User's Guide

L2040P

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 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.

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.
- During a lightning storm or when the display is to be left unattended for an extended period of time, unplug it from the wall outlet.

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.

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.

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.

 $\widehat{A2}$

Using the Computer

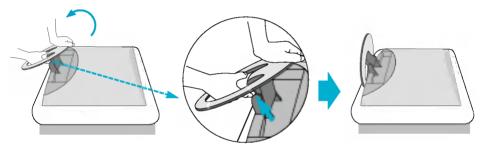
■ Before setting up the monitor, ensure that the power to the monitor, the computer system, and other attached devices is turned off.

Unfolding the stand base

1. Place the monitor with its front facing downward on a cushion or soft cloth

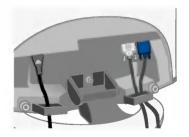


2. Hold down the release button inside the stand and strongly pull out the stand with your two hands.

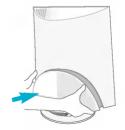


The stand won't move if you don't press release button.

- 3. Connect the signal input cable and the power cord.
- **4.** Arrange the signal input cable and the power cord by holder, as shown.

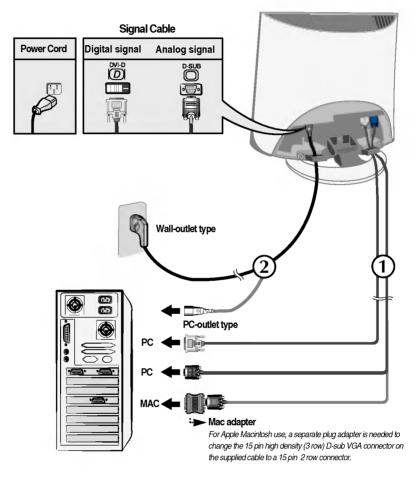


5. When successfully arranged, fit the back cap in along the groove.



Using the Computer

- 1. Connect the signal cable. When attached, tighten the thumbscrews to secure the connection. ①
- 2. Connect the power cord into a proper power outlet that is easily accessible and close to the display. ②

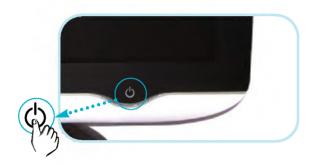


3. Touch **b** button on the front switch panel to turn the power on. When monitor power is turned on, the 'Self Image Setting Function' is executed automatically. (Only Analog Mode)

PROCESSING SELF

Connecting the Display

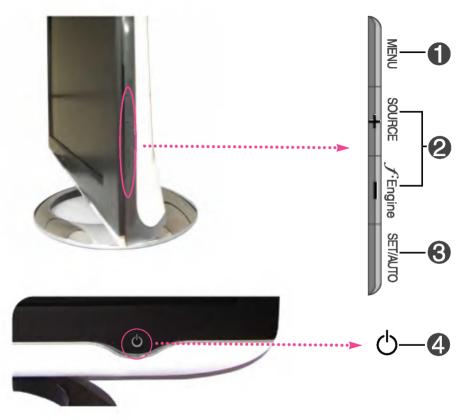
● Touch button for several seconds on the front switch panel to turn the power on.

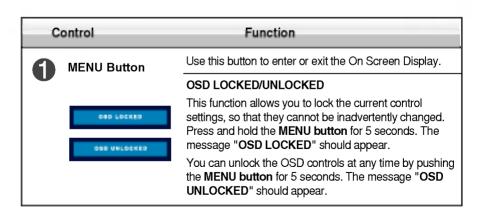


NOTE

'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. If you want to adjust the monitor while in use, or wish to manually run this function once again, push the 'SET/AUTO' button on the front panel of the monitor. Otherwise, you may execute the 'Factory reset' option on the OSD adjustment menu. However, be aware that this option initializes all the menu items except 'Language'.

Control Panel Functions.





Control Panel Functions

C	ontrol	Function		
2	- + Buttons	Use these buttons to select or adjust functions in the On Screen Display.		
- Button		For more information, refer to page A13 FLATRON FENGINE NORMAL MENU 20 - P + SETT		
	+ Button	SOURCE hot key		
		Use this button to make Dsub or DVI connector active. This feature is used when two computers are connected to the display. The default setting is Dsub.		
SET/AUTO Button		Use this button to enter a selection in the On Screen Display.		
		AUTO IMAGE ADJUSTMENT When adjusting your display settings, always press the SET/AUTO 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		
		20 inch monitor : 1600x1200		
		PROGESSING AUTO		
4	Power Button Use this button to turn the display on or off.			
	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:

$$MENU \rightarrow - + \rightarrow SET/AUTO \rightarrow - + \rightarrow MENU$$

- 1 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 SET/AUTO Button.
- Use the /+ Buttons to adjust the image to the desired level. Use the SET/AUTO 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 screen	
	CONTRAST		•	•		
	GAMMA		•	•		
COLOR	PRESET	6500K	•	•	To customize the color of	
		9300K			the screen	
	RED					
	GREEN					
	BLUE			•		
POSITION	HORIZONTAL				To adjust the position of the	
	VERTICAL		•		screen	
TRACKING	CLOCK		•		To improve the clarity and	
THETERING	PHASE		•		stability of the screen	
SETUP	LANGUAGE		•	•	To customize the screen	
SETOI	OSD	HORIZONTAL	•	•	status for a user's operating environment	
	POSITION VERTICAL			•	CHVIIOTIITICITE	
	WHITE BALANCE		•			
	POWER INDICATOR			•		
	FACTORY RESET		•	•		
FLATRON	MOVIE/TEXT		•		To select or customize	
F-ENGINE(-)	USER		•	•	desired image settings	
NORMAL						
			•	Adjus	stable	

: Adjustable

A: Analog Input

D: Digital Input

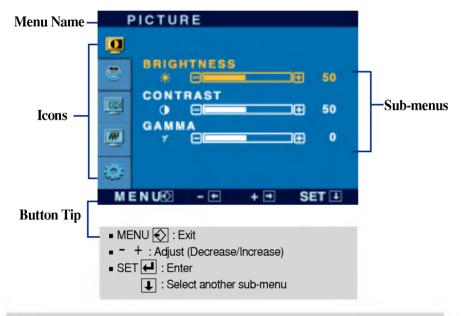
NOTE

■ The order of icons may differ depending on the model (A9~A13).



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 Main menu Description **PICTURE** To adjust the brightness of the screen. BRIGHTNESS To adjust the contrast of the screen. CONTRAST CONTRAST 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. ■ MENU : Exit - : Decrease + : Increase SET : Select another sub-menu. **COLOR** PRESET Select the screen color. • 6500K: Slightly reddish white. • 9300K: Slightly bluish white. Set your own red color levels. RED GRFFN Set your own green color levels. Set your own blue color levels. BLUE ■ MENU : Exit ■ - : Decrease + : Increase ■ SET: Select another sub-menu **POSITION** To move image left and right. HORIZONTAL VERTICAL To move image up and down. **HORIZONTAL** VERTICAL ■ MENU : Exit - : Decrease

■ + : Increase

■ SET: Select another sub-menu

Main menu	Sub menu	Description
TRACKING	CLOCK	To minimize any vertical bars or stripes visible on the screen background. The horizontal screen size will also change.
FHASE MENUS - P + P SET 4	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-men	u	
SETUP	LANGUAGE	To choose the language in which the control names are displayed.
LANGUAGE > ENGLISH OSO POSITION HORIZONTAL THE BE SO	OSD POSITION	To adjust position of the OSD window on the screen.
WHITE BALANCE POO POWER INDICATOR PON FACTORY RESET PNO 1600 x 1200 60Hz	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 H: Adjust SET: Select another sub-men	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."

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.

Press the ▶ button to reset immediately.

The OSD screen will appear when you touch the figure (-) 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 SETbutton to use the adjusted screen.



Main menu Sub menu Description



MOVIE

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

MOVIE: For animation images in videos or movies

TEXT: For text images (Word processing etc.)



User

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.



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?
- Check and see if the power cord is connected properly to the power outlet.
- Is the power indicator light on?
- Touch the Power button.
- Is the power on and the power indicator blue or green?
- Adjust the brightness and the contrast.
- Is the power indicator amber?
- 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 5 seconds: the message
 - "OSD UNLOCKED" will appear.

Display image is incorrect

- Display Position is incorrect.
- Press the SET/AUTO 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 SET/AUTO 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 SET/AUTO 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.
- Make sure the power voltage is high enough, It has to be higher than AC100-240V 50/60Hz.

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	Anti-Glare coating 20.1 inches viewab			
Sync Input	0.255mm pixel pito Horizontal Freq. Vertical Freq.	h Analog : 28 - 83kHz (Automatic) Digital : 28 - 83kHz (Automatic) 56 - 85Hz (Automatic)		
	Input Form	Separate TTL, Positive/Negative Composite TTL, Positive/Negative SOG (Sync On Green) Digital		
Video Input	Signal Input	15 pin D-Sub Connector DVI-D connector (Digital)		
	Input Form	RGB Analog (0.7Vp-p/75ohm), Digital		
Resolution	Max	DVI Digital: VESA 1600 x 1200@60Hz D-sub Analog: VESA 1600 x 1200@60I		
	Recommend	VESA 1600 x 1200@60Hz		
Plug&Play	DDC 2B			
Power Consumption	On Mode Sleep Mode Off Mode	≤ 58W ≤ 2W ≤ 1W		
Dimensions &Weight (with tilt stand)	Width Height Depth Net	47.3 cm /18.62 inches 44.7 cm /17.60 inches 24.0 cm / 9.44 inches 7.74 kg (17.06 lbs)		
Tilt Pance	Tilt	-5°~25°		
Tilt Range Power Input	AC 100-240V~ 50/6			
Environmental Conditions	Operating Conditi Temperature Humidity	ons 10°C to 35 °C 10 % to 80 % non-Condensing		
	Storage Condition Temperature Humidity			
Tilt Stand	Attached(O), Deta	Attached(O), Detached()		
Signal cable	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 1024	62.11	60
*18	1600 x 1200	75.00	60

^{*}Recommend Mode

Indicator

LED Color
Blue
Amber
Off

How to Install the Rack wall mounting

This monitor can be mounted on the VESA standrad wall mounting rack.

1. Please the monitor on a piece of cloth or other soft surface with the front side facing downward and remove the rear cap.



2. Separate the stand base using a screwdriver as shown in the picture.

3. Install the VESA standrad wall mounting.



Kensington Security Slot- optional Connected to a locking

cable that can be purchased separately at most computer stores

VESA wall mounting

Connected to another object (stand type and wall-mounted type. This monitor accepts a VESA-compliant mounting interface pad.-optional)
For further information, refer to the VESA Wall Mounting Instruction Guide.

Digitally yours •••••

