User's Guide

W2452T
W2452TX

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.

LG

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.

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.

■ **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 Body into the product in the correct direction as shown in the picture.

Stand Body   Hinge Body
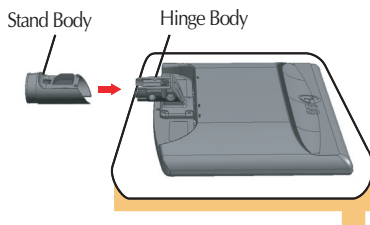
3. Assemble the Stand Base (Front, Rear) into the Stand Body in the correct direction, then tighten the screw as shown in the picture.

Stand Base   Stand Body

Stand Base

4. Insert the Cable Deco Cover in the Stand Body in the correct direction.
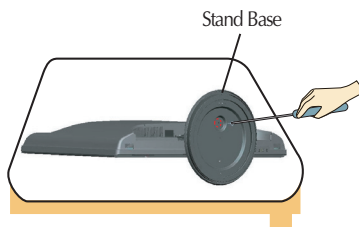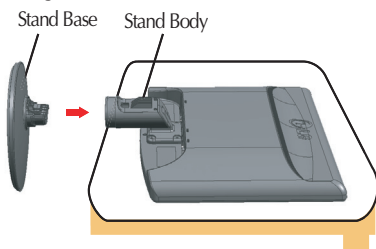
Stand Base   Cable Deco Cover
Stand Body

Cable Deco Cover
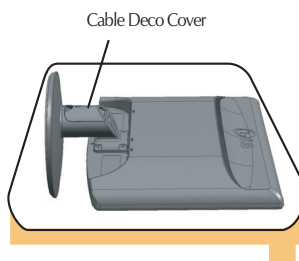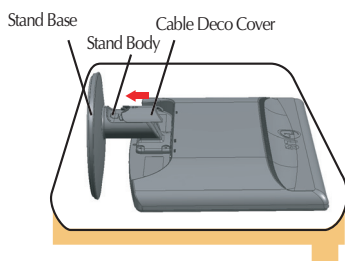
5. Once assembled take the monitor up carefully and face the front side

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. Slide the Cable Deco Cover out from the stand body.

4. Loosen the screw, then take off the stand base from stand body.

5. Please pull the stand body lightly to separate it from the hinge body.

Important
- Your monitor may differ from the items shown in the picture.

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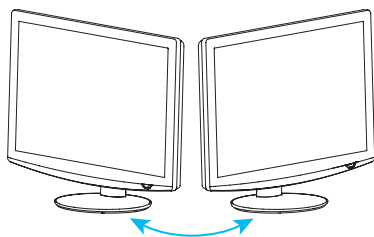
Positioning your display

1. Adjust the position of the panel in various ways for maximum comfort.

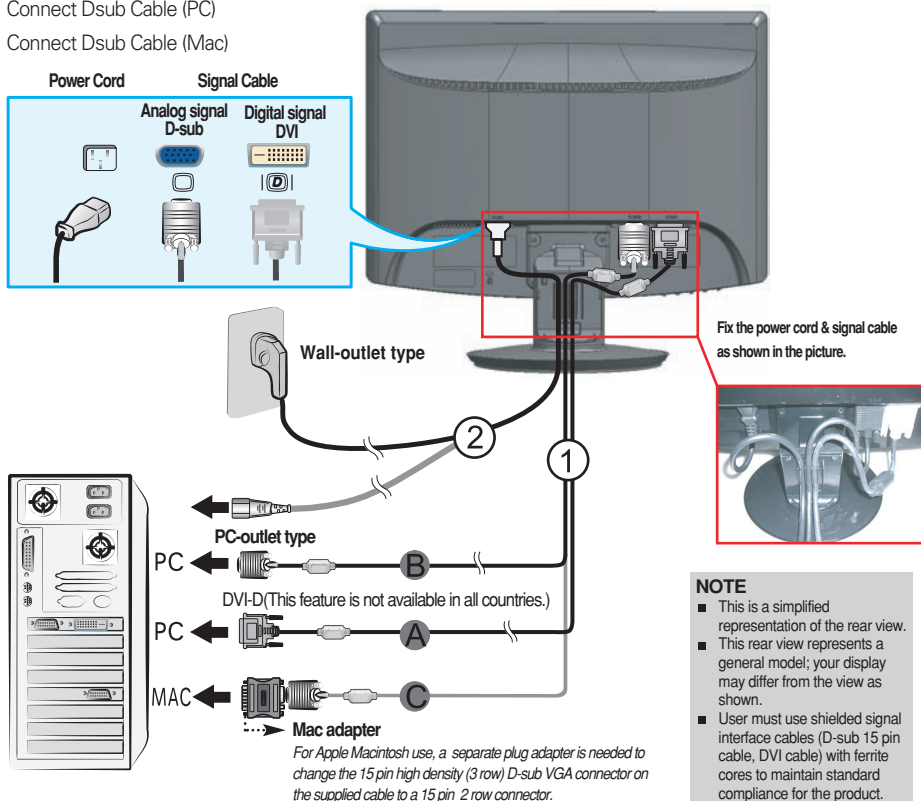■ **Tilt Range:** -5˚~20˚

-5°   20°

■ **Swivel:** 355˚

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.
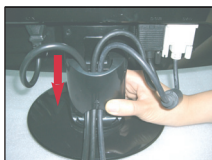
Using the Computer

1. Make sure to turn off the computer and product. Connect the cable as below sketch map form ① to ②.

Ⓐ Connect DVI Cable

Ⓑ Connect Dsub Cable (PC)

Ⓒ Connect Dsub Cable (Mac)

Power Cord   **Signal Cable**

Analog signal   **Digital signal**
D-sub   **DVI**

Wall-outlet type

②   ①

Fix the power cord & signal cable as shown in the picture.

PC-outlet type

PC ← Ⓑ

DVI-D(This feature is not available in all countries.)

PC ← Ⓐ

MAC ← Ⓒ

Mac adapter
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.

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.

2. Insert the Cable Deco Cover in the Stand Body in the correct direction.

3. 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)
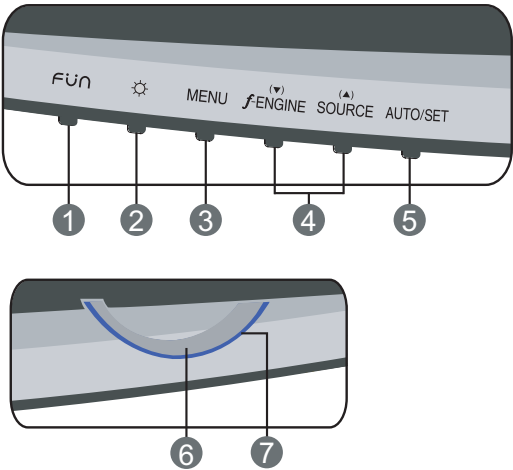
PROCESSING SELF
IMAGE SETTING

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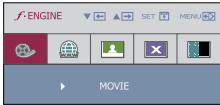**'AUTO/SET' Function?** When you encounter problems such as blurry screen, blurred letters, screen flicker or tilted screen while using the device or after changing screen resolution, press the AUTO/SET function button to improve resolution.

A6

Front Panel Controls

Control	Function
1 FUN Button	Use this button to enter **EZ ZOOMING**, **4:3 IN WIDE**, **PHOTO EFFECT**, **SOUND** items, for more information, refer to page A15-A16.
2 ☼	Use this button to enter On Screen Display Sub-menu to adjust BRIGHTNESS directly.
3 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.
OSD UNLOCKED	You can unlock the OSD settings at any time by pushing the **MENU button** for several seconds. The message "**OSD UNLOCKED**" appears.

Control Panel Functions

Control	Function
④ **▼▲ Buttons**	Use these buttons to select or adjust functions in the On Screen Display.
▼ Button **(ƒ·ENGINE)**	For more information, refer to page A17.
▲ Button **(SOURCE)**	Use this button to make either D-Sub or DVI connector active. This feature is used when two computers are connected to the display. The default setting is D-Sub.
⑤ **AUTO/SET Button**	Use this button to select an icon in the On Screen Display. **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: W2452T : 1920 x 1200 W2452TX : 1920 x 1200
⑥ **Power Button**	Use this button to turn the display on or off.
⑦ **Power Indicator**	This Indicator lights up as blue when the display is operating normally(On Mode). If the display is in Sleep Mode (Energy Saving), this indicator color changes to amber.

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 → ▼ ▲ → AUTO/SET → ▼ ▲ → 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 **AUTO/SET Button**.

3 Use the ▼ **/** ▲ **Buttons** to adjust the image to the desired level. Use the **AUTO/SET Button** to select other sub-menu items.

4 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		A	D	Reference
EZ ZOOMING			●	●	To adjust the resolution
4:3 IN WIDE			●	●	To adjust the image size
PHOTO EFFECT	NORMAL		●	●	To adjust screen color mode
	GAUSSIAN BLUR		●	●	
	SEPIA		●	●	
	MONOCHROME		●	●	
SOUND			●	●	To select or turn off the sound
PICTURE	BRIGHTNESS		●	●	To adjust the brightness, contrast and gamma of the screen
	CONTRAST		●	●	
	GAMMA		●	●	
COLOR	PRESET	sRGB	●	●	To customize the color of the screen
		6500K	●	●	
		9300K	●	●	
	RED		●	●	
	GREEN		●	●	
	BLUE		●	●	
TRACKING	HORIZONTAL		●		To adjust the position of the screen
	VERTICAL		●		
	CLOCK		●		To improve the clarity and stability of the screen
	PHASE		●		
	SHARPNESS		●	●	
SETUP	LANGUAGE		●	●	To customize the screen status for a user's operating environment
	OSD POSITION	HORIZONTAL	●	●	
		VERTICAL	●	●	
	WHITE BALANCE		●		
	POWER INDICATOR		●	●	
	FACTORY RESET		●	●	
FLATRON F-ENGINE	MOVIE		●	●	To select or customize desired image settings
	INTERNET		●	●	
	USER		●	●	
	NORMAL		●	●	
	DEMO		●	●	
			● : Adjustable A : Analog Input D : Digital Input		

NOTE

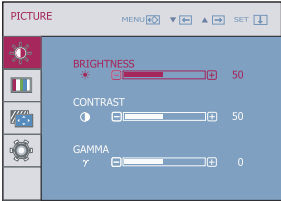■ The order of icons may differ depending on the model (A10~A17).

A10

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.

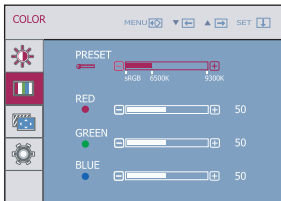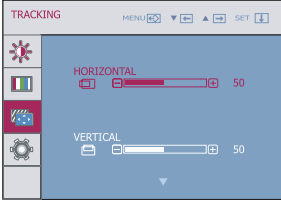**Press the MENU Button, then the main menu of the OSD appears.**

Main Menu

PICTURE	COLOR	TRACKING	SETUP

- MENU ◈ : Exit
- ▼ ▲ : Adjust (Decrease/Increase)
- SET ↵ : Enter
  - ↓ : Select another sub-menu
  - ↻ : Restart to select sub-menu

Button Tip

Menu Name

PICTURE   MENU ◈ ▼ ← ▲ → SET ↓

Icons

BRIGHTNESS
☀   ⊖ [▮▮▮▮▮▮] ⊕   50

CONTRAST
◐   ⊖ [▮▮▮▮] ⊕   50

GAMMA
γ   ⊖ [▮▮▮] ⊕   0
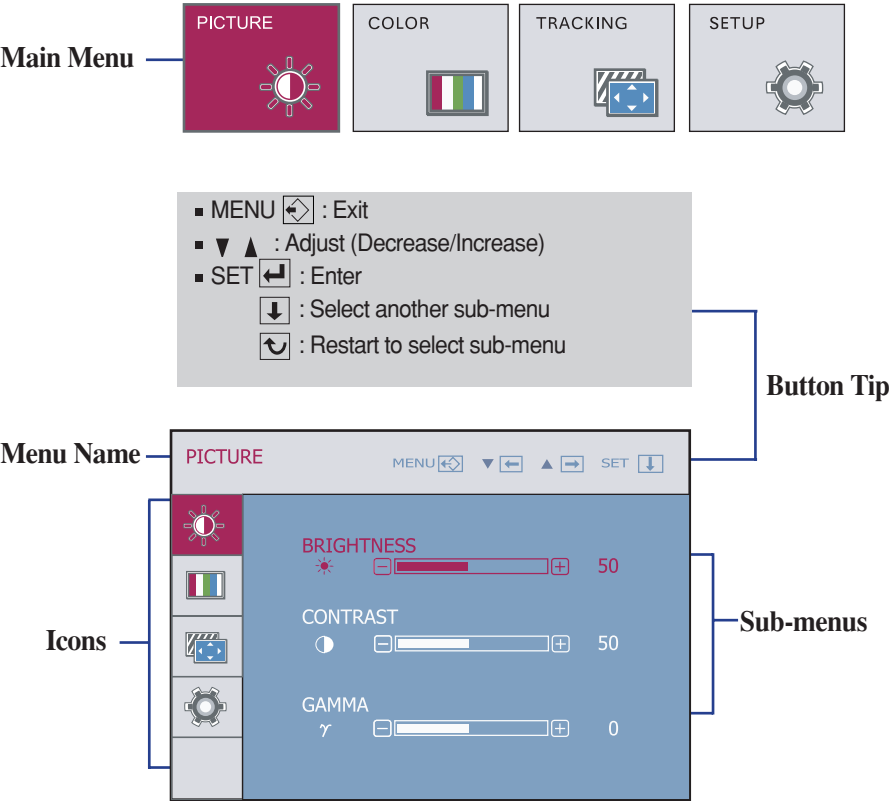
Sub-menus

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

On Screen Display(OSD) Selection and Adjustment

Main menu	Sub menu	Description

PICTURE

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
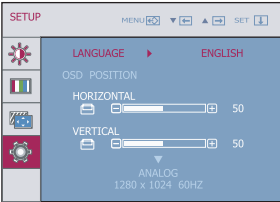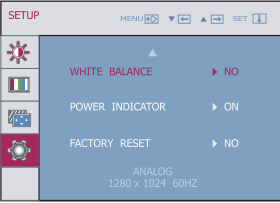On the monitor, high gamma values display whitish images and low gamma values display high contrast images.

- **MENU** : Exit
- ▼ : Decrease
- ▲ : Increase
- **SET** : Select another sub-menu

COLOR

PRESET
- sRGB: Set the screen color to fit the SRGB standard color specification.
- 6500K: Slightly reddish white.
- 9300K: Slightly bluish white.

RED — Set your own red color levels.

GREEN — Set your own green color levels.

BLUE — Set your own blue color levels.

- **MENU** : Exit
- ▼ : Decrease
- ▲ : Increase
- **SET** : Select another sub-menu

A12

Main menu	Sub menu	Description

TRACKING

HORIZONTAL   To move image left and right.

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.

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.

SHARPNESS   To adjust the clearness of the screen.

- **MENU** : Exit
- ▼ : Decrease
- ▲ : Increase
- **SET** : Select another sub-menu

Main menu	Sub menu	Description

SETUP

LANGUAGE — To choose the language in which the control names are displayed.

OSD POSITION — To adjust position of the OSD window on the screen.

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.

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.

- **MENU** : Exit
- ▼ : Adjust
- ▲ : Adjust
- **SET** : Select another sub-menu

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.

On Screen Display(OSD) Selection and Adjustment

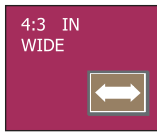■■■ The OSD screen will appear when you touch the **FUN** button on the left bottom of the monitor.

EZ ZOOMING	4:3 IN WIDE	PHOTO EFFECT	SOUND ▶ON 1
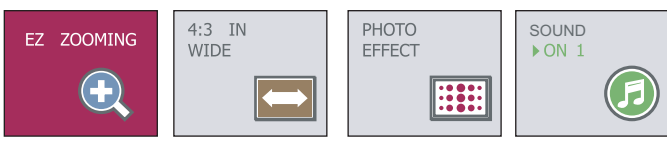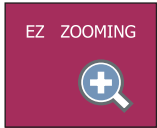
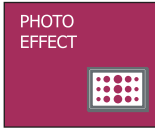| Main menu	Sub menu	Description
EZ ZOOMING	**EZ ZOOMING**	EZ Zoom lowers the display's resolution in single-step increments. Depressing the button once lowers the resolution by one step; while a second button-press returns the resolution to the original display settings. *This function is operated only if the 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.

On Screen Display(OSD) Selection and Adjustment

Main menu	Sub menu	Description

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.

- SEPIA:
  This option changes the screen to be Sepia tone. The Sepia tone is brown color tone.

- MONOCHROME:
  This option changed the screen to be Gray tone. The screen is displayed by white, black, gray.
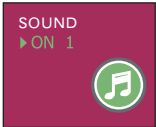

SOUND

To select or turn off the Buzzer sound.

The Buzzer sound operates in below cases:

- DC power On
- DC power Off
- Main Button Menu On
- Fun Button Menu On
- Menu Off

Use 'AUTO/SET' button to select sound (two kinds of Buzzer sound) or turn off the sound, and use 'MENU' button to save the selection and exit the OSD menu.

■■■ The OSD screen will appear when you touch the f·ENGINE button on the left bottom of the monitor.

Menu Name ──────
Icons ──────
Sub-menu Name ──────
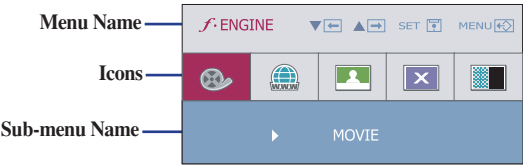
| Main menu	Sub menu	Description
	MOVIE **INTERNET**	This feature lets you easily select the best desired image condition optimized to the environment (ambient illumination, image types etc). **MOVIE**: For animation images in videos or movies **INTERNET**: For text images (Word processing etc.)
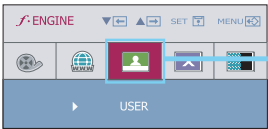
	USER	User
		You can manually adjust brightness, ACE or RCM. You can save or restore the adjusted value even when using a different environment.
		
		··· ☀ (Brightness): Adjusts screen brightness.
		···**ACE**(Adaptive Clarity Enhancer): Selects the clarity mode.
		···**RCM**(Real Color Management): Selects the color mode.
		  0 Not applied
		  1 Green enhance
		  2 Flesh tone
		  3 Color Enhance
		
		Select the SAVE sub-menu using the **AUTO/SET button** and save the **YES** value using the ▼, ▲ **buttons**.
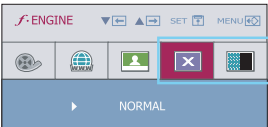
	NORMAL **DEMO**	This is under normal operating conditions. This is just for advertising to customer in the shops. It's setting is same with Movie mode and screen is divided by half.

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 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 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.

Specifications

Display	24 inches (61.13 cm) Flat Panel Active matrix-TFT LCD Anti-Glare coating Visible diagonal size: 61.13 cm 0.270*0.270 mm pixel pitch	
Sync Input	Horizontal Freq.	Analog : 30 - 83 kHz (Automatic) Digital : 30 - 83 kHz (Automatic)
	Vertical Freq.	56 - 75 Hz (Automatic)
	Input Form	Separate TTL, Positive/Negative SOG (Sync On Green) Digital (HDCP)
Video Input	Signal Input	15 pin D-Sub Connector DVI - D connector (Digital)
	Input Form	RGB Analog (0.7 Vp-p/ 75 ohm), Digital
Resolution	Max	Analog : VESA 1920 x 1200 @60 Hz Digital : VESA 1920 x 1200 @60 Hz
	Recommend	VESA 1920 x 1200 @60 Hz
Plug&Play	DDC 2B (Digital), DDC 2B (Analog)	
Power Consumption	On Mode : 80 W(Typ.) Sleep Mode ≤ 1 W Off Mode ≤ 1 W	

Dimensions &Weight	With Stand	Without Stand
Width	57.36 cm / 22.58 inches	57.36 cm / 22.58 inches
Height	46.29 cm / 18.22 inches	40.55 cm / 15.96 inches
Depth	24.26 cm / 9.55 inches	8.70 cm / 3.43 inches
Net	6.1 kg (13.45 lbs)	

Tilt Range	Tilt	-5˚~20˚
Swivel Range	Swivel	355˚
Power Input	AC 100-240V~ 50/60Hz 1.2A	

Environmental Conditions	Operating Conditions
	   Temperature 10˚C to 35 ˚C
	   Humidity 10 % to 80 % non-Condensing
	Storage Conditions
	   Temperature -20˚C to 60 ˚C
	   Humidity 5 % to 90 % non-Condensing	

Stand Base	Attached( ), Detached (O)	
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)

Display Modes (Resolution)	Horizontal Freq. (kHz)	Vertical Freq. (Hz)
1 640 x 480	31.469	60
2 640 x 480	37.500	75
3 720 x 480	35.162	60
4 720 x 400	31.500	70
5 800 x 600	37.879	60
6 800 x 600	46.875	75
7 1024 x 768	48.363	60
8 1024 x 768	60.023	75
9 1152 x 864	67.500	75
10 1280 x 768	47.776	60
11 1280 x 768	60.289	75
12 1280 x 1024	63.981	60
13 1280 x 1024	79.976	75
14 1600 x 1200	75.000	60
15 1680 x 1050	64.674	60
16 1680 x 1050	65.290	60
*17 1920 x 1200	74.038	60

* Recommend Mode

Indicator

MODE	LED Color
On Mode	blue
Sleep Mode	amber
Off Mode	Off

Digitally yours ∎∎∎∎····

LG