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.

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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.

A2

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.

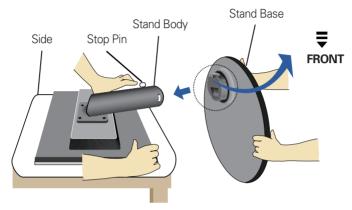
-Consult the dealer or an experienced radio/TV technician for help.

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

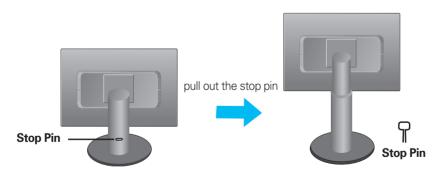
Connecting the stand

- 1. Place the monitor with its front facing downward on a cushion or soft cloth.
- 2. Assemble the Stand Base into the Stand Body.

Be sure don't pull out the Stop Pin and make the Stand Base direction as shown.



- 3. Make the monitor stand , then pull out the Stop Pin.
- *Warning:* The tape and locking pin may only be removed from those monitors equipped with a standing base when the base is pulled up. Otherwise, you may be injured by the protruding sections of the stand.



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.

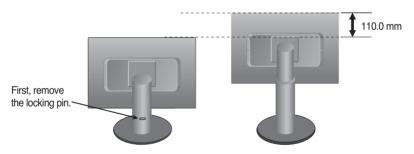
Â3

 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.

Height Range: maximum 4.33 inch (110.0 mm)



Ergonomic

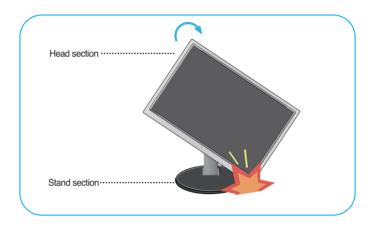
It is recommended that in order to maintain an ergonomic and comfortable viewing position, the forward tilt angle of the monitor should not exceed 5 degrees.

A4

Using the Pivot function

- **1.** Lift the monitor to its highest height to utilize the Pivot function.
- 2. Landscape & Portrait : You can rotate the panel 90° clockwise.

Please be cautious and avoid contact between the monitor head and the Stand Base when rotating the screen to access the Pivot function. If the monitor head touches the Stand Base, then the Stand Base could crack.



3. For detailed information, please refer to the Pivot Software CD provided.



• 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

Using the cable holder

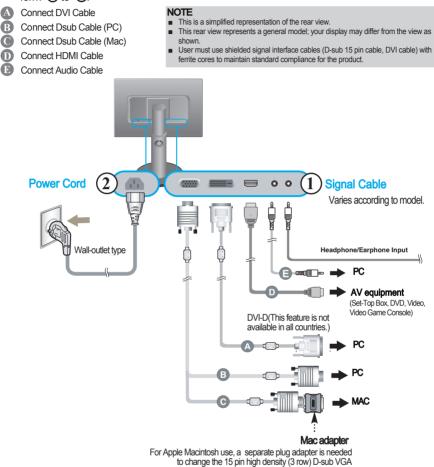


If you want to use the cable holder to let your cables together, please put them through right as shown. For if you don't do like that, you cannot use Pivot function smoothly.

A6

Using the Computer

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



to change the 15 pin high density (3 row) D-sub VGA connector on the supplied cable to a 15 pin 2 row connector.

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. (Only Analog Mode)

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.

3. Press the **SOURCE** button at the front side of the monitor.



When connecting with a DVI signal input cable. • Select **DVI**: DVI digital signal.

When connecting with a D-sub signal cable. • Select **RGB**: D-sub analogue signal.

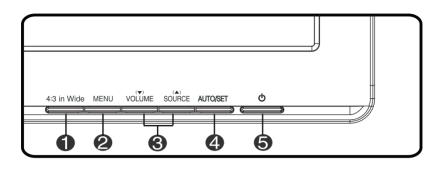
When connecting with a HDMI cable.

• Select HDMI

INPUT
RGB
DVI
HDMI



Front Panel Controls



1	4 : 3 in Wide
	Button

Resolution	Screen ratio
1280x1024	5:4
1152x864	4:3
1024x768	4:3
800x600	4:3
640x480	4:3
720x480	3:2

It allows you to adjust the size of screen you are watching now.

- WIDE : The video source is displayed in full screen size.
- 4:3: Depending on the input video signal ratio, it is automatically changed to an optimized screen ratio. (The 1280X1024 input signal is changed to 5:4 ratio and 1024X768 to 4:3.)
- The input signal which the 4:3 IN WIDE does not support the '4:3' is the following.
- 720 x 400, 1280 x 768, 1360 x 768, 1440 x 900, 1680 x 1050, 1920 x 1080



WIDE mode



4:3 display mode



Use this button to enter or exit the On Screen Display.

OSD LOCKED/UNLOCKED

This function allows you to lock the current control settings, so that they cannot be inadvertently changed. Press and hold the **MENU button** for several seconds. The message **"OSD LOCKED"** should appear.

You can unlock the OSD controls at any time by pushing the **MENU button** for several seconds. The message **"OSD UNLOCKED"** should appear.



3	▼▲ Buttons	Use these buttons to select or adjust functions in the On Screen Display.
	Button (VOLUME)	Use the speaker volume.
_	Button (SOURCE)	Use this button to make RGB, DVI or HDMI connector active. This feature is used when two computers are connected to the display. The default setting is RGB. *HDMI is optimized on the AV equipment.
4	AUTO/SET Button	Use this button to enter a selection in the On Screen Display.
	PROCESSING AUTO IMAGE ADJUSTMENT	AUTO IMAGE ADJUSTMENT When adjusting your display settings, always press the AUTO/SET button before entering the On Screen Display(OSD). This will automatically adjust your display image to the ideal settings for the current screen resolution size (display mode). The best display mode is -W2442PA inch monitor : 1920 x 1080
6	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.



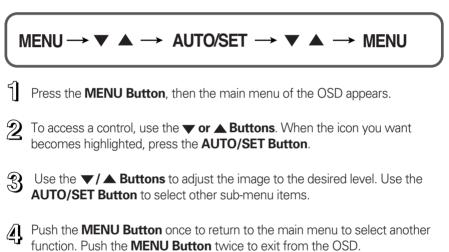
Screen Adjustment

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:



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

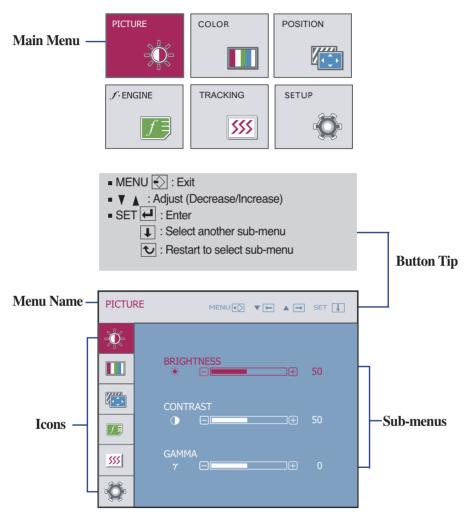
Main menu	Sub-men		R	D	Н	Reference	
PICTURE	BRIGHTNE	SS	٠	٠		To adjust the brightness,	
	CONTRAST					contrast and gamma of the	
	GAMMA					screen	
	** BLACK L	EVEL				To set offset level	
COLOR		sRGB					
COLOR	PRESET	6500K					
	DED	9300K				To customize the color of	
	RED					the screen	
	GREEN		•	•			
	BLUE						
POSITION	HORIZONT	AL				To adjust the position of the	
	VERTICAL					screen	
FLATRON		MOVIE			•		
F-ENGINE		* INTERNET ** GAME					
F-ENGINE	f.ENGINE						
	J	* NORMAL		•			
		** STANDARD * DEMO				To select or customize	
		** SPORTS				desired image settings	
	BRIGHTNESS						
	ACE						
	RCM						
TRACKING	CLOCK						
increase of the second se	PHASE					To improve the clarity and stability of the screen	
	SHARPNE	SS					
SETUP	LANGUAG	E					
SEIUI	OSD	HORIZONTAL					
	POSITION	VERTICAL				To customize the screen	
	* WHITE B	ALANCE				status for a user's operating environment	
	** OVERSCAN						
	POWER INDICATOR			٠			
	FACTORY RESET						
				ly for l		R : RGB Input DVI Input D : DVI Input Input H : HDMI Input	

NOTE

The order of icons may differ depending on the model (A12~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.

: Increase

SET : Select another sub-menu

Main menu	Sub menu	Description
	BRIGHTNESS	To adjust the brightness of the screen.
BRIGHTNESS	CONTRAST	To adjust the contrast of the screen.
CONTRAST Image: Contrast matrix of the contrast matrix	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		

COLOR **COLOR** • sRGB: Set the screen color to fit the COLOR PRESET SRGB standard color * specification. • 6500K: Slightly reddish white. • 9300K: Slightly bluish white. (<u>...</u> <u>7</u>, RED Set your own red color levels. \$\$\$ Ö Set your own green color levels. GREEN - MENU : Exit Set your own blue color levels. : Decrease : Increase SET : Select another sub-menu

Main menu	Sub menu	Description
POSITION POSITION		
POSITION MENUE TO A SET .	HORIZONTAL	To move image left and right.
*	VERTICAL	To move image up and down.
HORIZONTAL		
VERTICAL		
Ö		

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



∫•ENGINE

J. ENG	SINE MENU 🔄 🔻 🔺 SET 🗼	US
*		
	* 0 50 ACE	
	E □ 1 RCM	
<u> </u>		
¢.		

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

- **SER** 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.

 Image: Second state sta

Select the SAVE sub-menu using the AUTO/SET button and save the YES value using the $\mathbf{\Psi}$, \mathbf{A} buttons.

A15

Main menu	Sub me	nu Description
Sector Metric Movie Image: Sector Sector Sector	MOVIE	This is for animation images in videos or movies.
	INTERNET GAME	This is for text images (Word processing etc). (only for RGB/DVI input) This is for game images. (only for HDMI input)
	NORMAL STANDARD	This is under normal operating conditions. (only for RGB/DVI input) This is under standard operating conditions. (only for HDMI input)
Image: Second secon	DEMO SPORTS	This is just for advertising to customer in the shops. It's setting is same with Movie mode and screen is divided by half. (only for RGB/DVI input) This is for sports image. (only for HDMI input) *These features let you easily select the best desired image condition optimized to the environment (ambient illumination, image types etc).



Main menu	Sub menu	Description
TRACKING TRACKING		
	CLOCK	To minimize any vertical bars or stripes visible on the screen background. The horizontal screen size will also change.
PHASE Sharphess A Control of S Control of	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 Y : Decrease A : Increase SET : Select another sub-mediate 	SHARPNESS	To adjust the clearness of the screen.

Main menu	Sub menu	Description
SETUP SETUP	LANGUAGE	To choose the language in which the control names are displayed.
SETUP MENUE TE AN SET E CANCULAGE > ENGLISH OSD POSITION	OSD POSITION	To adjust position of the OSD window on the screen.
HORIZONTAL HORIZONTAL 50 WETTCAL CONSTRUCT CONSTRUCT SO CONSTRUCT CON	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.
Media Radii Contraction (Contraction) Media Result Media Result Media Result Media Result Media Result Adjust Adjust SET : Select another sub-me	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. 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 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. 	

Display	24 inches (60.9 cm) Flat Panel Active matrix-TFT LCD, Anti- Glare coating Visible diagonal size: 60.9 cm 0.276*0.276 mm pixel pitch		
Sync Input	Horizontal Freq. Vertical Freq. Input Form	Digital : 30 - 83 56 - 75 Hz (Au Separate TTL,	3 kHz (Automatic) 3 kHz (Automatic) tomatic) Positive/Negative n Green), Digital (HDCP)
Video Input	Signal Input 15 pin D-Sub Connector DVI - D connector (Digital)		
Resolution	Max Analog : VESA 1920 x 1080 @60 Hz Digital : VESA 1920 x 1080 @60 Hz Recommend VESA 1920 x 1080 @60 Hz		A 1920 x 1080 @60 Hz 1920 x 1080 @60 Hz
Plug&Play	DDC 2B (Digital, H	HDMI), DDC 2AE	3 (Analog)
Power Consumption	On Mode Sleep Mode Off Mode	: 42W(Typ ≤ 1 W ≤ 1 W	
Dimensions & Weight	Height 43.75 cm 54.75 cm Depth 27.02 cm	Stand 1 / 22.92 inches 1 / 17.22 inches 1 / 21.55 inches 1 / 10.64 inches 6.2 kg (13.78 lbs	Without Stand 58.22 cm / 22.92 inches 35.40 cm / 13.94 inches 6.01 cm / 2.37 inches
Tilt Range	Tilt -5°~ 18°		,
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)		
Power cord	Wall-outlet type or PC-outlet type		

NOTE

Information in this document is subject to change without notice.



Preset Modes (Resolution)

RGB/DVI Timing

Display	Modes (Resolution)	Horizontal Freq. (kHz)	Vertical Freq. (Hz)
1 2 3 4 5 6 7 8	720 x 400 640 x 480 640 x 480 800 x 600 800 x 600 1024 x 768 1024 x 768 1152 x 864	31.468 31.469 37.500 37.879 46.875 48.363 60.123 67.500	70 60 75 60 75 60 75 60 75 75
9 10 11 12 *13	1280 x 1024 1280 x 1024 1440 x 900 1680 x 1050 1920 x 1080	63.981 79.976 55.935 65.290 67.500	60 75 60 60 60

HDMI Timing

* Recommend Mode

Display M	odes (Resolution)	Horizontal Freq. (kHz)	Vertical Freq. (Hz)
1	480P	31.50	60
2	576P	31.25	50
3	720P	37.50	50
4	720P	45.00	60
5	1080i	28.12	50
6	1080i	33.75	60
7	1080P	56.25	50
8	1080P	67.50	60

Indicator

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

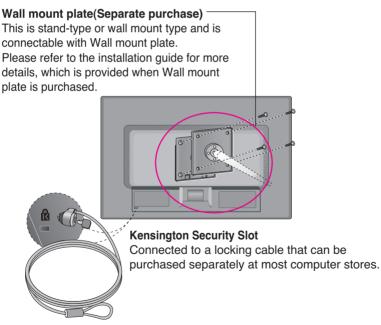
Installing the Wall mount plate

This monitor satisfies the specifications of the Wall mount plate or the interchange device.

- 1. Place the monitor with its front facing downward on a soft cloth.
- 2. Separate the stand after firstly separating 4 screws by using a driver as figure.



3. Install the Wall mount plate.



Digitally yours

