User's Guide

L2000CP

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 product and give the information to your dealer when you ask for service.



Please read these safety precautions carefully before using the product.

Marning Warning

Failure to follow those warnings may result in death, serious injury or damage to the product or other property.

Electrical Power Related Precautions



Warning

- Use only the power cord supplied with the unit or another manufacturer authorized cord.
 - Failure to do so may result in fire or electrical shock or damage to the product.
- Use only a properly grounded plug and receptacle.
 - If you do not you may be electrocuted or injured. Or the product might be damaged.
- Do not use a damaged or loose plug.
 - This may cause electrical shock or fire.
- Operate the display only from a power source(i.e. voltage) indicated in the product specification.
 - Otherwise the product can be damaged, fire can occur or you may be electrocuted. If you are not sure what type of power supply you have, consult a certified electrician.
- In the presence of thunder and lightning, never touch the power cord and signal cable because it can be very dangerous.
 - It can cause electric shock.
- Do not connect several extension cords, electrical appliances or electrical heaters to a single outlet. Use a power bar with a grounding terminal designed for exclusive use with the computer.
 - A fire can break out due to overheating.
- Do not touch the power plug with wet hands. Additionally, if the cord pin is wet or covered with dust, dry the power plug completely or wipe dust off before plugging in the cord.
 - You may be electrocuted due to excess moisture.
- If you don't intend to use the product for a long time, unplug the power cable from the product.
 - Covering dust can cause a fire, or insulation deterioration can cause electric leakage, electric shock or fire.
- Insert the power plug firm so it cannot come loose.
 - A loose connect can cause fire.
- Hold the plug when pulling out the power cable. Do not pull the plug out by the wire. Do not bend the power cord with excessive force or put heavy objects on the power cord.
 - The power line can be damaged, which may cause electric shock or fire.
- Do not insert conductive material (ea. metal chopstick) into the product opening into one end of the power cable while the other end is plugged in. Additionally, do not touch the power cable right after plugging into the wall input terminal.
 - You may be electrocuted.
- The power supply cord is used as the main disconnection device. Ensure that the socket-outlet shall be installed near the equipment and shall be easily accessible.
- Do not unplug the power cord while the product is in use.
 - Electrical shock can damage the product.



Precautions in installing the Product



Warning

- Keep away from heat sources like electrical heaters, curdles or other open flames.
 - Electrical shock, fire, malfunction or deformation may occur.



Safety Precautions

- Keep the packing anti-moisture material or vinyl packing out of the reach of children.
 - Anti-moisture material is harmful if swallowed. If swallowed by mistake, force the patient to vomit and visit the nearest hospital. Additionally, vinyl packing can cause suffocation. Keep it out of the reach of children.
- Do not put heavy objects on the product on sit upon it.
 - If the product collapses or is dropped, you may be injured. Children must pay particular attention.
- Do not leave the power or signal cable when someone can trip over it.
 - The passerby can falter, which can cause electrical shock, fire, product breakdown or injury.
- Install the product in a neat and dry place. Do not use near water.
 - Dust or moisture can cause electrical shock, fire or product damage.
- Do not add accessory that have not been designed for this display.
- If you smell smoke or other odors or hear a strange sound from the product unplug the power cord and contact the service center.
 - If you continue to use without taking proper measures, electrical shock or fire can occur.
- If you dropped the product or the case is broken, turn off the product and unplug the power cord.
 - If you continue to use without taking proper measures, electrical shock or fire can occur. Contact the service center.
- Do not drop an object on or apply impact to the product. Do not throw any toys or objects at the product.
 It can cause injury to humans, problems to the product and damage the display.
- Keep out of reach of children and do not place toys near the product.
- Make sure the product ventilation hole is not blocked. Install the product more than 10cm from the wall.
 - If you install the product too close to the wall, it may be deformed or fire can break out due to internal heat build-up.
- Do not cover the product with cloth or other material (eg. plastic) while plugged in.
 - The product can be deformed or fire can break out due to internal overheating inside the product.
- Place the product on a flat and stable surface that is large enough to support the product.
 - If the product is dropped, you may be injured or the product may be broken.
- Install the product where no Electromagnetic Interference occurs.
- Keep the product away from direct sunlight.
 - The product can be damaged.
- Do not place the product on the floor.
 - Small Children and others may trip over it.



Precautions in Moving the Product



Warning

- Make sure to turn off the product.
 - You may be electrocuted or the product can be damaged.
- Make sure to remove all cables before moving the product.
 - You may be electrocuted or the product can be damaged.
- When lifting or moving the product, do not hold it upside down while holding only the stand.
 - This may cause the product to fall resulting in damage or injury.
- Do not shock the product when moving it.
 - You may be electrocuted or the product can be damaged.
- Make sure the panel faces forward and hold it with both hands to move.
 - If you drop the product, the damaged product can cause electric shock or fire. Contact an authorized the service center for repair.
- Do not place the product face down.
 - This may damage the TFT-LCD screen.

Safety Precautions



Precautions in Using/Cleaning the Product

∕¶∖ Warning

- Do not attempt to disassemble, repair or modify the product yourself.
 - Fire or electric shock can occur.
 - Contact the service center for repair.
- When cleaning the product, unplug the power cord and scrub gently with a soft cloth to prevent scratching. Do not clean with a wet cloth. Or spray water or other liquids directly onto the product. An electric shock may occur. (Do not use chemicals such as benzene, paint thinners or alcohol)
- Keep the product away from water.
 - Fire or electric shock accident can occur.
- Do not put or store flammable substances near the product.
 - There is a danger of explosion or fire.
- Keep the product clean at all times.
- Take a comfortable and natural position when working with a product to relax the muscles.
- Take a regular break when working with a product for a long time.
- Do not press on the panel with a hand or sharp object such as nail, pencil or pen, or make a scratch on it.
- Keep proper distance from the product and rest from time-to-time.
 - Your vision may be impaired if you look at the product too closely or fpr too long.
- Set the appropriate resolution by referring to the User's Guide.
 - Your vision can be impaired.
- Keep small accessories out of the reach of children.
- Leaving a fixed image on the screen for a long time may cause damage to the screen and cause image burn-in. Make sure to use a screen saver on the product. Burn-in and related problems are not covered by the warranty on this product.



On Disposal

- The fluorescent lamp used in this product contains a small amount of mercury.
- Do not dispose of this product with general household waste.
- Disposal of this product must be carried out in accordance to the regulations of your local authority.

Connecting the Display

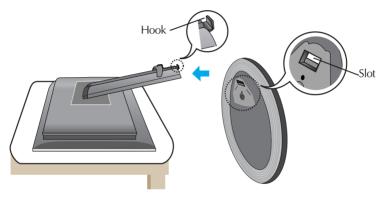
Before setting up the monitor, ensure that the power to the monitor, the computer system, and other attached devices is turned off.

Connecting the stand base or Removing the stand base

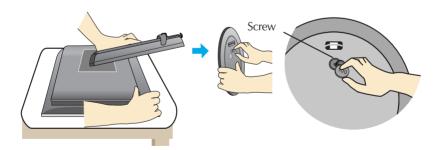
- 1. Place the monitor with its front facing downward on a cushion or soft cloth.
- **2.** Align the hooks on the stand body with the matching slots in the base of the monitor.
- **3.** Insert the hooks into slots.

Warning: The tape and locking pin may only be removed from those monitors equipped with a standing base when the base is pulled up.

Otherwise, you may be injured by the protruding sections of the stand.



4. Use a coin on the back of the stand base and turn the screw clockwise to tighten. **5.** When you desire to detach the monitor from the stand base, use a coin to turn the screw counterclockwise.



Important

- This illustration depicts the general model of connection. Your monitor may differ from the items shown in the picture.
- Once you connect the stand base, try not to disconnect it.
- Do not carry the product upside down holding only the stand base. The product may fall and get damaged or cause injury your foot.

Connecting the Display

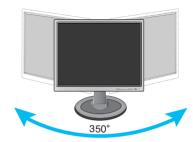
Before setting up the monitor, ensure that the power to the monitor, the computer system, and other attached devices is turned off.

Positioning your display

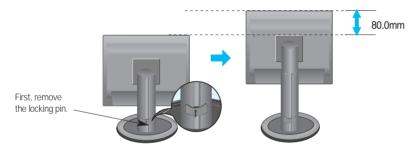
- 1. Adjust the position of the panel in various ways for maximum comfort.
 - Tilt Range: -5°~25°

■ Swivel :350°





■ Height Range: maximun 3.15 inch (80.0mm)



■ Landscape & Portrait: You can rotate the panel 90° clockwise. (* For detailed information, please refer to the Pivot Sofeware CD provided.)



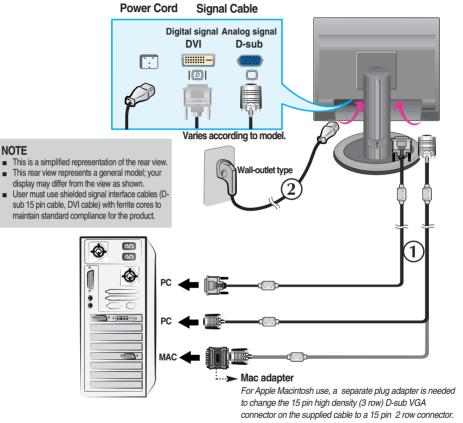
* Make sure not to touch the floor when the head rotates to use the Pivot function.

Ergonomic

It is recommended that in order to maintain an ergonomic and comfortable viewing position, the forward tilt angle of the monitor should not exceed 5 degrees.

Using the Computer

- 1. Place the monitor in a convenient, well-ventilated location near your computer. To adjust height of your monitor, unlock the stand lock on top of the stand.
- 2. Connect the signal cable. When attached, tighten the thumbscrews to secure the connection.
- 3. Connect the power cord into a proper power outlet that is easily accessible and close to the display. (2)



4. Press **(**) button on the front switch panel to turn the power on. When monitor power is turned on, the 'Self Image Setting Function' is executed automatically. (Only Analog Mode)



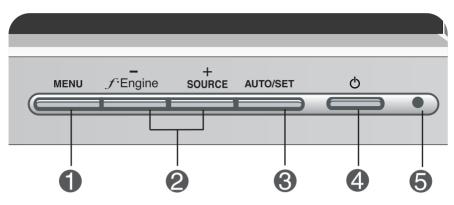
NOTE

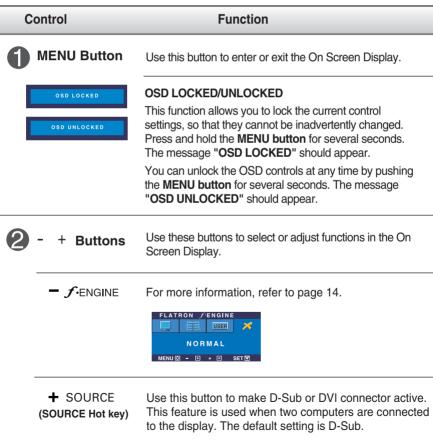
'Self Image Setting Function'? This function provides the user with optimal display settings. When the user connects the monitor for the first time, this function automatically adjusts the display to optimal settings for individual input signals.

optimal settings for individual input signals.

'AUTO/SET' Function? When you encounter problems such as blurry screen, blurred letters, screen flicker or tilted screen while using the device or after changing screen resolution, press the AUTO/SET function button to improve resolution.

Front Panel Controls





Control Panel Functions

Control	Function
AUTO/SET Button	Use this button to enter a selection in the On Screen Display.
PROCESSING AUTO IMAGE ADJUSTMENT	AUTO IMAGE ADJUSTMENT When adjusting your display settings, always press the AUTO/SET button before entering the On Screen Display(OSD). This will automatically adjust your display image to the ideal settings for the current screen resolution size (display mode). The best display mode is 1600 x 1200
4 Power Button	Use this button to turn the display on or off.
6 Power Indicator	This Indicator lights up blue when the display operates normally(On Mode). If the display is in Sleep Mode (Energy Saving), this indicator color changes to amber.

On Screen Display (OSD) Control Adjustment

Screen Adjustment

Making adjustments to the image size, position and operating parameters of the display is quick and easy with the On Screen Display Control system. A short example is 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 display to stabilize for at least 30 minutes before making image adjustments.

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

$$\mathsf{MENU} \to \textbf{-} + \to \mathsf{AUTO/SET} \to \textbf{-} + \to \mathsf{MENU}$$

- Press the MENU 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 AUTO/SET Button.
- Use the / + Buttons to adjust the image to the desired level. Use the AUTO/SET Button to select other sub-menu items.
- Push the MENU Button once to return to the main menu to select another function. Push the MENU Button twice to exit from the OSD.

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

Main menu	Sub-menu		Α	D	Reference	
PICTURE	BRIGHTNESS				To adjust the brightness, contrast and gamma of the	
	CONTRAST					
	GAMMA				screen	
COLOR		sRGB			To customize the color of	
COLOR	PRESET	6500K			the screen	
		9300K				
	RED					
	GREEN					
	BLUE					
	HORIZONTAL VERTICAL				To adjust the position of the	
POSITION					screen	
	CLOCK				To improve the clarity and	
TRACKING	PHASE				stability, sharpness of the screen	
	SHARPNESS					
SETUP	LANGUAGE				To customize the screen	
SETCI	OSD	HORIZONTAL			status for a user's operating	
	POSITION VERTICAL				environment	
	WHITE BALANCE					
	POWER INDICATOR					
	FACTORY RESET					
FLATRON	MOVIE/TEXT				To select or customize desired image settings	
F-ENGINE (-)	USER					
	NORMAL					
	■ : AdjustableA : Analog Input					

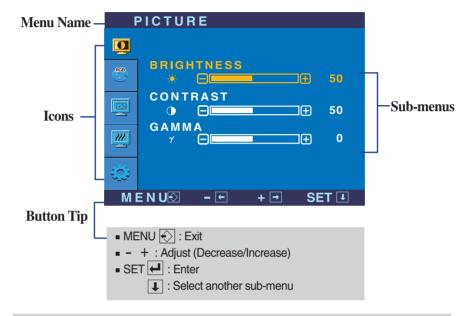
NOTE

 \blacksquare The order of icons may differ depending on the model (10~14).

D: Digital Input

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.

Press the MENU Button, then the main menu of the OSD appears.



NOTE

 $_{\blacksquare}$ OSD (On Screen Display) menu languages on the monitor may differ from the manual.

Sub menu Main menu Description **PICTURE** PICTURE **BRIGHTNESS** To adjust the brightness of the screen. CONTRAST To adjust the contrast of the screen. CONTRAST 50 GAMMA Set your own gamma value. : -50/0/50 **GAMMA** On the monitor, high gamma values display whitish images and low gamma MENU® - E + E SETE values display high contrast images. ■ MENU : Exit Decrease + : Increase SET : Select another sub-menu COLOR COLOR **PRESET** sRGB: Set the screen color to fit the sRGB PRESET standard color specification. • 6500K: Slightly reddish white. RED





MENU : Exit- : Decrease+ : Increase

SET : Select another sub-menu

Main menu	Sub menu	Description
TRACKING		
TRACKING OLOCK PHASE	CLOCK	To minimize any vertical bars or stripes visible on the screen background. The horizontal screen size will also change.
SHARPNESS A - + SET 1	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.
 MENU : Exit - : Decrease + : Increase SET : Select another sub-m 	SHARPNESS enu	To adjust the clearness of the screen.
SETUP		
SETUP LANGUAGE ENGLISH	LANGUAGE	To choose the language in which the control names are displayed.
OSD POSITION HORIZONTAL STORY VERTICAL 50	OSD POSITION	To adjust position of the OSD window on the screen.
ANALOG 1600 x 1200 60HZ MEN U② - □ + □ SET □ SET U P WHITE BALANCE NO POWER INDICATOR NO FACTORY RESET NO ANALOG 1600 x 1200 60HZ MEN U♡ - □ + □ SET ☑	WHITE BALANCE	If the output of the video card is different the required specifications, the color level may deteriorate due to video signal distortion. Using this function, the signal level is adjusted to fit into the standard output level of the video card in order to provide the optimal image. Activate this function when white and black colors are present in the screen.
MENU: Exit - : Adjust + : Adjust SET: Select another sub-m	POWER INDICATOR enu	Use this function to set the power indicator on the front side of the monitor to ON or OFF . If you set OFF , it will go off. If you set ON at any time, the power indicator will automatically be turned on.
	FACTORY RESET	Restore all factory default settings except "LANGUAGE." Press the + button to reset immediately.

If this does not improve the screen image, restore the factory default settings. If necessary, perform the white balance function again. This function will be enabled only when the input signal is an analog signal.

■ ■ The OSD screen will appear when you touch the fengine (-) button on the right side of the monitor



FLATRON F-ENGINE

When you execute F-ENGINE, two tones will appear on the screen as shown. The applied screen will appear on the left side, whereas the non-applied screen will appear on the right side. Touch the SET button to use the adjusted screen.



Main menu FLATRON / ENGINE MOVIE USER MOVIE MENU Ø - ⊞ + ⊞ SET 🗊 ■ MENU : Exit

TEXT

This feature lets you easily select the best desired image condition optimized to the environment (ambient illumination, image types etc).

Description

MOVIE: For animation images in videos or movies

TEXT: For text images (Word processing etc.)

■ - .+ : Move ■ SET : Select

USER MENU ② - □ + □ SET 🗊

To adjust the USER sub-menu function, Press the SFT Button



■ MENU : Fxit : Decrease

+

SET : Select another sub-menu User

Sub menu

You can manually adjust brightness, ACE or RCM. You can save or restore the adjusted value even when using a different environment setting.

... (Brightness): Adjusts screen brightness.

···ACE(Adaptive Clarity Enhancer): Selects the clarity mode.

···RCM(Real Color Management): Selects the color mode. Not applied Green enhance Flesh tone Color Enhance

Select the SAVE sub-menu using the SET button and save the YES value using the buttons.



: Increase

NORMAL This is under normal operating conditions.

Check the following before calling for service.

No image appears

- Is the power cord of the display connected?
- Is the power indicator light on?
- Is the power on and the power indicator blue or green?
- Is the power indicator amber?
- Do you see an "OUT OF RANGE" message on the screen?
- Do you see a "CHECK SIGNAL CABLE" message on the screen?

- Check and see if the power cord is connected properly to the power outlet.
- Press the Power button
- · Adjust the brightness and the contrast.
- If the display is in power saving mode, try moving the mouse or pressing any key on the keyboard to bring up the screen.
- Try to turn on the PC.
- This message appears when the signal from the PC (video card) is out of horizontal or vertical frequency range of the display. See the 'Specifications' section of this manual and configure your display again.
- This message appears when the signal cable between your PC and your display is not connected. Check the signal cable and try again.

Do you see a "OSD LOCKED" message on the screen?

- Do you see "OSD LOCKED" when you push MENU button?
- You can secure the current control settings, so that they cannot be inadvertently changed. You can unlock the OSD controls at any time by pushing the MENU button for several seconds: the message "OSD UNLOCKED" will appear.

Display image is incorrect

- Display Position is incorrect.
- Press the AUTO/SET button to automatically adjust your display image to the ideal setting.
 If the results are unsatisfactory, adjust the image position using the H position and V position icon in the on screen display.
- Check Control Panel --> Display --> Settings and see if the frequency or the resolution were changed. If yes, readjust the video card to the recommend resolution.
- On the screen background, vertical bars or stripes are visible.
- Press the AUTO/SET button to automatically adjust your display image to the ideal setting.
 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 portrayed.
- Press the AUTO/SET button to automatically adjust your display image to the ideal setting.
 If the results are unsatisfactory, decrease the horizontal bars using the PHASE icon in the on screen display.
- Check Control Panel --> Display --> Settings and adjust the display to the recommended resolution or adjust the display image to the ideal setting. Set the color setting higher than 24 bits (true color).
- The screen color is mono or abnormal.
- Check if the signal cable is properly connected and use a screwdriver to fasten if necessary.
- Make sure the video card is properly inserted in the slot.
- Set the color setting higher than 24 bits (true color) at Control Panel - Settings.
- The screen blinks.
- Check if the screen is set to interlace mode and if yes, change it to the recommend resolution.

Troubleshooting

Have you installed the display driver?

- Have you installed the display driver?
- Be sure to install the display driver from the display driver CD (or diskette) that comes with your display. Or, you can also download the driver from our web site: http://www.lge.com.
- Do you see an "Unrecognized monitor, Plug&Play (VESA DDC) monitor found" message?
- Make sure to check if the video card supports Plug&Play function.

Specifications

Display	20.1 inches (51.0cm) Flat Panel Active matrix-TFT LCD Anti-Glare coating Visible diagonal size: 51.0cm 0.255mm pixel pitch			
Sync Input Horizontal Freq. Vertical Freq. Input Form		28 - 83kHz (Automatic) 56 - 85Hz (Automatic) Separate Sync Composite Sync		
Video Input	Signal Input	DVI - D connector (Digital)		
Resolution	Max VESA 1600 x 1200@60Hz Recommend VESA 1600 x 1200@60Hz			
Plug&Play	DDC 2B			
Power Consumption	On Mode Sleep Mode Off Mode	: 58W ≤ 1W ≤ 1W		
Dimensions &Weight (with tilt/ swivel stand)	Width Height Depth Net	44.60 cm / 17.56 inches 44.78 cm / 17.62 inches (Min) 52.78 cm / 20.76 inches (Max) 24.26 cm / 9.55 inches 7.6 kg		
Range	Tilt Swivel Height Rotate	-5°~25° 350° 80mm / 3.15 inches 90°clockwise		
Power Input	AC 100-240V~ 50/60Hz 1.2A			
Environmental Conditions	Operating Condition Temperature Humidity	ns 10°C to 35°C 10 % to 80 % non-Condensing		
	Storage Conditions Temperature Humidity	-20°C to 60 °C 5 % to 90 % non-Condensing		
Tilt/Swivel Stand	Attached(), Detached (O)			
Power cord	Wall-outlet type or PC-outlet type			

NOTE

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

Preset Modes (Resolution)

Disp	lay Modes (Resolution)	Horizontal Freq. (kHz)	Vertical Freq. (Hz)
1	640 x 350	31.47	70
2	640 x 480	31.47	60
3	640 x 480	37.50	75
4	640 x 480	43.27	85
5	720 x 400	31.47	70
6	800 x 600	37.88	60
7	800 x 600	46.88	75
8	800 x 600	53.67	85
9	832 x 624	49.72	75
10	1024 x 768	48.36	60
11	1024 x 768	60.02	75
12	1024 x 768	68.68	85
13	1152 x 870	68.68	75
14	1152 x 900	61.80	65.96
15	1280 x 1024	63.98	60.02
16	1280 x 1024	79.98	75.02
*17	1600 x 1200	75.00	60
**18	1600 x 1200	73.53	60

*Recommend Mode **Digital Mode

Indicator

MODE	LED Color
On Mode	Blue
Sleep Mode	Amber
Off Mode	Off

How to Install the VESA Standard wall mounting

This monitor meets VESA-compliant mounting interface pad specifications.



Digitally yours •••••····

