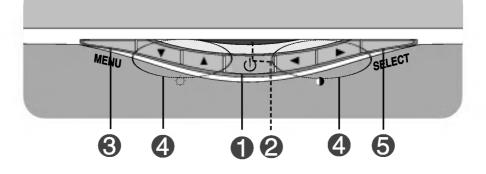
For Apple Macintosh use, a separate plug adapter is needed to change the 15 pin high density (3 row) D-sub VGA connector on the supplied cable to a 15 pin 2 row connector.

PC

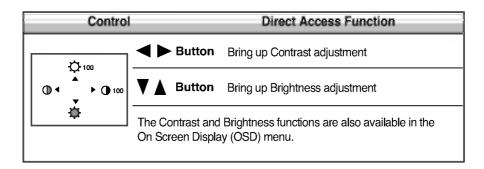
MAC

.... Mac adapter

Front Panel Controls



	Control	Function
0	Power Button	Use this button to turn the monitor on or off.
2	Power (DPMS) Indicator	This Indicator lights up green when the monitor operates normally. If the monitor is in DPM (Energy Saving) mode, this indicator color changes to amber.
8	MENU (or OSD) Button	Use this button to enter or exit the on screen display.
4	▲ ▼/ ⋖ ► Buttons	Use these buttons to choose or adjust items in the on screen display.
6	SELECT (or SET) Button	Use this button to enter a selection in the on screen display.



Screen Adjustment

Making adjustments to the image size, position and operating parameters of the monitor is quick and easy with the On Screen Display Control system. A short example is quick and easy given below to familiarize you with the use of the controls. The 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 adjustments.

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

■ Case 1

MENU
$$\rightarrow \triangle \bigvee \rightarrow$$
 SELECT $\rightarrow \triangle \bigvee \blacktriangleleft \triangleright \rightarrow$ SELECT \rightarrow MENU

■ Case 2

OSD $\rightarrow \triangle \bigvee \rightarrow$ SET $\rightarrow \triangle \bigvee \blacktriangleleft \triangleright \rightarrow$ SET \rightarrow OSD

- Press the MENU (or 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 SELECT (or SET) Button.
- \mathfrak{F} Use the \blacktriangle $\blacktriangledown/\blacktriangleleft$ \blacktriangleright Buttons to adjust the item to the desired level.
- Accept the changes by pressing the SELECT (or SET) Button.
- 5 Exit the OSD by Pressing the MENU (or OSD) Button.

The following table indicates all the On Screen Display control, adjustment, and setting menus.

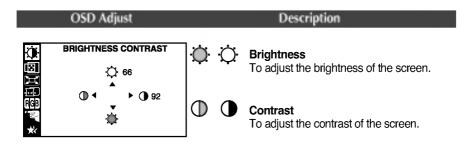
Main menu	Sub menu			Reference	
O:	Brightness		•	To adjust the brightness and	
BRIGHTNESS/ CONTRAST Contrast			contrast of the screen		
Ø	V Position			To adjust the position of the screen	
POSITION	H Position	า			
	V Size			To adjust the size of the screen	
SIZE	H Size				
)4)4	Tilt			To adjust the shape of the screen	
SHAPE	Side Pincushion				
	S Pincushion Balance				
	Parallelogram				
	Trapezoid				
	H Corner				
	Top Corner				
	Bottom Corner				
RGB	PRESET			To customize the color of the	
COLOR		9300K		screen	
	Temp				
	R/G/B(User Color)				
· =	Video Level			To customize the screen status for a user's operating environment	
SETUP	Language				
	OSD Time				
**	Degauss			To improve the clarity and stability of the screen	
SPECIAL	Recall				
	Reset	Reset			
	_	H Moire			
	١	/ Moire			
	Converge	nce			
	Purity				
			•	: Adjustable	

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

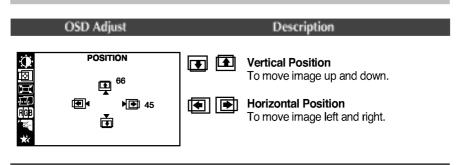
NOTE

■ The order of icons may differ depending on the model (A8~A11).

To adjust the brightness and contrast of the screen



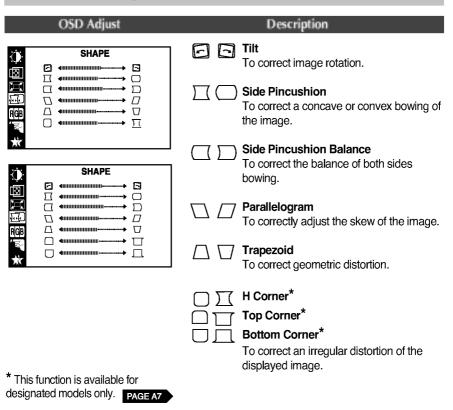
To adjust the position of the screen



To adjust the size of the screen

OSD Adjust Description Vertical Size To adjust image height. Horizontal Size To adjust image width.

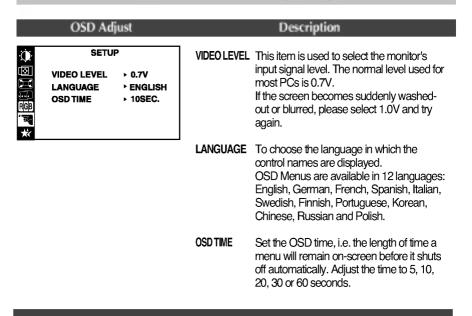
To adjust the shape of the screen



To customize the color of the screen

OSD Adjust Description COLOR PRESET 6500K/9300K Select the screen color. PRESET 6500K 6500K: Slightly reddish white. **TEMP** • 9300K: Slightly bluish white. RED GREEN **TEMP** Select the screen temperature which you BLUE prefer among reddish or bluish or any color in between. RED GREEN Set your own color levels. BLUE

To customize the screen status for a user's operating environment



To improve the clarity and stability of the screen

OS	iD Adjust		Description
DEGAUS RECALL		DEGAUSS	To manually demagnetize the screen to avoid showing incorrect images or colors.
RESET MOIRE RGB PURITY 1024X768 PRESET		RECALL	You can use this function to reload the modified parameters for screen display operation, as specified by the user after purchase: Position, Size, Side Pincushion,
DEGAUS RECALL RESET MOIRE CONVER RGB PURITY 1024X768 PRESET	► ON ► ON ► H: 0/V: 0 GENCE ► H: 50 ► 50 /85 Hz		Trapezoid (These recalled options may differ depending on the mode selected: Preset, User, or New). If you don't want to recall the monitor to these modified settings, use the ▲ ▼ button to select CANCEL and then press the SELECT (or SET) button.
		RESET	Return to all factory default settings except "LANGUAGE": Brightness, Contrast, Tilt, Color 9300K, Video Level, OSD Time, Moire, Purity (These reset options may differ depending on the mode selected: Preset, User, or New). If you don't want to reset the monitor, use the ▼ button to select CANCEL and then press the SELECT (or SET) button.
		MOIRE	This item allows you to reduce the degree of 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. Moire adjustments may shake slightly while the moire reduction function is on.
		CONVER- GENCE*	This is to adjust the alignment of red and blue fields.
* This function is available for designated models only. PAGE A7		PURITY*	Use to adjust the purity on the screen if the color appears uneven.

Troubleshooting

Check the following before calling for service.

No image appears ☐ Is the power cord of the Check and see if the power cord is connected properly to monitor connected? the power outlet. Is the power indicator light · Press the Power button. Is the power on and the the brightness and the contrast. power indicator green? Is the power indicator If the monitor is in power saving mode, try moving the amber? mouse or pressing any key on the keyboard to bring up the screen. ☐ Do you see an "OUT OF This message appears when the signal from the PC FRÉQUENCY" message (video card) is out of horizontal or vertical frequency range on the screen? of the monitor. See the 'Specifications' section of this manual and configure your monitor again. ☐ Do you see a "SELF This message appears when the signal cable between DIAGNOSITICS" message your PC and your monitor is not connected. Check the

signal cable and try again.

The screen is flickering.

on the screen?

- Is the vertical frequency less than 70Hz or is your monitor set to the interlaced mode?
- Do you have any magnetic material such as adapter, or highvoltage line near to your monitor?
- □ Do you hear a "~ding" sound while the monitor is flickering?

- Set the vertical frequency to 72Hz or higher, and consult the video card user manual for instructions on converting to a non-interlaced mode. (You can set this option under the Display icon of the Control Panel.)
- Remove magnetic sources, such as power adapters, speakers, or high-voltage lines, away from the monitor.
- Use the normal degaussing function. This function clears the screen and reduces any screen blur that may occur due to the surrounding magnetic field. The screen may flicker for about 5 seconds, accompanied by a "~ding" sound.

Troubleshooting

The screen color is not normal. Do you see basic Set the color depth to 256 colors or higher: use 'Control discoloration (16 colors)? Panel' ->'Display' ->'Settings' ->'Color Palette' Is the screen color • Check the connection of the signal cable. Or pull out the unstable or monochrome? video card of the PC and insert it again. Do you see black dots on This is due to a small amount of foreign or abnormally the screen? florescent material that became fastened on the mask during manufacturing. It will not affect product performance. Do you see a partial This happens due to interference from surrounding blurring on the screen? magnetic fields, as created when speakers, steel structures, or high-voltage lines are placed near the monitor. Remove any such materials from the immediate vidinity and use the DEGAUSS icon on the screen adjustment menu to fix the screen. I see an after-image on the screen. □ Do you see the after- A premature aging of the monitor pixels may cause the image even when you prolonged display of a single image on the screen. Be turn off the monitor? sure to use a screen saver to maximize the service life of the monitor. I see waves on the screen. □ Do you see the wave This occurs in inverse proportion to the screen focus, directly on the screen? which can be caused by a particular frequency or video card. Brighten the screen and use the 'MOIRE' icon on the screen adjustment menu to adjust the screen. Have you installed the monitor driver? ☐ Have you installed the Be sure to install the monitor driver from the monitor driver monitor driver? CD (or diskette) that comes with your monitor. Or, you can also download the driver from our web site: http://www.lge.com. USB function USB function cannot be Check if the USB cable is correctly connected. Check if the PC and OS are USB compliant. setup. For verification of USB support, consult the manufacturer of each system.

Specifications

Picture Tube	19 inches (18.0 inches viewable) Perfect Flat Tube 90 degree deflection 0.24mm Slot pitch ARAS(Anti-Reflective Anti-Static) coating			
Sync Input	Horizontal Freq. Vertical Freq. Input Form	30 - 98kHz (Automatic) 50 - 160Hz (Automatic) Separate TTL, Positive/Negative CompositeTTL, Positive/Negative		
	Signal Input	15 pin D-Sub Connector		
Video Input	Input Form	Separate, RGB Analog, 0.7Vp-p/75 ohm, Positive		
Resolution	Max Flicker Free VESA 1600 x 1200@ 75Hz Recommend VESA 1280 x 1024@ 85Hz			
Plug&Play	DDC 2B			
Power Consumption	On Sleep Off	≤ 103W ≤ 4W ≤ 2W		
Dimensions &Weight (with tilt/ swivel	Width Height Depth	46.7 cm / 18.39 inches 47.4 cm / 18.66 inches 47.3 cm / 18.62 inches		
stand)	Net	23.5 kg (51.80 lbs)		
Power Input	Europe	AC 200-240V~ 50Hz 1.0A		
	Others AC 100-240V~ 50/60Hz 2.0A The products should be used according to the Power requirements of each ID LABEL.			
Environmental	ental Operating Conditions			
Conditions	Temperature Humidity	0°C to 40 °C 10 % to 90 % non-Condensing		
	Storage Condition Temperature Humidity			
Tilt/Swivel Stand	Attached(), Detached (O)			
Signal cable	Attached(O), Detached () Wall-out type or PC-outlet type			
Power cord				

NOTE

Information in this document is subject to change without notice.

Specifications

Preset Modes (Resolution)

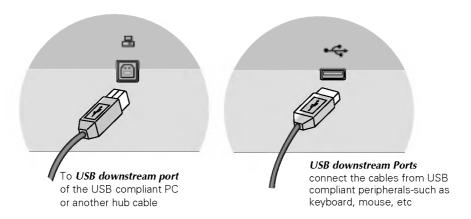
D	isplay Mode	s (Resolution)	Horizontal Freq. (kHz)	Vertical Freq. (Hz)
1	VESA	640 x 480	43.269	85
2	VESA	800 x 600	53.674	85
3	VESA	1024 x 768	68.677	85
4	VESA	1280 x 1024	91.146	85
5	VESA	1600x 1200	93.750	75

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, 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 a chain of 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 the Plug and the Plug auto detection and configuration. This monitor has an integrated BUS-powered USB hub, allowing up to 2 other USB devices to be attached it.

USB connection

- 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)
- Connect the USB compliant peripherals to the downstream ports of the monitor.
 - This is a simplified representation of the rear view.



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.
- 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.



Making use of USB (Universal Serial Bus)

USB Specifications

SB standard	Rev. 1.1 complied BUS-powered hub
ownstream power supply	100mA for each (MAX)
ommunication speed	12 Mbps (full), 1.5 Mbps (low)
SB port	1 Upstream port / 2 Downstream ports

IMPORTANT: These USB connectors are not designed for use with high-power USB devices such as a video camera, scanner, etc. LGE recommends connecting high-power USB devices directly to the computer

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