User's Guide



Make sure to read the **Important Precautions** before using the product. Keep the User's Guide(CD) in an accessible place for future reference. See the label attached on the product and give the information to your dealer when you ask for service.



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

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 disconnection device. Ensure that the socket-outlet is easily accessible after installation.

Operate the display only from a power source indicated in the specifications of this manual or listed on the display. 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.

Do not Open the Display.

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

To Avoid Personal Injury :

- Do not place the display on a sloping shelf unless properly secured.
- Use only a stand recommended by the manufacturer.
- Do not drop an object on or apply impact to the product. Do not throw any toys or objects on the product screen.
 It can cause injury to human, problem to product and damage the display.

To Prevent Fire or Hazards:

- Always turn the display OFF if you leave the room for more than a short period of time. Never leave the display ON when leaving the house.
- Keep children from dropping or pushing objects into the display's cabinet openings. Some internal parts carry hazardous voltages.
- Do not add accessories that have not been designed for this display.
- When the display is to be left unattended for an extended period of time, unplug it from the wall outlet.
- 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.

NOTE

• THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTRERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT.SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

NOTE

This epuipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the 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 harmful 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 the 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.

On Installation

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

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

Displays 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 display on a bed, sofa, rug, etc.
- Place the display in a built-in enclosure unless proper ventilation is provided.
- Cover the openings with cloth or other material.
- Place the display near or over a radiator or heat source.
- Main power breaker is the power cord and this breaking device must be located at a location where it is easy to operate.

Do not rub or strike the Active Matrix LCD with anything hard as this may scratch, mar, or damage the Active Matrix LCD permanently.

Do not press the LCD screen with your finger for a long time as this may cause some afterimages.

Some dot defects may appear as Red, Green or Blue spots on the screen. However, this will have no impact or effect on the display performance.

If possible, use the recommended resolution to obtain the best image quality for your LCD display. If used under any mode except the recommended resolution, some scaled or processed images may appear on the screen. However, this is characteristic of the fixed-resolution LCD panel.

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 Cleaning

- Unplug the display before cleaning the face of the display screen.
- Use a slightly damp (not wet) cloth. Do not use an aerosol directly on the display screen because over-spraying may cause electrical shock.

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.

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.

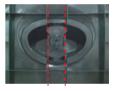
Connecting the stand

- 1. Place the monitor with its front facing downward on a soft cloth.
- 2. Assemble the Stand Base(Front, Rear) into the Stand Body in the correct direction.



Stand Base

3. Tie down the base lock to perpendicularity direction.



4. Once assembled take the monitor up carefully and face the front side

Important

- This illustration depicts the general model of connection. Your monitor may differ from the items shown in the picture.
- Do not carry the product upside down holding only the stand base. The product may fall and get damaged or injure your foot.

Disassembling the stand

1. Put a cushion or soft cloth on a flat surface.

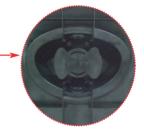


2. Place the monitor face down on the cushion or soft cloth.



3. Change your lock on the product as it follows and turn it in the arrow direction.



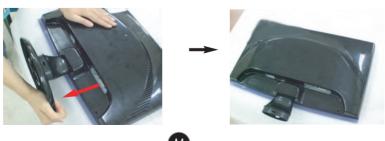


If you can't release the stand base even the locking rib is at a release position, Please push the indicated rib down and retry it.





4. Pull out the stand to remove.



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°~15°





Ergonomic

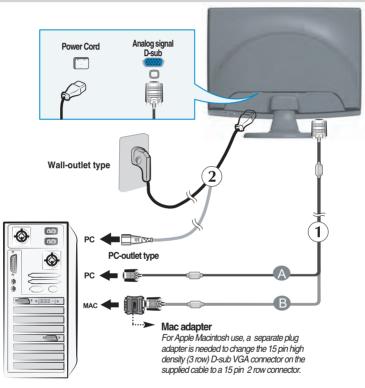
It is recommended that in order to maintain an ergonomic and comfortable viewing position, the forward tilt angle of the monitor should not exceed 5 degrees.

Using the Computer

- **1.** Make sure to turn off the computer and product. Connect the cable as below sketch map form 0 to 0.
- Connect D-sub Cable (PC)
- B Connect D-sub Cable (Mac)

NOTE

- This is a simplified representation of the rear view.
- This rear view represents a general model; your display may differ from the view as shown.
- User must use shielded signal interface cables (D-sub 15 pin cable, DVI cable) with ferrite cores to maintain standard compliance for the product.



 Press U 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.

PROCESSING SELF

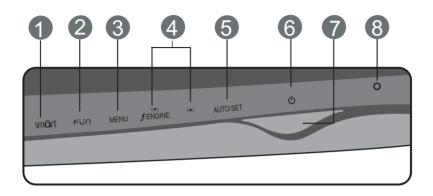
NOTE

'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.

'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	Function
smârt Button	Use this button to enter CINEMA MODE,AUTO BRIGHT,TIME CONTROL,LIVE SENSOR items, for more information,refer to page A15.
Pun Button	Use this button to enter EZ ZOOMING , 4:3 IN WIDE , PHOTO EFFECT , items, for more information, refer to page A16-A17.
MENU Button	Use this button to enter or exit from the On Screen Display.
	OSD LOCKED/UNLOCKED
OSD LOCKED	This function allows you to lock the current control settings, so that these settings are not inadvertently changed. To lock the OSD settings, press and hold the MENU button for several seconds. The message " OSD LOCKED " appears.
	You can unlock the OSD settings at any time by pushing the MENU button for several seconds. The message " OSD UNLOCKED " appears.

Control	Function
	Use these buttons to select or adjust functions in the On Screen Display.
▼ Button (f.ENGINE)	For more information, refer to page A18.
6 AUTO/SET Button	Use this button to select an icon in the On Screen Display.
PROCESSING AUTO IMAGE ADJUSTMENT	AUTO IMAGE ADJUSTMENT When adjusting your display settings, always press the AUTO/SET button prior to 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: W1954S : 1440 x 900
6 Power Button	Use this button to turn the display on or off.
Power Indicator	This Indicator lights up as red when the display is operating normally(On Mode). If the display is in Sleep Mode (Energy Saving), this indicator color changes to flicker.
8 Light sensor	This is lens for light sensor sletect outside luminance, when setting AUTO BRIGHT ON.

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:



- Press the MENU Button, then the main menu of the OSD appears.
- 2 To access a control, use the $\mathbf{\nabla}$ or $\mathbf{\Delta}$ Buttons. When the icon you want becomes highlighted, press the AUTO/SET Button.
- 3 Use the \checkmark / \blacktriangle 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-r	nenu	A	Reference
CIMEMA MODE				To focus on the moving picture selected
AUOT BRIGHT				To control screen brightness automatically
TIME CONTROL				To mind user using time
LIVE SENSOR				To control touch key distance
SMART				To control smart key menu
EZ ZOOMING				To adjust the resolution
4:3 IN WIDE				To adjust the image size
	NORMAL		•	
PHOTO		AUSSIAN BLUR		To adjust screen color mode
EFFECT	SEPIA			
	MONOCHRO	ME		
	BRIGHTNES	S		To adjust the brightness, contrast
PICTURE	CONTRAST			and gamma of the screen
	GAMMA			
		sRGB		
	PRESET	6500K		
COLOR		9300K		To customize the color of the
002011	RED	•		screen
	GREEN			
	BLUE			
	HORIZONTAL			To adjust the position of the
	VERTICAL			screen
TRACKING	CLOCK			To forward the state in an distribution
	PHASE		To improve the clarity and stability of the screen	
	SHARPNESS			of the screen
	LANGUAGE			
	OSD	HORIZONTAL		
	POSITION	VERTICAL		1
SETUP	WHITE BALA	NCE		To customize the screen status for
	RTC			a user's operating environment
	POWER INDICATOR			1
	FACTORY RESET			
	MOVIE			
	INTERNET		•	1
FLATR ON	USER			To select or customize desired image settings
F-ENGINE	NORMAL		•	
DEMO				1
				Adjustable Analog Input

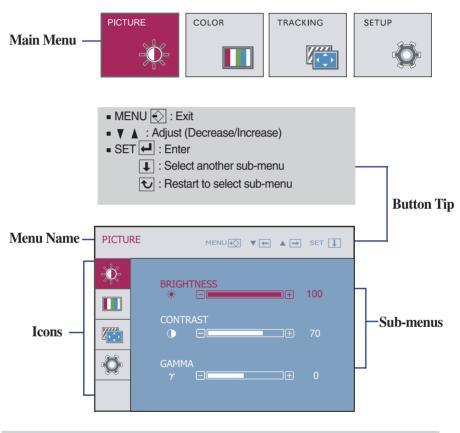
NOTE

The order of icons may differ depending on the model (A10~A18).



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

• OSD (On Screen Display) menu languages on the monitor may differ from the manual.

Sub menu	Description
BRIGHTNESS	To adjust the brightness of the screen.
CONTRAST	To adjust the contrast of the screen.
GAMMA	Set your own gamma value. : -50/0/50 On the monitor, high gamma values display whitish images and low gamma values display high contrast images.
	BRIGHTNESS CONTRAST

- MENU : Exit
- Decrease
- Increase
- SET : Select another sub-menu



Main menu	Sub menu	Description
TRACKING TRACKING		
TRACKING MENUES VE A D SET 1	HORIZONTAL	To move image left and right.
HORIZONTAL 50	VERTICAL	To move image up and down.
	CLOCK	To minimize any vertical bars or stripes visible on the screen background. The horizontal screen size will also change.
SHARPNESS G	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.
 V: Decrease A: Increase SET: Select another sub-mer 	SHARPNESS	To adjust the clearness of the screen.



Main menu	Sub menu	Description
SETUP COD SETUP	LANGUAGE	To choose the language in which the control names are displayed.
SETUP MEMUE Image: Set in the s	osd Position	To adjust position of the OSD window on the screen.
SETUP WHITE BALANCE R T C POWER INDICATOR NO R T C POWER INDICATOR POWER INDICATOR FACTORY RESET NO	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 MENU : Exit Adjust SET : Select another sub-mer	RTC	If you set ON , you enable the Response Time Control function. If you set OFF , you disenable the Response Time Control function.
	POWER INDICATOR	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 , buttons 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 smart button on the right bottom of the monitor.

CINEMA MODE	AUTO BRIGHT OFF	TIME CONTROL POFF
Main menu	Sub menu	Description
CINEMA MODE	CINEMA MODE	It focuses better on the moving picture in selected area. *This function is operated only if the fortmanager is installed to pc.
AUTO BRIGHT ► OFF	AUTO BRIGHT	If select on, it automatically controls the brightness of display to best suit the surrounding working environment, providing the optimal viewing condition and maximized user convenience. If select off, auto brightness is off.
TIME CONTROL > OFF	TIME CONTROL	Remind user using time by showing alarm OSD and flickering power LED. Selection:OFF/1HOUR/2HOUR
LIVE SENSOR DON SOO	LIVE SENSOR	This function turns on the button LED for pushing comfortable.When detect the presence of users hand before touch it.
SMART	SMART	To adjust AUTO BRIGHT, TIME CONTROL, LIVE SENSOR. If select ON it turns on AUTO BRIGHT, LIVE SENSOR and makes time CONTROL to 1HOUR. If select off, it turns off those. If set AUTO BRIGHT, TIME CONTROL, LIVE SENSER directly, this setting is changed to USER automatically.



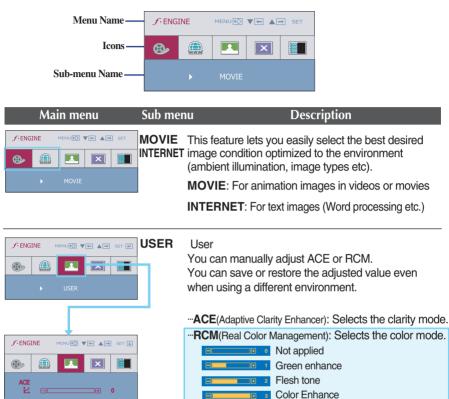
The OSD screen will appear when you touch the **FUN** button on the right bottom of the monitor.



Main menu	Sub menu	Description
EZ ZOOMING	EZ ZOOMING	EZ Zoom lowers the display's resolution in single-step increments. Depressing the button once lowers the resolution by one step; while a second button-press returns the resolution to the original display settings.
		forteManager is installed to PC.
4:3 IN WIDE	4:3 IN WIDE	To select the image size of the screen.
		WIDE 4:3
		 WIDE: Switch to full screen mode according to input image signal. 4:3: Change the image signal ratio into 4:3.

Main menu	Sub menu	Description
PHOTO EFFECT	PHOTO EFFECT	 NORMAL: The PhotoEffect function is disabled. GAUSSIAN BLUR: This option is to add the effect to the screen that the dark and sharp image becomes brighter and more blurred.
IIII PHOTO EFFECT	SET E MENU	 SEPIA: This option changes the screen to be Sepia tone. The Sepia tone is brown color tone.
► NO	RMAL	 MONOCHROME: This option changed the screen to be Gray tone. The screen is displayed by white, black, gray.

■■ The OSD screen will appear when you touch the *f*_{ENGINE} button on the right bottom of the monitor.





NORMAL This is under normal operating conditions.

This is just for advertising to customer in the shops. It's setting is same with Movie mode and screen is divided by half.

Check the following before calling for service.

No image appears		
Is the power cord of the display connected?	 Check and see if the power cord is connected properly to the power outlet. 	
Is the power indicator light on?	Press the Power button.	
Is the power indicator flickering?	 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. 	
Do you see an "OUT OF RANGE" message on the screen?	• 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.	
Do you see a "CHECK SIGNAL CABLE" message on the screen?	 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. 	
 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). 	

Important

- 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.
- Reasons for Recommending Optimal Resolution : The aspect ratio is 16:10. If the input resolution is not 16:10 (for instance, 16:9, 5:4, 4:3), you might encounter problems such as blurred letters, blurry screen, cut-off screen display or tilted screen.
- The setting method can differ by computer and O/S (Operation System), and resolution mentioned above may not be supported by the video card performance. In this case, please ask to the computer or the video card manufacturer.

Display image is incorrect			
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.		

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.		

Display	19 inches (48.1 cm) Flat Panel Active matrix-TFT LCD				
	Anti-Glare coating				
	Visible diagonal size: 48.1 cm 0.285*0.285 mm pixel pitch				
Suma Imput	Horizontal Freq.				
Sync Input	Vertical Freq.	30 - 83 kHz (Automatic) 56 - 75 Hz (Automatic)			
	Input Form	Separate TTL, Positive/Negative			
	input i onn	SOG (Sync On Green)			
Video Input	Signal Input				
	Input Form	RGB Analog (0.7 Vp-p/ 75 ohm)			
Resolution	Max	VESA 1440 x 900 @ 75 Hz			
	Recommend	VESA 1440 x 900 @60 Hz			
Plug&Play	DDC 2AB				
Power	On Mode	: 36W(Typ	.)		
Consumption	Sleep Mode	\leq 1 W			
	Off Mode	≤ 1 W			
Dimensions & Weight	With S	Stand	Without Stand		
	Width 45.05 cm	/ 17.73 inches	45.05 cm / 17.73 inches		
	Height 38.09 cm	/ 14.99 inches	32.68 cm / 12.86 inches		
	Depth 18.30 cm	/ 7.20 inches	6.00 cm / 2.36 inches		
	Net	3.33 kg (7.34 lbs)			
Tilt Range	Tilt -5°~ 15°				
Power Input	AC 100-240V~ 50/60Hz 0.8A				
Environmental Conditions	Operating Condition	ons			
Conditions	Temperature 10°C to 35 °C				
	Humidity				
	Storage Conditions				
	Temperature -20°C to 60 °C				
	Humidity		on-Condensing		
Stand Base	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)

19 inch monitor

Display	y Modes (Resolution)	Horizontal Freq. (kHz)	Vertical Freq. (Hz)
1 2 3 4 5 6 7 8	640 x 350 720 x 400 640 x 480 640 x 480 800 x 600 800 x 600 832 x 624 1024 x 768	31.469 31.468 31.469 37.500 37.879 46.875 49.725 48.363	70 70 60 75 60 75 75 75 60
9 10 11 12 13 14 *15 16	1024 x 768 1152 x 870 1152 x 900 1280 x 1024 1280 x 1024 1440 x 900 1440 x 900 1440 x 900	60.123 68.681 61.805 63.981 79.976 55.500 55.935 70.635	75 75 65 60 75 60 60 75

* Recommend Mode

Indicator

MODE	LED Color
On Mode	Red
Sleep Mode	Flicker
Off Mode	Off

Digitally yours



Digitally yours

