User's Guide

L1720P

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.

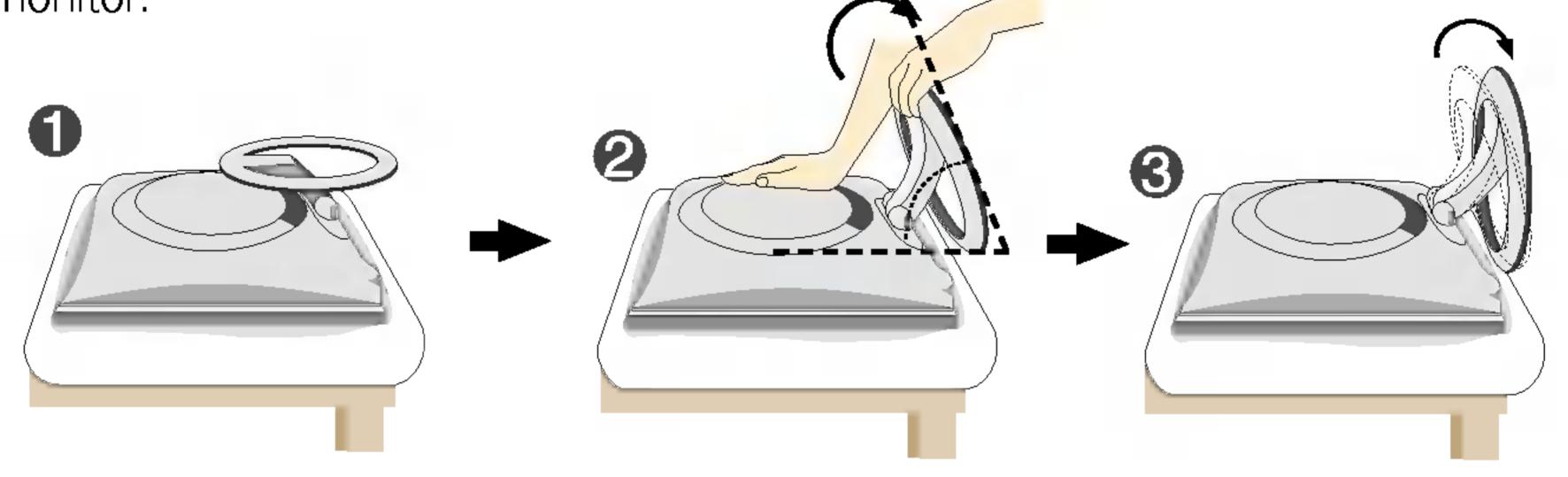
Connecting the Display

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

Unfolding the stand base

- 1. Place the monitor with its front facing downward on a cushion or soft cloth.
- 2. Expand the stand base to its first step degree (65 $^{\circ}$) pulling it outward with two hands.

3. Further expand the stand base to 90 degrees with slightly more force. Do not apply excessive force to expand the stand base to over 90 degrees, or it may damage the monitor.

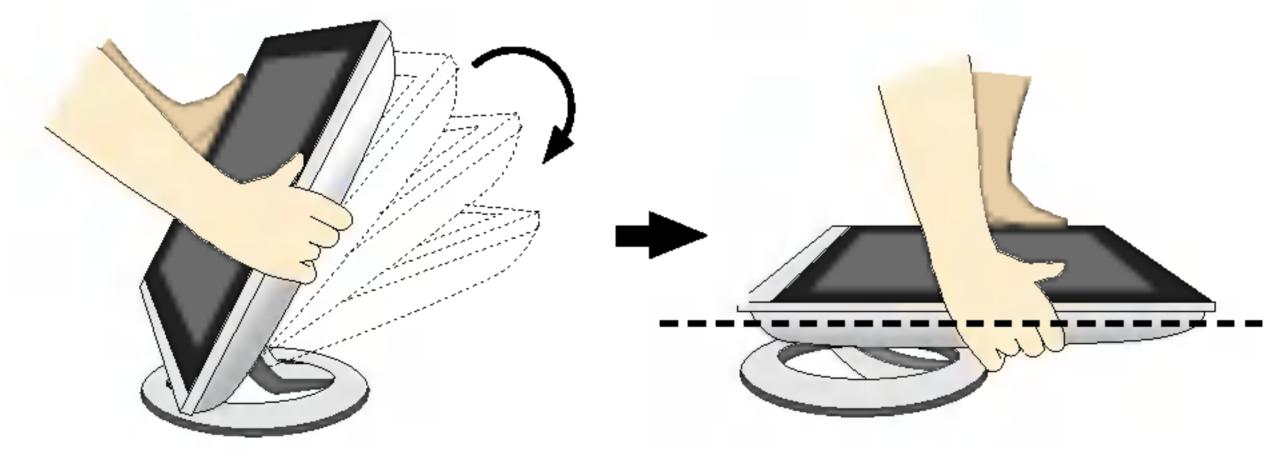


4. Place the monitor upright and adjust the stand base angle as desired. Adjust the stand base angle holding the monitor head part with both hands.



folding the stand base

1.Face the front of the monitor and push it backwards, following the sequence shown in the picture.



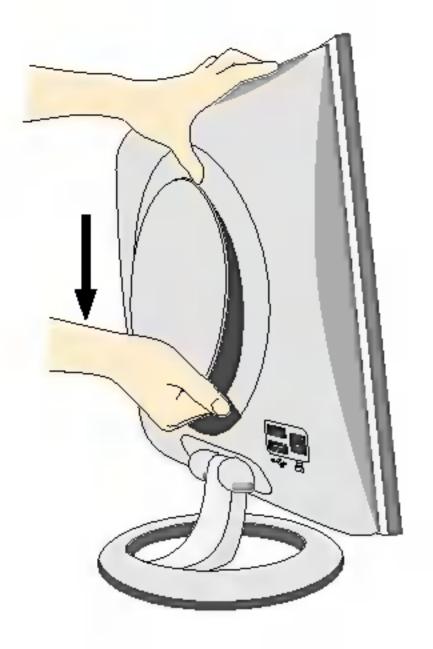
Do not push it over 180 degrees. It may damage the stand base.

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



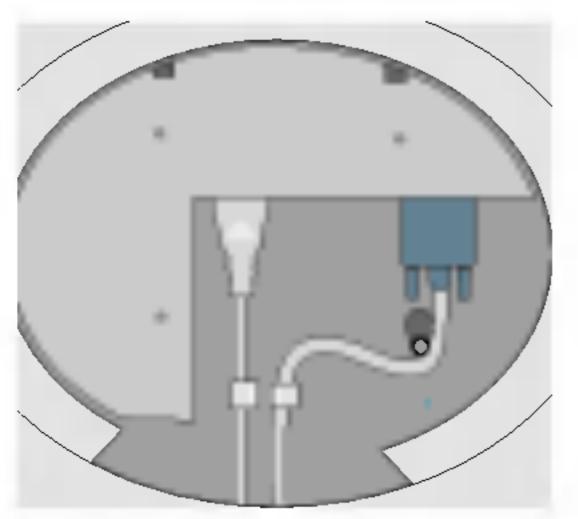
Do not touch or apply force to the monitor screen while expanding or folding the stand base.

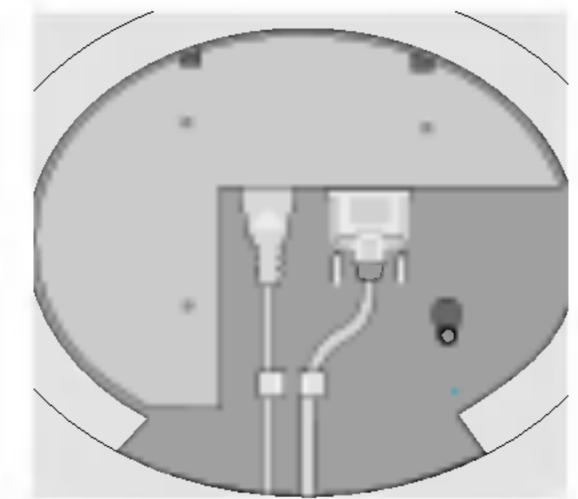
Using the Computer

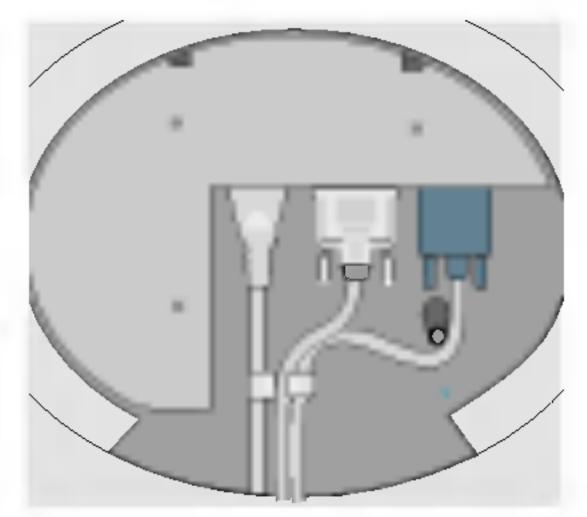


1. Separate the back cap by sliding its lower section downward as shown in the picture.

2. Connect the signal input cable and the power cord. (see next page)

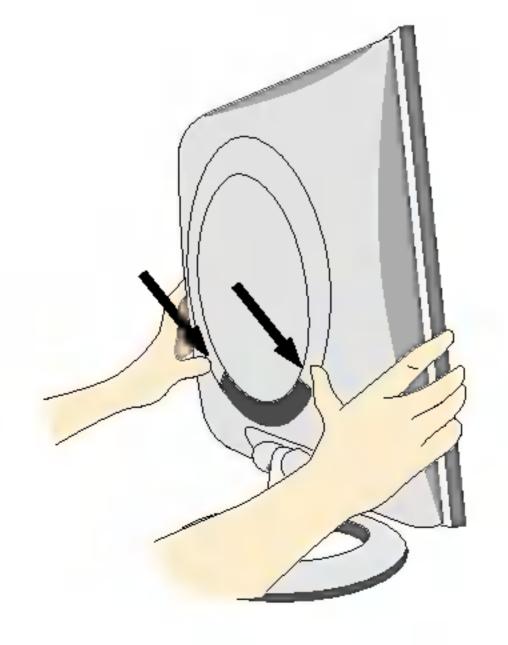








3. After the cables are connected, set the back cap into the groove of the upper section and reassemble by pushing upward.



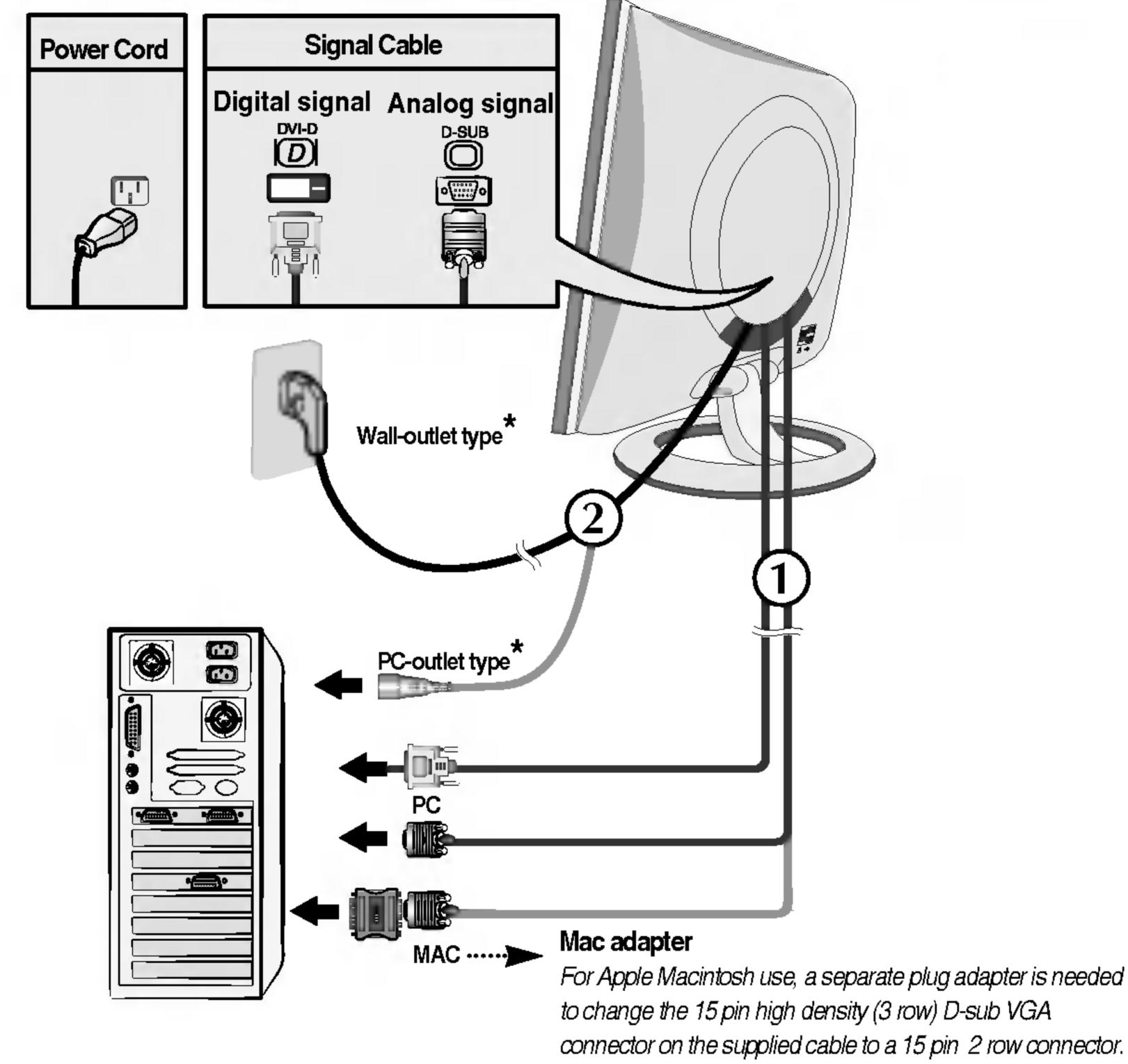
4. Insert the back cap along the bottom grooves on both sides, holding the bottom.

Using the Computer

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

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.



3. Press **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.

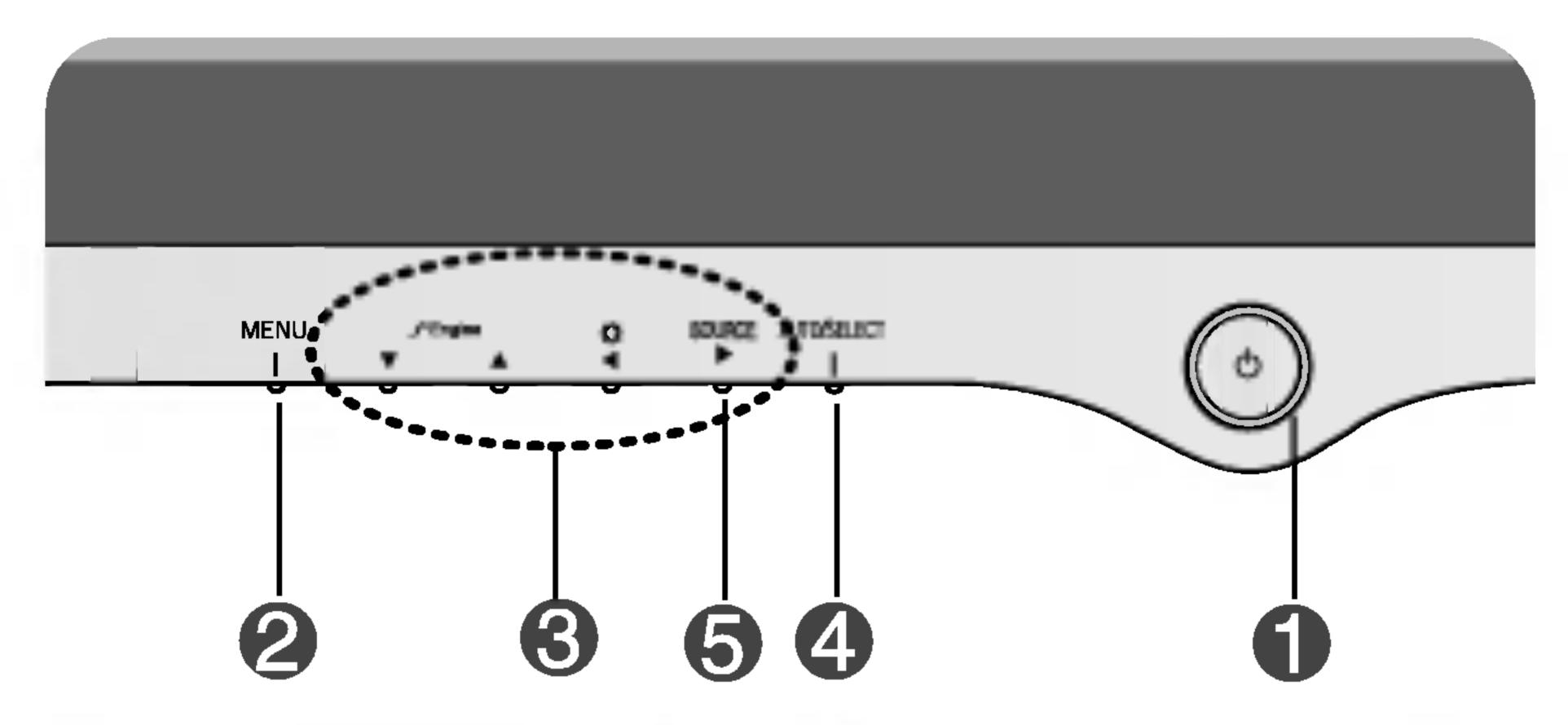
PROCESSING SELF

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. If you want to adjust the monitor while in use, or wish to manually run this function once again, push the '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'.

Front Panel Controls



Control		Function	
0	Power Button	Use this button to turn the display on or off.	
	Power (DPMS) Indicator	This Indicator lights up blue when the display operates normally. If the display is in DPM (Energy Saving) mode, this indicator color changes to amber.	
2	MENU Button	Use this button to enter or exit the On Screen Display.	
3	▼▲ ◆ ▶ Buttons	Substitution of the Use these buttons to choose or adjust items in the On Screen Display.	
4	AUTO/SELECT Button	Use this button to enter a selection in the On Screen Display.	

Control

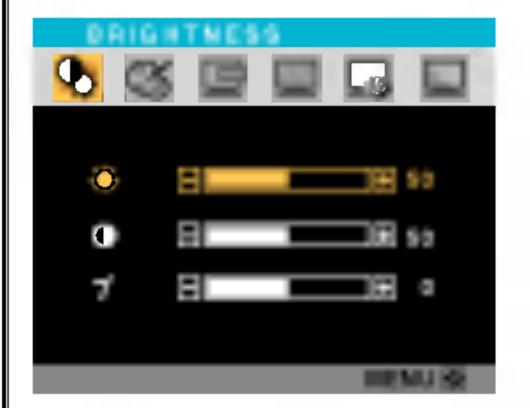
Direct Access Function







For more information, refer to page A13











AUTO IMAGE ADJUSTMENT



When adjusting your display settings, always press the **AUTO/SELECT** 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 1280x1024.



SOURCE

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.

OSD LOCKED

OSD LOCKED/UNLOCKED



OSD UNLOCKED

: MENU

This function allows you to secure the current control settings, so that they cannot be inadvertently changed. Press and hold the MENU button for 5 seconds: the message "OSD LOCKED" appears.

You can unlock the OSD controls at any time by pushing the MENU button for 5 seconds:

the message "OSD UNLOCKED" will appear.



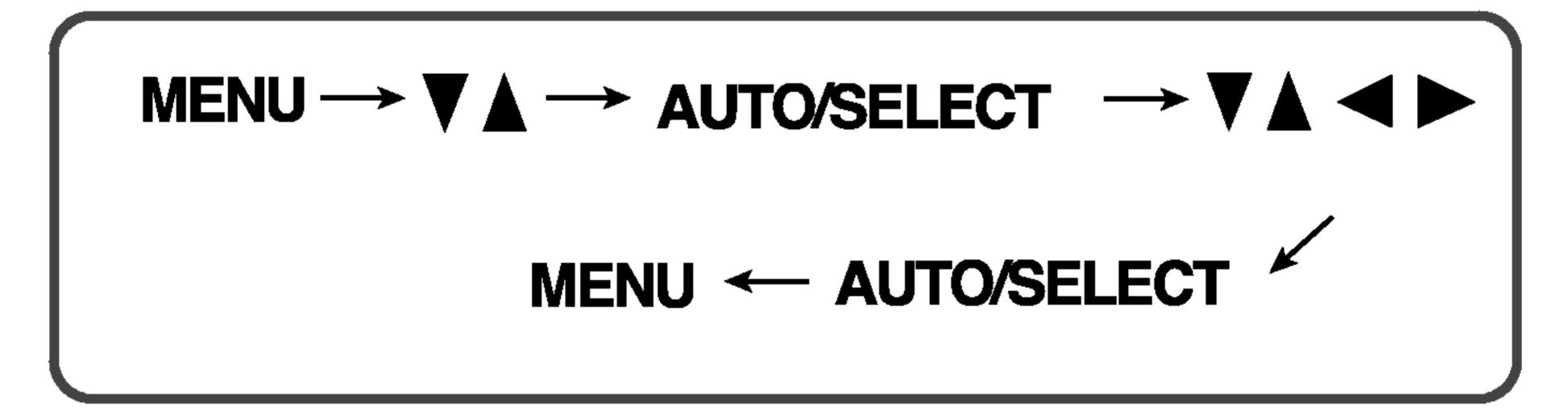
Screen Adjustment

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 ▼ or ▲ Buttons. When the icon you want becomes highlighted, press the AUTO/ SELECT Button.
- \mathfrak{F} Use the $\mathfrak{F} \blacktriangle \blacktriangleleft \blacktriangleright$ Buttons to adjust the item to the desired level.
- Accept the changes by pressing the AUTO/ SELECT Button.
- Exit the OSD by Pressing the MENU Button.

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

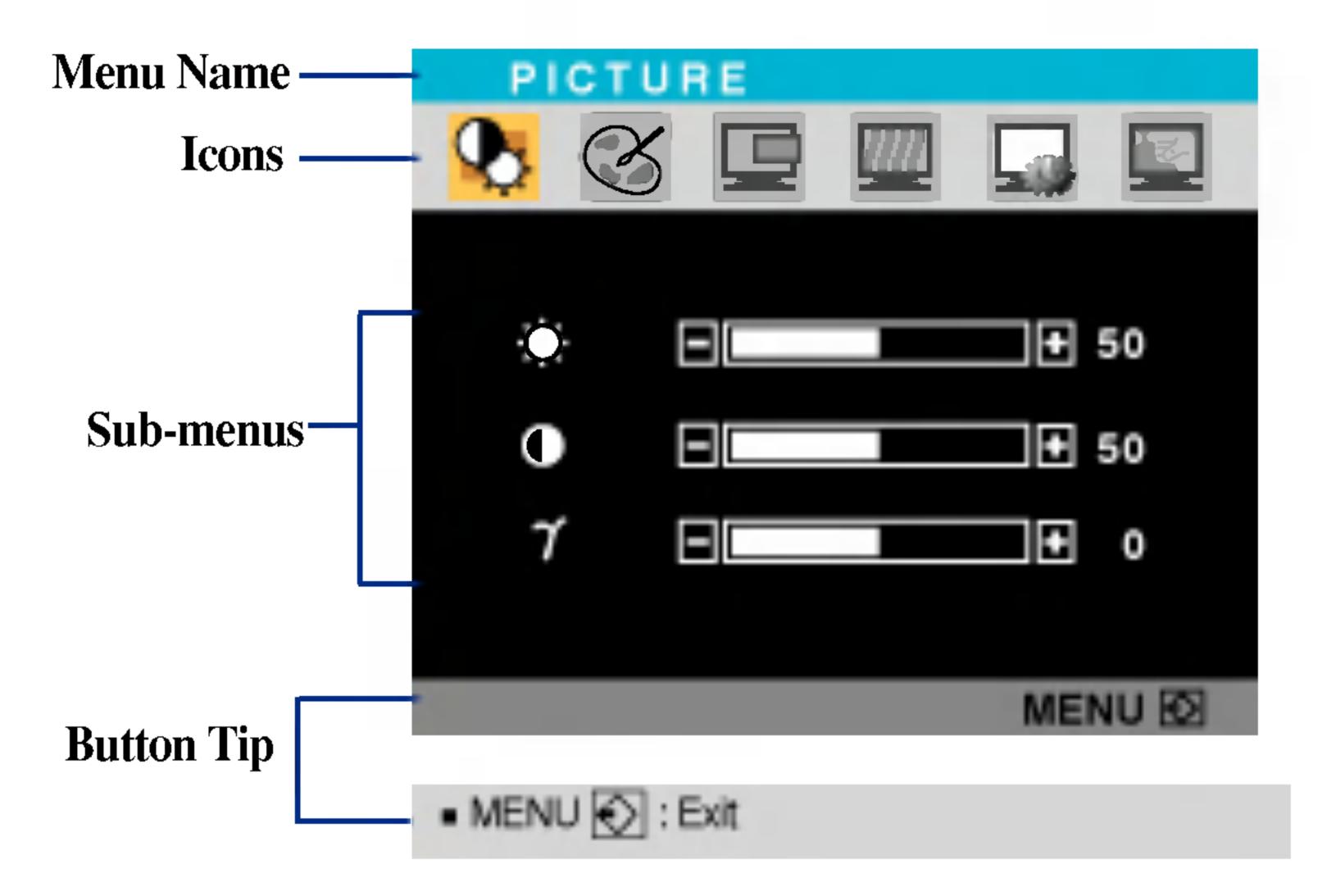
Main menu	Sub menu	A	D	Reference	
PICTURE	BRIGHTNESS			To adjust the brightness, contrast and gamma of the screen	
	CONTRAST				
	GAMMA	•			
COLOR	PRESET			To customize the color of the	
	RED			screen	
	GREEN				
	BLUE				
POSITION	H POSITION			To adjust the position of the	
	V POSITION			screen	
TRACKING	CLOCK			To improve the clarity and	
	PHASE			stability of the screen	
FACTORY	FACTORY RESET			To restore the default settings	
RESET	WHITE BALANCE				
SETUP	LANGUAGE			To customize the screen status	
	OSD H POSITION			for a user's operating environment	
	OSD V POSITION				
FLATRON	TEXT/ MOVIE			To select or customize desired	
F-ENGINE(-)	USER			image settings	
	NORMAL				
	AdjustableA : Analog InputD : 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.

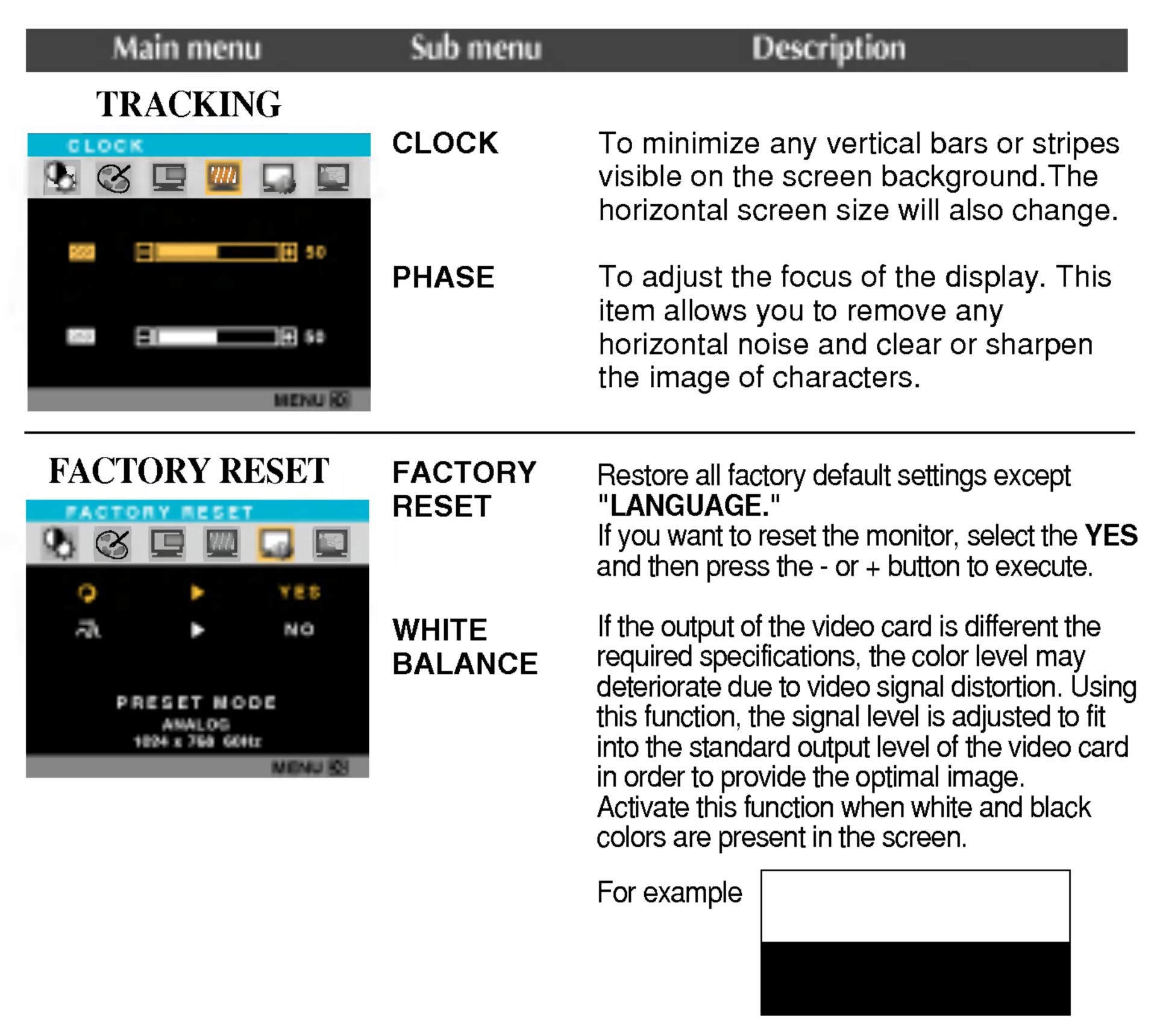
Press the MENU Button, then the main menu of the OSD appears.



NOTE

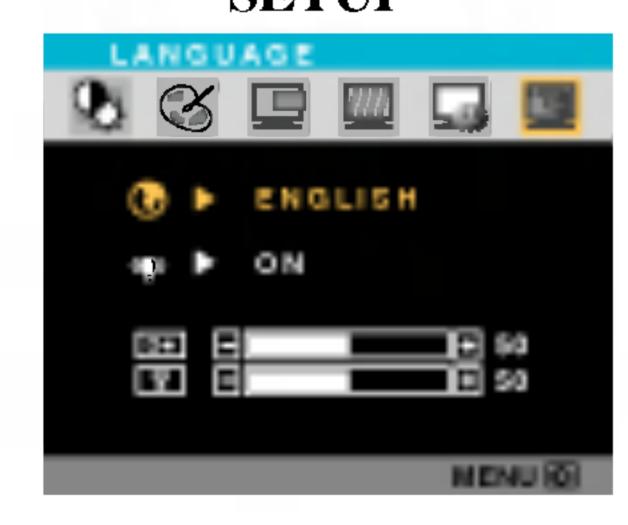
OSD (On Screen Display) menu languages on the monitor may differ from the manual.

Description Main menu Sub menu **PICTURE** To adjust the brightness of the screen. BRIGHTNESS To adjust the contrast of the screen. CONTRAST Set your own gamma value. : -50/0/50 GAMMA On the monitor, high gamma values display whitish images and low gamma values display high contrast images. **COLOR** Select the screen color. **PRESET** • 6500K: Slightly reddish white. • 9300K: Slightly bluish white. 9300K . 6500K Set your own red color levels. RED + 50 **+** 50 + 50 Set your own green color levels. GREEN MENU IS Set your own blue color levels. BLUE **POSITION** To move image left and right. **H POSITION** To move image up and down. **V** POSITION



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.

SETUP



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

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.

OSD H POSITION

To adjust horizontal position of the OSD window on the screen.

OSD **V** POSITION

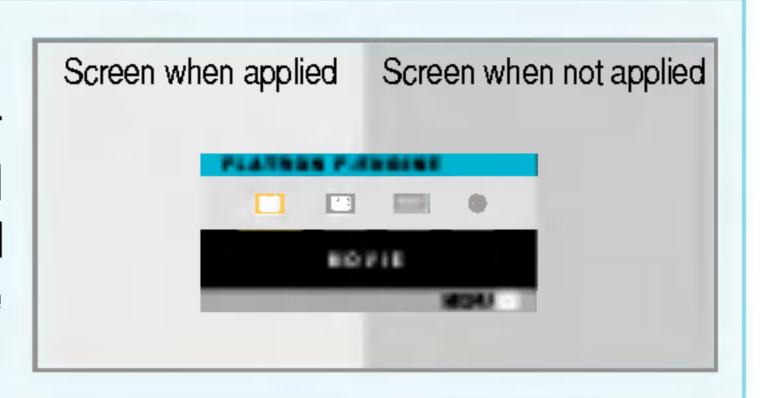
To adjust vertical position of the OSD window on the screen.

The OSD screen will appear when you press the F-ENGINE button at the front 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. Press the SETbutton to use the adjusted screen.



Main menu Sub menu Description

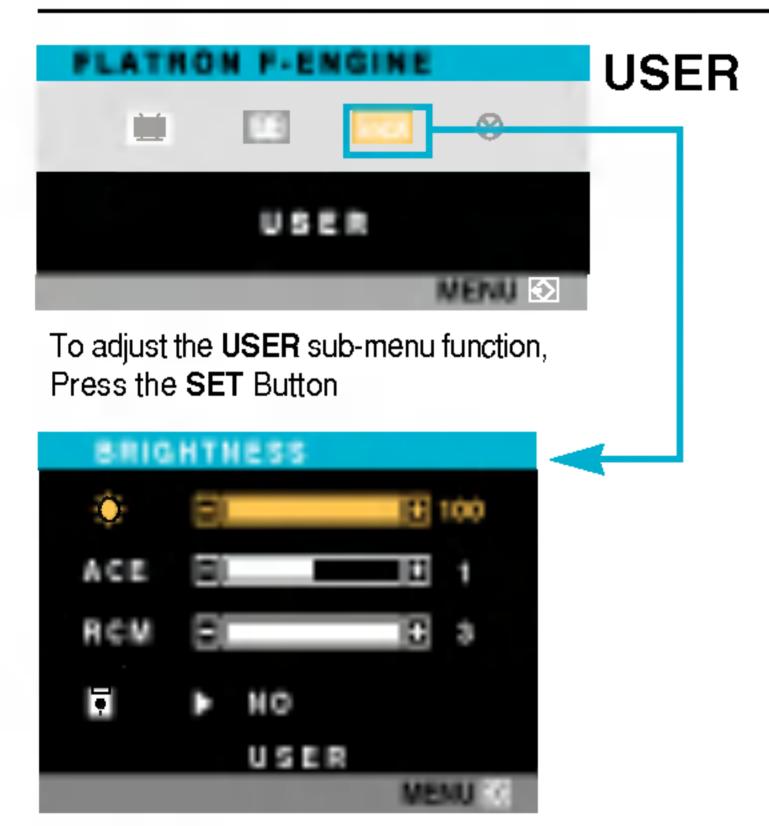


MOVIE TEXT

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.)



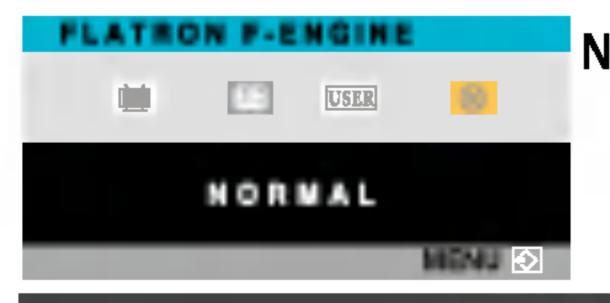
User

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.



Select the 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?
 - Is the power indicator Pi
- Is the power on and the power indicator blue?

light on?

- Is the power indicator amber?
- Do you see an "INPUT SIGNAL OUT OF RANGE" message on the screen?
- Do you see a "NO SIGNAL "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.
- Make sure if the power is on.
- 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 5 seconds: the message
 - "OSD UNLOCKED" will appear.

Display image is incorrect

Display Position is incorrect.

- On the screen background, vertical bars or stripes are visible.
- Any horizontal noise appearing in any image or characters are not clearly portrayed.

The screen color is mono or abnormal.

The screen blinks.

- Press the AUTO/SELECT 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.
- Press the AUTO/SELECT 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.
- Press the AUTO/SELECT 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).
- 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.
- 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.

mave you installed the display drivers

- Have you installed the display driver?
- Do you see an "Unrecognized monitor, Plug&Play (VESA DDC) monitor found" message?
- 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.
- Make sure to check if the video card supports Plug&Play function.

USB TUNCTION

- USB function cannot be setup.
- · Check if the USB cable is correctly connected.
- Check if the PC and OS are USB compliant.
 For verification of USB support, consult the manufacturer of each system.

Display	17 inches (43.2cm) Flat Panel Active matrix-TFT LCD Anti-Glare coating 17 inches viewable 0.264 mm pixel pitch				
Sync Input	Horizontal Freq. Vertical Freq.		30 - 83kHz (Automatic) 56 - 75Hz (Automatic)		
	Input Forn	n	Separate TTL, Po SOG (Sync On Co Digital	•	
Video Input	Signal Inp	ut	15 pin D-Sub Connector DVI-D connector (Digital)		
	Input Forn	n	RGB Analog (0.7	'Vp-p/75ohm), Digital	
Resolution	Max		DVI Digital: VESA 1280 x 1024@60Hz D-sub Analog: VESA 1280 x 1024@75Hz		
	Recomme	nd	VESA 1280 x 10	24@60Hz	
Plug&Play	DDC 2B				
Power Consumption		Normal : $43V$ Stand-by/Suspend $\leq 2V$ DPMS Off $\leq 2V$			
Dimensions &Weight (with tilt stand)		Full	Jp Position	Folded Position	
	Width Height Depth Net	37.90c	m/15.51inches m/14.92inches m/9.13 inches 4.5 kg (9.92 lbs)	39.40cm /15.51inches 41.20cm /16.22inches 12.70 cm / 5.00inches	
Tilt Range	Tilt	·			
Power Input	AC 100-240V~ 50/60Hz 1.0A				
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 95 % non-Condensing				
TILL CO		_		n-Condensing	
Tilt Stand	Attached(O), Detached ()				
		, _	, , , , , , , , , , , , , , , , , , , 		
Signal cable Power cord	Attached(ached (O) PC-outlet type		

NOTE

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



Specifications

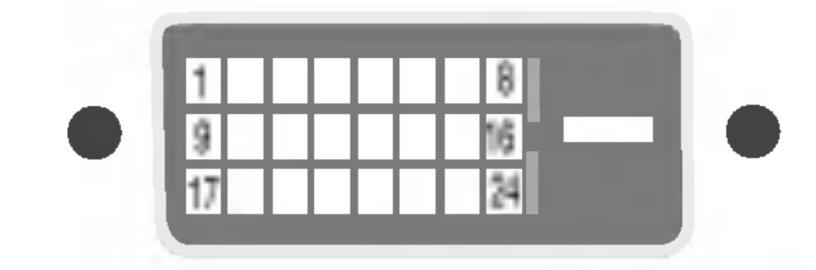
Preset Modes (Resolution)

D	isplay Mode	s (Resolution)	Horizontal Freq. (kHz)	Vertical Freq. (Hz)
1	VGA	640 x 350	31.469	70
2	VGA	720 x 400	31.468	70
3	VGA	640 x 480	31.469	60
4	VESA	640 x 480	37.500	75
5	VESA	800 x 600	37.879	60
6	VESA	800 x 600	46.875	75
7	MAC	832 x 624	49.725	75
8	VESA	1024 x 768	48.363	60
9	VESA	1024 x 768	60.023	75
10	MAC	1152 x 870	68.681	75
11	VESA	1152 x 900	61.805	65
* 12	VESA	1280 x 1024	63.981	60
13	VESA	1280 x 1024	79.976	75

Indicator

MODE	LED Color
Normal	blue
Stand-by/Suspend	amber
DPMS Off	amber

Signal Connector Pin Assignment



DVI-D Connector

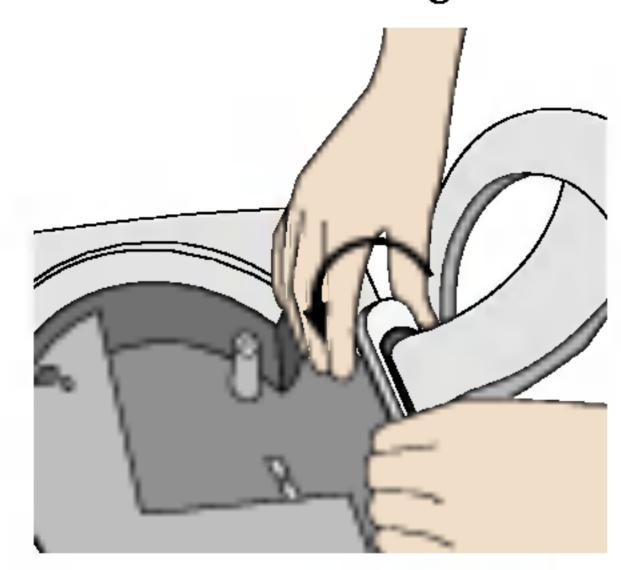
Pin	Signal(DVI-D)	
1	T. M. D. S. Data2-	
2	T. M. D. S. Data2+	
3	T. M. D. S. Data2/4 Shield	
4	T. M. D. S. Data4-	
5	T. M. D. S. Data4+	
6	DDC Clock	
7	DDC Data	
8	Analog Vertical Sync.	
9	T. M. D. S. Data1-	
10	T. M. D. S. Data1+	
11	T. M. D. S. Data1/3 Shield	
12	T. M. D. S. Data3-	
13	T. M. D. S. Data3+	
14	+5V Power	
15	Ground (return for +5V, H. Sync. and V. Sync.)	

Pin	Signal(DVI-D)
16	Hot Plug Detect
17	T. M. D. S. Data0-
18	T. M. D. S. Data0+
19	T. M. D. S. Data0/5 Shield
20	T. M. D. S. Data5-
21	T. M. D. S. Data5+
22	T. M. D. S. Clock Shield
23	T. M. D. S. Clock+
24	T. M. D. S. Clock-

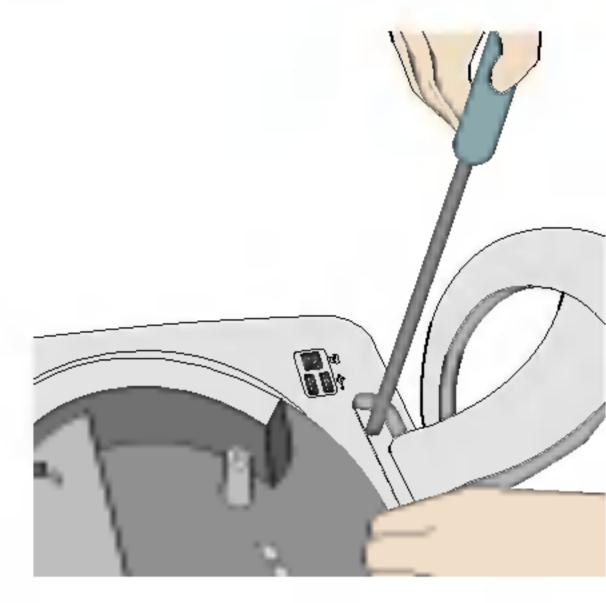
T. M. D. S. (Transition Minimized Differential Signaling)

This monitor meets VESA-compliant mounting interface pad specifications.

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

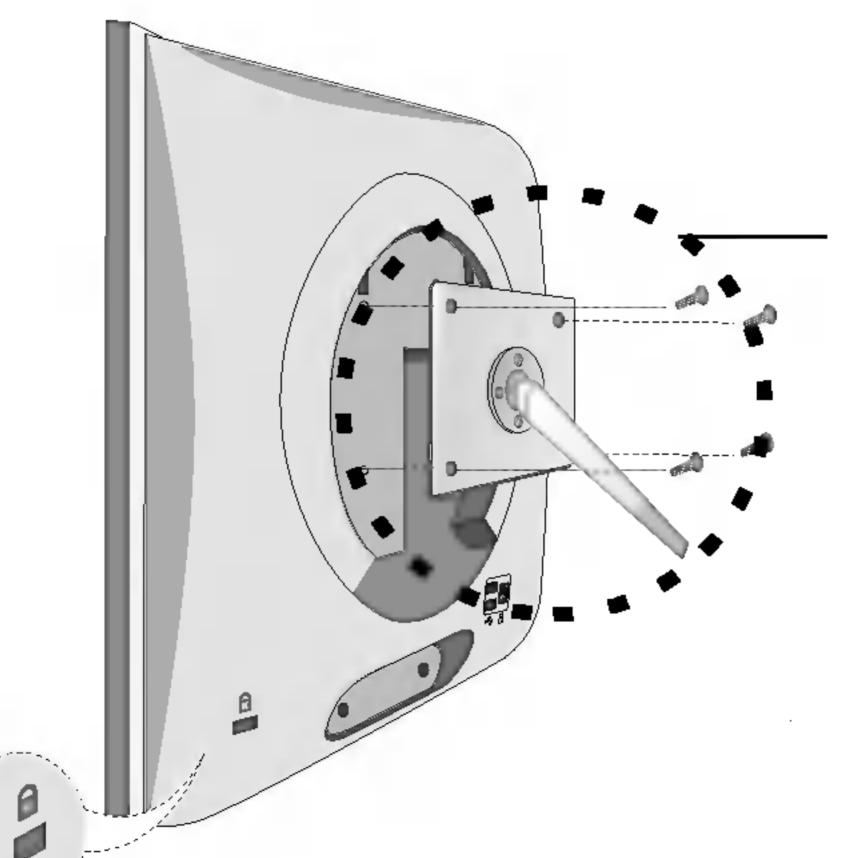


2. Slide off the lower section of the cover base with two hands as shown in the picture.



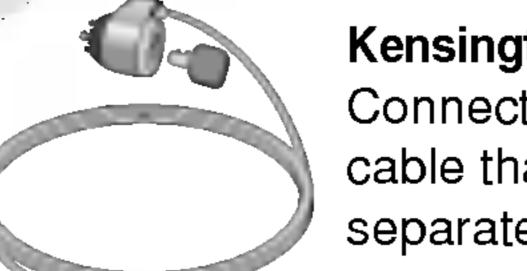
3. Separate the stand base using a screwdriver as shown in the picture.

4. Install the VESA standrad wall mounting.



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.



Kensington Security Slot- optional

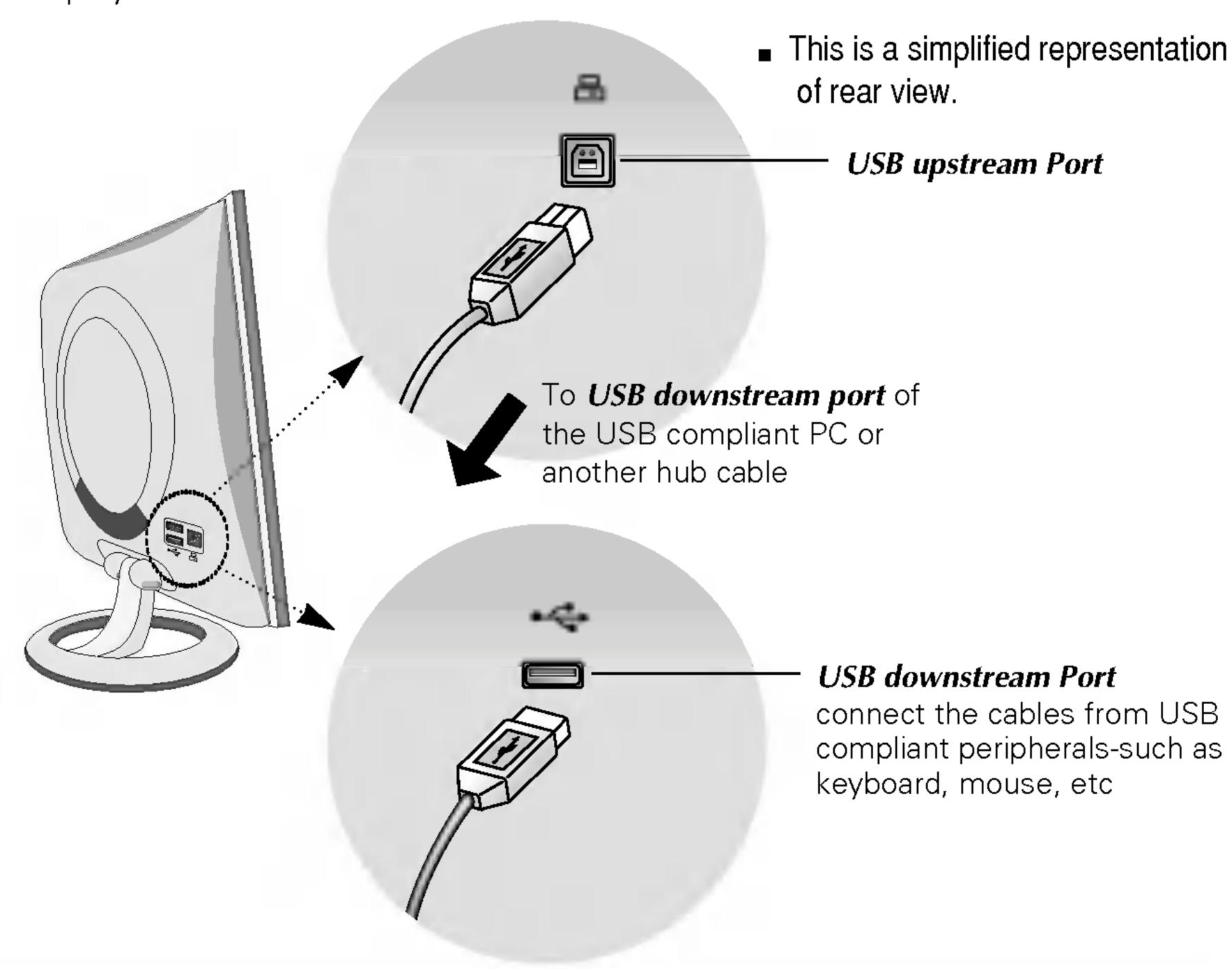
Connected to a locking cable that can be purchased separately at most computer stores

Making use of USB (Universal Serial Bus) - Optional

USB (Universal Serial Bus) is an innovation in connecting your different desktop peripherals conveniently to your computer. By using the USB, you will be able to connect your mouse, keyboard, and other peripherals to your display instead of having to connect them to your computer. This will give you greater flexibility in setting up your system. USB allows you to connect a chain of up to 120 devices on a single USB port; and you can "hot" plug (attach them while the computer is running) or unplug them while maintaining the Plug and the Plug auto detection and configuration. This display has an integrated BUS-powered USB hub, allowing up to 2 other USB devices to be attached it.

USB connection

- 1. Connect the upstream port of the display to the downstream port of the USB compliant PC or another hub using the USB cable. (Computer must have a USB port)
- 2. Connect the USB compliant peripherals to the downstream ports of the display.



NOTE

- To activate the USB hub function, the display must be connected to a USB compliant PC(OS)
 or another hub with the USB cable(enclosed).
- When connecting the USB cable, check that the shape of the connector at the cable side matches the shape at the connecting side.
- Even if the display is in a power saving mode, USB compliant devices will function when they are connected the USB ports(both the upstream and downstream) of the display.

Making use of USB (Universal Serial Bus) - Optional

USB Specifications

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

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

Digitally yours

