

# OWNER'S MANUAL LED LCD MONITOR

Please read this manual carefully before operating your set and retain it for future reference.

## LED LCD MONITOR MODEL

22M47D	23M47D	24M47D
22M47VQ	23M47VQ	24M47VQ
22M47H	23M47H	24M47H
22M47HQ		24M47HQ

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[ 22M47VQ | 22M47H | 22M47HQ | 23M47VQ | 23M47H | 24M47HQ | 24M47HQ | 24M47VQ |

## **LICENSE**

Each model has different licenses. Visit www.lg.com for more information on the license.



The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI logo are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.

The following content is only applied to the monitor which is sold in Europe market and which needs to meet the ErP Directive:

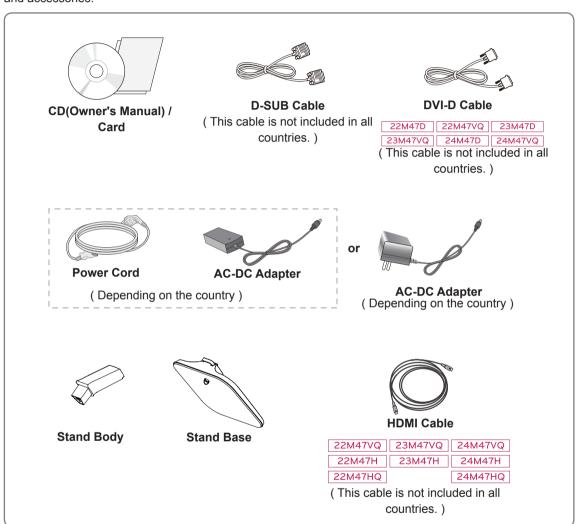
<sup>\*</sup> This monitor is set to be turned off automatically in 4 hours after you turned on display if there is no adjustment to display.

<sup>\*</sup> To make this setting be disabled, change the option to 'Off' in OSD menu of "Automatic Standby".

## **ASSEMBLING AND PREPARING**

## **Unpacking**

Check your product box for the following items. If there are any missing accessories, contact the local dealer where you purchased your product. The illustrations in this manual may differ from the actual product and accessories.





#### **CAUTION** -

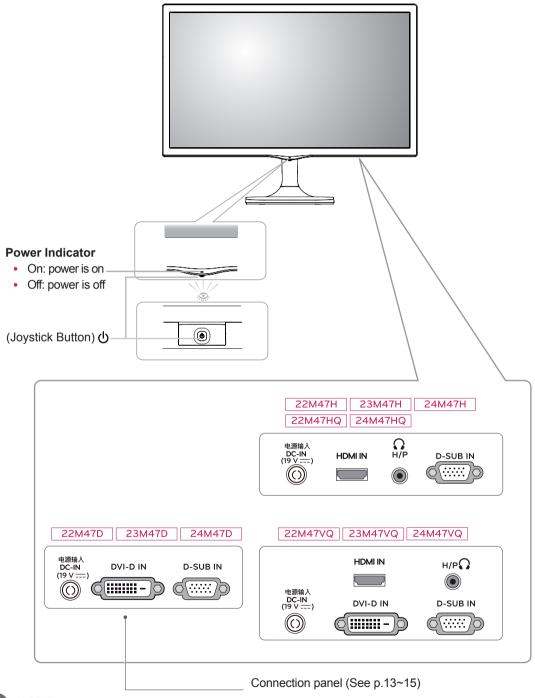
- Do not use any unapproved accessories to ensure the safety and product life span.
- · Any damages or injuries by using unapproved accessories are not covered by the warranty.



#### NOTE -

- The accessories supplied with your product may vary depending on the model.
- Product specifications or contents in this manual may be changed without prior notice due to upgrade
  of product functions.

## **Parts and buttons**





#### NOTE -

• The joystick button is located at the bottom of the monitor.

## How to Use the Joystick Button

You can easily control the functions of the monitor by pressing the joystick button or moving it left/right with your finger.

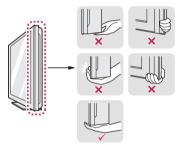
#### **Basic Functions**

	ტ	Power on	Press the joystick button once with your finger to turn on the monitor.
		Power off	Press and hold the joystick button once with your finger to turn off the monitor.
<b>₹</b>	<b>◄/▶</b>	Volume Control	You can control the volume by moving the joystick button left/right.

## **Moving and Lifting the Monitor**

When moving or lifting the monitor, follow these instructions to prevent the monitor from being scratched or damaged and to ensure safe transportation regardless of its shape or size.

- It is advisable to place the monitor in the original box or packing material before attempting to move it.
- Before moving or lifting the monitor, disconnect the power cord and all cables.
- Hold the top and bottom of the monitor frame firmly. Do not hold the panel itself.



 When holding the monitor, the screen should face away from you to prevent it being scratched.



- When moving the monitor, avoid any strong shock or vibrations to the product.
- When moving the monitor, keep it upright, never turn the monitor on its side or tilt it sideways.



#### CAUTION

 As far as possible, avoid touching the monitor screen. This may result in damage to the screen or some of the pixels used to create images.



## **Setting up the Monitor set**

## **Attaching the Stand Base**

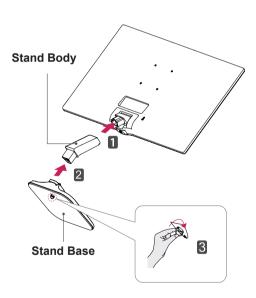
1 Place the Monitor set with the screen side down on a flat and cushioned surface.



#### CAUTION-

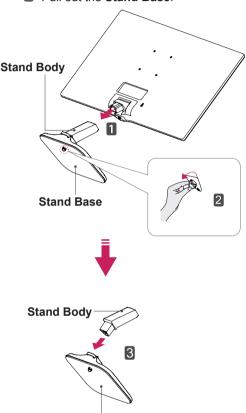
Lay a foam mat or soft protective cloth on the surface to protect the screen from damage.

- 2 1 Attach the Stand Body to the monitor set.
  - 2 Attach the Stand Base to Stand Body.
  - 3 Tighten the screw to the right.



## **Detaching the Stand Base**

- Place the Monitor set with the screen side down on a flat and cushioned surface.
- Pull out the Stand Body and Stand Base from the monitor set.
  - 2 Turn the screw to the left.
  - 3 Pull out the Stand Base.





#### CAUTION

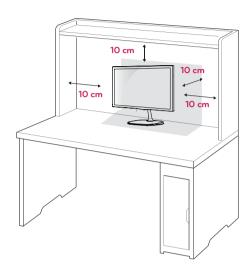
**Stand Base** 

- Illustrations in this document represent typical procedures, so they may look different from the actual product.
- Do not carry the monitor upside down by just holding the stand base. This may cause the monitor to fall off the stand and could result in personal injury.
- When lifting or moving the monitor, do not touch the monitor screen. The force applied to the monitor screen may cause damage to it.
- If you use the monitor panel without the stand base, its joystick button may cause the moni-tor to become unstable and fall, resulting in damage to the monitor or human injury. In addition, this may cause the joystick button to malfunction.

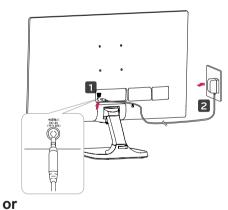
## Mounting on a table

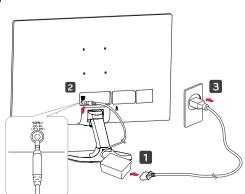
1 Lift and tilt the Monitor set into its upright position on a table.

Leave a 10 cm (minimum) space from the wall for proper ventilation.



2 Connect the AC-DC Adapter and Power Cord to a wall outlet.





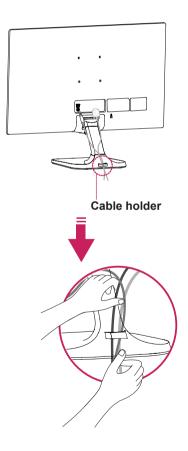
3 Press the joystick button on the bottom of the monitor to turn on the monitor.



#### CAUTION

Unplug the power cord before moving the Monitor to another location. Otherwise electric shock may occur.

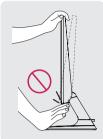
## Using the cable holder



## WARNING -

When you adjust the angle, do not hold the bottom of the Monitor set frame as shown on the following illustration, as may injure your fingers.



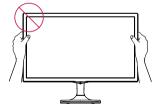


When adjusting the angle, may cause damage or abnormality over excessive force.

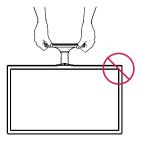




Do not touch or press the screen when adjusting the angle of the monitor.



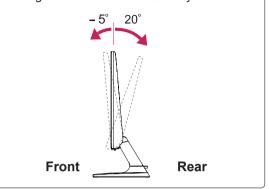
Do not hold this set like below picture. Monitor screen can detach from stand base and injure your body.





#### NOTE

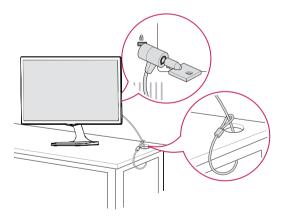
Tilt from +20 to -5 degrees up or down to adjust the angle of the Monitor set to suit your view.



#### Using the Kensington security system

The Kensington security system connector is located at the back of the Monitor set. For more information of installation and using, refer to the manual supplied with the Kensington security system or visit <a href="http://www.kensington.com">http://www.kensington.com</a>.

Connect the Kensington security system cable between the Monitor set and a table.



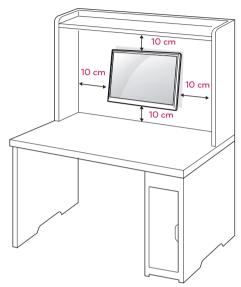


#### NOTE -

The Kensington security system is optional. You can obtain it from most electronics stores.

## Mounting on a wall

For proper ventilation, allow a clearance of 10 cm on each side and from the wall. Detailed instructions are available from your dealer, see the optional Tilt Wall Mounting Bracket Installation and Setup Guide.



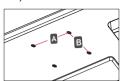
If you intend to mount the Monitor set to a wall, attach Wall mounting interface (optional parts) to the back of the set.

When you install the Monitor set using a wall mounting interface (optional parts), attach it carefully so it will not drop.

- 1 If you use screw longer than standard, the monitor might be damaged internally.
- 2 If you use improper screw, the product might be damaged and drop from mounted position. In this case, LG Electronics is not responsible for it.

101 10.			
Model	22M47D	23M47D	24M47D
	22M47VQ	23M47VQ	24M47VQ
	22M47H	23M47H	24M47H
	22M47HQ		24M47HQ
Wall Mount (A x B)		75 x 7	75
Standard screw	M4 x L10		
Number of screws	4		
Wall Mount Plate		RW12	20
(Optional)			

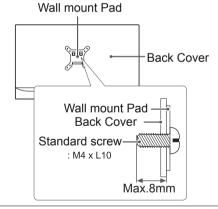
VESA (A x B)



# -<u>/</u>ì

#### **CAUTION**

- Disconnect the power cord first, and then move or install the Monitor set. Otherwise electric shock may occur.
- If you install the Monitor set on a ceiling or slanted wall, it may fall and result in severe injury.
- Use only an authorized LG wall mount and contact the local dealer or qualified personnel.
- Do not over tighten the screws as this may cause damage to the Monitor set and void your warranty.
- Use only screws and wall mounts that meet the VESA standard. Any damages or injuries by misuse or using an improper accessory are not covered by the warranty.
- Screw length from outer surface of back cover should be under 8mm.





#### NOTE

- Use the screws that are listed on the VESA standard screw specifications.
- The wall mount kit will include an installation manual and necessary parts.
- The wall mount bracket is optional. You can obtain additional accessories from your local dealer.
- The length of screws may differ depending on the wall mount. Be sure to use the proper length.
- For more information, refer to the instructions supplied with the wall mount.

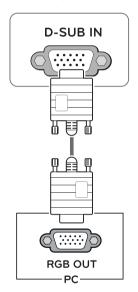
# **USING THE MONITOR SET**

## Connecting to a PC

 Your Monitor set supports Plug & Play\*.
 \*Plug & Play: A PC recognizes a connected device that users connect to a PC and turn on, without device configuration or user intervention.

#### **D-SUB** connection

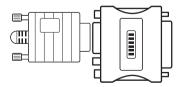
Transmits analog video from your PC to the Monitor set. Connect the PC and the Monitor set with the supplied D-sub 15 pin signal cable as shown in the following illustrations.





#### NOTE

When using a D-Sub signal input cable connector for Macintosh

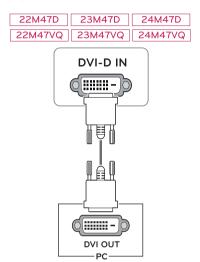


#### Mac adapter

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.

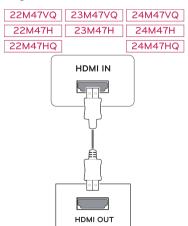
#### **DVI-D** connection

Transmits a digital video signal from your PC to the Monitor set. Connect the PC and the Monitor set with a DVI cable as shown in the following illustrations.



#### **HDMI** connection

Transmits the digital video and audio signals from your PC to the Monitor set. Connect the PC and the Monitor set with the HDMI cable as shown in the following illustrations.





#### NOTE

 If you use HDMI PC, it can cause compatibility problem.



#### **CAUTION** -

 Connect the signal input cable and tighten it by turning the screws clockwise.



- Do not press the screen with your finger for a long time as this may result in temporary distortion on the screen.
- Avoid displaying a fixed image on the screen for a long period of time to prevent image burn. Use a screensaver if possible.



#### NOTE

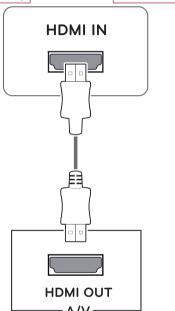
- When you want to use two PC in our Monitor, please connect the signal cable(D-SUB/ DVI-D/HDMI) respectively in Monitor set.
- If you turn the Monitor set on while it is cold, the screen may flicker. This is normal.
- Some red, green, or blue spots may appear on the screen. This is normal.

## **Connecting to AV Devices**

#### **HDMI** connection

Transmits the digital video and audio signals from your AV devices to the monitor. Connect your AV device to the monitor with the HDMI cable as illustrated below.







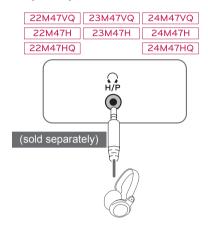
#### NOTE

 If you use HDMI PC, it can cause compatibility problem.

## **Connecting to External Devices**

## Peripheral device connection

Connect peripheral devices to the monitor using headphone ports.





#### **NOTE**

- · Peripheral devices are sold separately.
- Cables with angled plugs may have clearance issues, use straight plugs when possible.







Straight Type



#### NOTE

 Headphones or speakers may not work normally, depending on the server PC settings.

# **INSTALLING THE LG MONITOR SOFTWARE**

## **Installing The Screen Split**

Insert the the owner's manual CD included in the product package into your PC's CD driver and install the LG Monitor Software.

1 Set the default Web browser to Internet Explorer.



2 Click the "Screen Split" on the CD's main screen. When the file download window appears, click the Run button. (The file download window may vary depending on the operating system and the Internet Explorer version, but the installation procedures are same.)





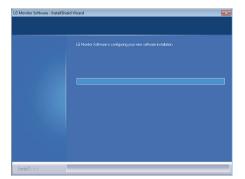
 Service Pack 1 or higher is required for Windows 7 & Windows 8. 3 Follow the instructions to proceed with the installation.



4 Check "I accept the terms of the agreement" on the License Agreement screen and then click the [Next] button.



5 The Screen Split installation starts as shown below.





- Screen Split: This program automatically splits the program window as desired.
   Monitor Selection only supported in extend display.
  - \* This program supported Windows 7& Windows 8.

6 When the installation is complete, restart your system.





If you run Screen Split, the Screen Split icon [ ] appears in the system tray at the right bottom of the PC screen.



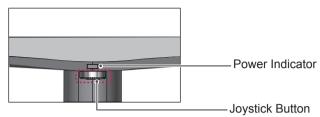
Right-click the Screen Split icon and select a layout you want.



## **CUSTOMIZING SETTINGS**

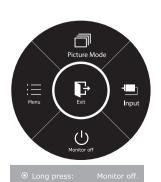
## **Activating the Main Menu**

- 1 Press the joystick button on the bottom of the monitor.
- 2 Move the joystick up/down (▲/▼) and left/right(◄/▶) to set the options.
- 3 Press the joystick button once more to exit the main menu.



Button	Menu Status		Description
	Main menu enabled		Enables the main menu.
			Exits the main menu. (Holding down the button to turn off the monitor: You can turn off the monitor this way at any time, including when the OSD is on.)
	•	Main menu disabled	22M47VQ   23M47VQ   24M47VQ   22M47H   23M47H   24M47HQ   22M47HQ   24M47HQ   Adjusts the monitor volume level.   22M47D   23M47D   24M47D   Enables the navigation OSD.
		Main menu enabled	Enters the menu features.
	•	Main menu disabled	Z2M47VQ   Z3M47VQ   Z4M47VQ   Z2M47H   Z4M47H   Z4M47H   Z4M47HQ   Z4M47HQ   Z4M47HQ   Z4M47D   Z4M4
		Main menu enabled	Operates the Input change.
		Main menu disabled	Enables the main menu.
		Main menu enabled	Enters the reader feature.
		Main menu disabled	Enables the main menu.
<i>6</i> " )	•	Main menu enabled	Turns off the monitor.

## **Main Menu Features**



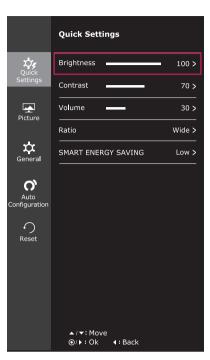
Main Menu	Description	
Menu	Configures the screen settings.	
Picture Mode	Select picture mode to achieve the best display effect.	
Input	You can choose the input signal.  • When two input signals are connected, you can select the input signal (D-SUB/DVI-D/HDMI) you want.  • When only one signal is connected, it is automatically detected. The default setting is D-SUB.	
Monitor off	Turns off the monitor.	
Exit	Exits the main menu.	

## **Customizing settings**

## **Menu Settings**

## -Quick Settings

- 1 To view the **OSD menu**, press the **joystick button** at the bottom of the monitor and then enter the **Menu**.
- 2 Go to Quick Settings > Brightness by moving the joystick.
- 3 Configure the options following the instructions that appear in the bottom right corner.
- 4 To return to the upper menu or set other menu items, move the joystick to ◀ or pressing (◉ / OK) it.
- 5 If you want to exit the OSD menu, move the joystick to ◀ until you exit.



Each option is described below.

Menu > Quick Settings	Description			
Brightness	Adjusts the color contrast and brightness of the screen.			
Contrast	Aujusis irie co	nor contrast and prignitiess of the screen.		
Volume	Adjusts the vo	lume.		
22M47VQ   23M47VQ   24M47VQ   22M47H   23M47H   24M47H   22M47HQ   24M47HQ   24M47HQ	• Jog joystick button down ( ) in the Volume menu will enable/disable the Mute function.			
Ratio	Adjusts the screen ratio.			
	Wide	Displays the video in wide-screen, regardless of the video signal input.		
	Original	Displays a video according to the input video signal aspect ratio.		
SMART ENERGY SAVING	High	Enables SMART ENERGY SAVING you can save energy with this energy- high efficient function.		
	<b>Low</b> Enables SMART ENERGY SAVING you can save energy with this energy-low efficient function.			
	Off	Disables SMART ENERGY SAVING .		



#### **NOTE**

- The display may look the same for Wide, Original options at the recommended resolution (1920 x 1080).
- The ratio is disabled in the interlaced signal.



#### NOTE

- TOTAL POWER REDUCTION: How much power is saved while using the monitor.
- TOTAL CO2 REDUCTION: Change the TOTAL POWER REDUCTION to CO2.
- SAVING DATA(W/h)

	546 mm (21.5 inch)	584 mm (23 inch)	600 mm (23.6 inch)
SMART SAVING (High)	4 W/h	4 W/h	4 W/h
SMART SAVING (Low)	2 W/h	2 W/h	2 W/h

- · Saving Data depends on the Panel. So, those values should be different from each panel and panel vendor.If option of SMART ENERGY SAVING is High or Low, monitor luminance become higher or lower depend on source.
- LG calculated these values by using "broadcast video signal" (including broadcast video: IEC 62087)
- · SMART SAVING refers to how much power can be saved using the SMART ENERGY SAVING function.
- · If option of SMART ENERGY SAVING is High or Low, Picture Mode will automatically be Custom and Reader Mode and Color Wizard will automatically be Off.

## -Picture

- 1 To view the **OSD menu**, press the **joystick button** at the bottom of the monitor and then enter the **Menu**.
- 2 Go to Picture by moving the joystick.
- 3 Configure the options following the instructions that appear in the bottom right corner.
- 4 To return to the upper menu or set other menu items, move the joystick to ◀ or pressing (♠ / OK) it.
- 5 If you want to exit the OSD menu, move the joystick to ◀ until you exit.



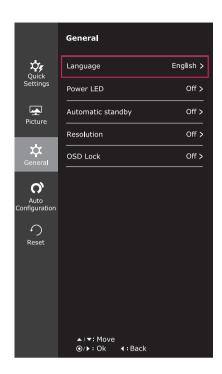
Each option is described below.

Menu > Picture	Description			
Picture Mode	Custom	Allows the user to adjust each element. The color mode of the main menu can be adjusted.		
	Reader 1	It is a mode that the screen is adjusted to the best for the newspaper. If you want screen more bright, you can control brightness in Menu OSD.		
	Reader 2	It is a mode that the screen is adjusted to the best for the cartoon. If you want screen more bright, you can control brightness in Menu OSD.		
Photo		Optimizes the screen to view photos.		
	Cinema	Optimizes the screen to improve the visual effects of a video.		
	Game	Optimizes the screen for gameplay.		
Color wizard	Red weakness	It is a mode for user who has inability to see red color. It make color weakness user can easily distinguish red colors.		
	Green weakness	It is a mode for user who has inability to see green color. It make color weakness user can easily distinguish green colors.		
	Off	It is a mode that Color Wizard mode is off.		

Picture Adjust	Picture	SUPER RESOLU- TION+	High	Optimized picture quality is displayed when a user wants crystal clear images. It is effective forhigh quality video or game.	
			Middle	The optimized picture quality is displayed when a user wants images between low and highmodes for comfortable viewing. It is effective for UCC or SD video.	
			Low	The optimized picture quality is displayed when a user wants smooth and natural images. It iseffective for slow-moving pictures or still images.	
			Off	Select this option for everyday viewing. SUPER RESOLUTION+ is turned off in this mode.	
		Sharpness	Adjusts th	e sharpness of the screen.	
		Black Level   22M47VQ   23M47VQ   24M47VQ   22M47H   23M47H   24M47H   24M4	Sets the offset level (for HDMI only).  • Offset: as a reference for a video signal, this is the darkest color the monitor can display.		
		22M47HQ 24M47HQ	High	The picture of the screen gets brighter.	
			Low	The picture of the screen gets darker.	
		Response Time	screen. For Normal. For High.	sponse time for displayed pictures based on the speed of the or a normal environment, it is recommended that you use or a fast-moving picture, it is recommended that you use High may cause image sticking.	
			High	Sets the response time to High.	
			Middle	Sets the response time to Middle.	
			Low	Sets the response time to Low.	
			Off	Sets the response time to Off.	
	Over Scan           22M47VQ         23M47VQ         24M47VQ           22M47H         23M47H         24M47HQ           22M47HQ         24M47HQ	To select the range of output image for DTV timing in HDMI input. (only for HDMI input)Recommend overscan function to turn on when connect AV equipment.			
	Color	Gamma	Set your own gamma value. : Gamma 0, Gamma 1, Gamma 2, 0 the monitor, high gamma values display whitish images and low gamma values display blackish images. If user don't want adjusted gamma, user can select Gamma off.		
		Color Temp	Warm: Se Medium:	e factory default picture color. ets the screen color to a reddish tone. Sets the screen color between a red and blue tone. s the screen color to a bluish tone.	
			Custom		
			Red Green Blue	You can customize the picture color using Red, Green, and Blue colors.	
		Six Color	saturation Green_Sa Saturatio	user requirements for colors through adjusting the color and of the six colors(Red_Hue, Red_Saturation, Green_Hue, aturation, Blue_Hue, Blue_Saturation, Cyan_Hue, Cyan_n, Magenta_Hue, Magenta_Saturation, Yellow_Hue, Yelration) and saving the settings.	
			*Saturatio	usts tone of the screen.  n: Adjusts the saturation of the screen colors. The lower the saturated and bright the colors become. The higher the more saturated and dark the colors become.	
		Reset	Returns th	ne color settings to the default settings.	
Display	Horizontal	To move image left and r	ight.		
	Vertical	To move image up and d	own.		
	Clock	To minimize any vertical size will also change.	bars or stri	pes visible on the screen background. The horizontal screen	
	Phase	To adjust the focus of the or sharpen the image of	display. Tl	his item allows you to remove any horizontal noise and clear	

#### -General

- 1 To view the **OSD menu**, press the **joystick button** at the bottom of the monitor and then enter the **Menu**.
- 2 Go to General by moving the joystick.
- 3 Configure the options following the instructions that appear in the bottom right corner.
- 4 To return to the upper menu or set other menu items, move the joystick to ◀ or pressing (◉ / OK) it.
- 5 If you want to exit the OSD menu, move the joystick to ◀ until you exit.



Each option is described below.

Menu > General	Description				
Language	To choose the language in which the control names are displayed.				
Power LED	Turns the power indicator on the front side of the monitor on/off.				
	On The power indicator is automatically turned on.				
	Off	The power indicator is automatically turned on.			
Automatic Standby           22M47VQ         23M47VQ         24M47VQ           22M47H         23M47H         24M47H           22M47HQ         24M47HQ	The monitor will automatically switch to standby mode after a certain period.				
Resolution	User can set the desired resolution. This option is enabled only when the screen resolution on your computer is set to the following.				
	The function is enabled only when the screen resolution on your computer is se following, except that the PC output wrong resolution.				
	1024x768, 1280x768, 1360x768, 1366x768,Off				
	1280x960, 1600x900,Off				
	1440x900, 1600x900,Off				
OSD Lock	Prevents incorrect key input.				
	On	Key input is disabled.			
	except for the OSD Lock mode and the Exit button for Brightness, Con-, Input, and General are disabled.				
	Off	Key input is enabled.			

## -Auto Configuration

- 1 To view the OSD menu, press the joystick button at the bottom of the monitor and then enter the Menu.
- 2 Go to Auto Configuration by moving the joystick.
- 3 Configure the options following the instructions that appear in the bottom right corner.
- 4 To return to the upper menu or set other menu items, move the joystick to ◀ or pressing (◉ / OK) it.
- 5 If you want to exit the OSD menu, move the joystick to ◀ until you exit.



Each option is described below.

Menu > Auto Configuration	Description	
Do you want to Auto confuguration?		
Yes	Operate the Auto configuration for optimal display in D-SUB.	
Cancel	Cancel the select.	

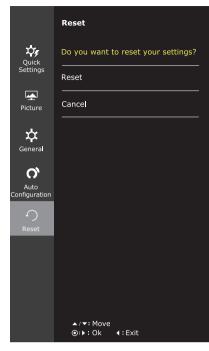


#### **NOTE**

• This function will be enable only in analog input.

## -Reset

- 1 To view the OSD menu, press the joystick button at the bottom of the monitor and then enter the Menu.
- 2 Go to Reset by moving the joystick.
- 3 Configure the options following the instructions that appear in the bottom right corner.
- 4 To return to the upper menu or set other menu items. move the joystick to ◀ or pressing (◉ / OK) it.
- 5 If you want to exit the OSD menu, move the joystick to **◄** until you exit.

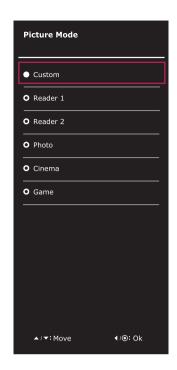


Each option is described below.

Menu > Reset	Description
Do you want to reset your settings?	
Reset	Returns to the default settings.
Cancel	Cancel the select.

## -Picture mode

- 1 Press the joystick button on the bottom of the monitor.
- 2 Go to **Picture mode** by moving the joystick button to ▲.
- 3 Configure the options following the instructions that appear in the bottom.



Each option is described below.

Menu > Picture Mode	Description		
Picture Mode	Custom	Allows the user to adjust each element. The color mode of the main menu can be adjusted.	
	Reader 1	It is a mode that the screen is adjusted to the best for the newspaper. If you want screen more bright, you can control brightness in Menu OSD.	
	Reader 2	It is a mode that the screen is adjusted to the best for the cartoon. If you want screen more bright, you can control brightness in Menu OSD.	
	Photo Optimizes the screen to view photos.  Cinema Optimizes the screen to improve the visual effects of a video.  Game Optimizes the screen for gameplay.		



#### **NOTE**

• If option of Picture Mode is non-Custom , SMART ENERGY SAVING and Color Wizard will automatically be Off.

# **TROUBLESHOOTING**

## Check the following before calling for service.

•	
No image appears	
Is the power cord of the display connected?	<ul> <li>Check and see if the power cord is connected properly to the power outlet.</li> </ul>
Is the power indicator light on?	Press the Power button.
Is the power indicator flickering?	<ul> <li>If the display is in power saving mode, try moving the mouse or pressing any key on the keyboard to bring up the screen.</li> <li>Try to turn on the PC.</li> </ul>
Do you see an "OUT OF RANGE" message on the screen?	<ul> <li>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.</li> </ul>
Do you see a "NO SIGNAL" message on the screen?	• When the monitor is on "No-Signal" in 5 minutes, the monitor goes to DPM mode.

Can 't you control some functions in OSD?		
Do you see "OSD LOCKED" when you push MENU button? Can't you select some menu in OSD?	<ul> <li>You can secure the current control settings, so that they cannot be inadvertently changed.</li> <li>You can unlock the OSD controls at any time by entering the OSD lock menu and changing items to off.</li> </ul>	

Display image is incorrect		
Display Position is incorrect.	Enter the Auto Configuration function and select the "Yes" item to automatically adjust your display image to the ideal setting.	
On the screen background, vertical bars or stripes are visible.	Enter the Auto Configuration function and select the "Yes" item to automatically adjust your display image to the ideal setting.	
Any horizontal noise appearing in any image or characters are not clearly portrayed.	<ul> <li>Enter the Auto Configuration function and select the "Yes" item to automatically adjust your display image to the ideal setting.</li> <li>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).</li> </ul>	



#### CAUTION

- 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.
- If the recommended resolution (optimal resolution) is not selected, letters may be blurred and the screen may be dimmed, truncated or biased. Make sure to select the recommend resolution.
- 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.	<ul> <li>Check if the signal cable is properly connected and use a screwdriver to fasten if necessary.</li> <li>Make sure the video card is properly inserted in the slot.</li> <li>Set the color setting higher than 24 bits (true color) at Control Panel Settings.</li> </ul>
The screen blinks.	Check if the screen is set to interlace mode and if yes, change it to the recommend resolution.

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

22M47VQ	23M47VQ	24M47VQ
22M47H	23M47H	24M47H
22M47HQ		24M47HQ

The screen is flickering.			
Did you select the recommended resolution?	<ul> <li>If the selected resolution is HDMI 1080i 60/50 Hz, the screen may be flickering. Change the resolution to the recommended resolution 1080P.</li> </ul>		

# **SPECIFICATIONS**

22M47D	22M47VQ 22M4	7H 22M47HQ		
Display	Screen Type	54.6 cm (21.5 inch) Flat Panel Active matrix-TFT LCD Anti-Glare coating Visible diagonal size: 54.6 cm		
	Pixel Pitch	0.248 mm x 0.248 mm (Pixel Pitch)		
Resolution	Max	1920 x 1080 @ 60 Hz		
	Recommend	VESA 1920 x 1080 @ 60 Hz		
Power Consumption		On Mode : 20 W (ENERGY STAR® standard)* Sleep Mode ≤ 0.3 W Off Mode ≤ 0.3 W		
Power Input	19 V 1.2 A			
AC-DC Adapter	or Type ADS-40FSG-19 1 or Type LCAP21, manufa or Type LCAP26-A, man or Type LCAP26-B, manufa or Type LCAP26-B, manufa or Type LCAP26-B, manufa	Type ADS-40SG-19-3 19025G, manufactured by SHENZHEN HONOR ELECTRONIC or Type ADS-40FSG-19 19025GPG-1, manufactured by SHENZHEN HONOR ELECTRONIC or Type ADS-40FSG-19 19025GPBR-1, manufactured by SHENZHEN HONOR ELECTRONIC or Type ADS-40FSG-19 19025GPCU-1, manufactured by SHENZHEN HONOR ELECTRONIC or Type ADS-40FSG-19 19025GPCU-1, manufactured by SHENZHEN HONOR ELECTRONIC or Type ADS-40FSG-19 19025GPB-2, manufactured by SHENZHEN HONOR ELECTRONIC or Type LCAP21, manufactured by LIEN CHANG ELECTRONIC ENTERPRISE or Type LCAP26-A, manufactured by LIEN CHANG ELECTRONIC ENTERPRISE or Type LCAP26-E, manufactured by LIEN CHANG ELECTRONIC ENTERPRISE or Type LCAP26-I, manufactured by LIEN CHANG ELECTRONIC ENTERPRISE or Type LCAP26-B, manufactured by LIEN CHANG ELECTRONIC ENTERPRISE or Type LCAP26-B, manufactured by LIEN CHANG ELECTRONIC ENTERPRISE		
Dimensions	With Stand	51.0 cm x 40.9 cm x 19.5 cm		
(Width x Height Depth)	Without Stand	51.0 cm x 31.4 cm x 6.8 cm		
Weight	2.6 kg	2.6 kg		
Tilt Range	-5° to 20°	-5° to 20°		
Environmental conditions	Operating Tempera Operating Humidity			
	Storage Temperatu Storage Humidity	re -20°C to 60 °C 5 % to 90 % non-Condensing		
Stand Base	Attached ( ), Detac	hed (O)		
Power cord	Wall-outlet type	Wall-outlet type		

Product specifications shown above may be changed without prior notice due to upgrade of product functions.

<sup>\*</sup> The power consumption level can be different by operating condition and monitor setting.

<sup>\*</sup> The On mode power consumption is measured with ENERGY STAR® test standard.

<sup>\*</sup> ENERGY STAR® is a US registered mark of the United States Environmental Protection Agency.

			22M47D	22M47H	22M47HQ	22M47VQ
Sync Input	Horizontal Frequency	30 kHz to 83 kHz (Automatic)	•	•	•	•
		30 kHz to 61 kHz (Automatic)				
	Vertical	56 Hz to 75 Hz (D-SUB)	•	•	•	•
	Frequency	56 Hz to 75 Hz (DVI-D)	•			•
		56 Hz to 61 Hz (HDMI)		•	•	•
Input Form		Separate Sync.	•	•	•	•
		Digital	•	•	•	•
Video Input	Signal Input	ignal Input 15 pin D-SUB Connector		•	•	•
		DVI-D Connector (Digital)	•			•
		HDMI Connector		•	•	•
	Input Form	RGB Analog (0.7 Vp-p/ 75 ohm)	•	•	•	•
		Digital	•	•	•	•
Plug & Play	DDC 2B(Anal	DDC 2B(Analog)		•	•	•
	DDC 2B(Digita	al)	•			•
	DDC 2B(HDM	DDC 2B(HDMI)		•	•	•

# **SPECIFICATIONS**

23M41D    23M41VQ    23M41H	23M47D	23M47VQ	23M47H
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Display	Screen Type	58.4 cm (23 inch) Flat Panel Active matrix-TFT LCD Anti- Glare coating Visible diagonal size: 58.4 cm	
	Pixel Pitch	0.265 mm x 0.265 mm (Pixel Pitch)	
Resolution	<b>Max</b> 1920 x 1080 @ 60 Hz		
	Recommend	VESA 1920 x 1080 @ 60 Hz	
Power Consumption	On Mode : 21 W (ENERG Sleep Mode ≤ 0.3 W Off Mode ≤ 0.3 W	SY STAR® standard)*	
Power Input	19 V 1.3 A		
AC-DC Adapter	Type ADS-40SG-19-3 19025G, manufactured by SHENZHEN HONOR ELECTRONIC or Type ADS-40FSG-19 19025GPG-1, manufactured by SHENZHEN HONOR ELECTRONIC or Type ADS-40FSG-19 19025GPBR-1, manufactured by SHENZHEN HONOR ELECTRONIC or Type ADS-40FSG-19 19025GPI-1, manufactured by SHENZHEN HONOR ELECTRONIC or Type ADS-40FSG-19 19025GPCU-1, manufactured by SHENZHEN HONOR ELECTRONIC or Type ADS-40FSG-19 19025GPB-2, manufactured by SHENZHEN HONOR ELECTRONIC or Type LCAP21, manufactured by LIEN CHANG ELECTRONIC ENTERPRISE or Type LCAP26-A, manufactured by LIEN CHANG ELECTRONIC ENTERPRISE or Type LCAP26-E, manufactured by LIEN CHANG ELECTRONIC ENTERPRISE or Type LCAP26-I, manufactured by LIEN CHANG ELECTRONIC ENTERPRISE or Type LCAP26-B, manufactured by LIEN CHANG ELECTRONIC ENTERPRISE Or Type LCAP26-B, manufactured by LIEN CHANG ELECTRONIC ENTERPRISE		
Dimensions	With Stand 54.5 cm x 42.9 cm x 19.7 cm		
(Width x Height x Depth)	Without Stand	54.5 cm x 32.5 cm x 6.8 cm	
Weight	2.8 kg		
Tilt Range	-5° to 20°		
Environmental conditions			
	Storage Temperature Storage Humidity	-20°C to 60 °C 5 % to 90 % non-Condensing	
Stand Base	Attached ( ), Detached (O)		
Power cord	Wall-outlet type		

Product specifications shown above may be changed without prior notice due to upgrade of product functions.

<sup>\*</sup> The power consumption level can be different by operating condition and monitor setting.

<sup>\*</sup> The On mode power consumption is measured with ENERGY STAR® test standard.

<sup>\*</sup> ENERGY STAR® is a US registered mark of the United States Environmental Protection Agency.

			23M47D	23M47H	23M47VQ
Sync Input	Horizontal Frequency	30 kHz to 83 kHz (Automatic)	•	•	•
		30 kHz to 61 kHz (Automatic)			
	Vertical	56 Hz to 75 Hz (D-SUB)	•	•	•
	Frequency	56 Hz to 75 Hz (DVI-D)	•		•
		56 Hz to 61 Hz (HDMI)		•	•
	Input Form	Separate Sync.	•	•	•
		Digital	•	•	•
Video Input	Signal Input	15 pin D-SUB Connector	•	•	•
		DVI-D Connector (Digital)	•		•
		HDMI Connector		•	•
	Input Form	RGB Analog (0.7 Vp-p/ 75 ohm)	•	•	•
		Digital	•	•	•
Plug & Play	DDC 2B(Anal	DDC 2B(Analog)		•	•
	DDC 2B(Digita	DDC 2B(Digital)			•
	DDC 2B(HDM	DDC 2B(HDMI)		•	•

# **SPECIFICATIONS**

24M47D	24M47VQ	24M47H	24M47HQ

Display	Screen Type	60.0 cm (23.6 inch) Flat Panel Active matrix-TFT LCD Anti-Glare coating		
		Visible diagonal size: 60.0 cm		
	Pixel Pitch	0.272 mm x 0.272 mm (Pixel Pitch)		
Resolution	Max	1920 x 1080 @ 60 Hz		
	Recommend	VESA 1920 x 1080 @ 60 Hz		
Power Consumption	On Mode : 22 W (ENERGY STAR® standard)* Sleep Mode ≤ 0.3 W Off Mode ≤ 0.3 W			
Power Input	19 V 1.3 A			
AC-DC Adapter	Type ADS-40SG-19-3 19025G, manufactured by SHENZHEN HONOR ELECTRONIC or Type ADS-40FSG-19 19025GPG-1, manufactured by SHENZHEN HONOR ELECTRONIC or Type ADS-40FSG-19 19025GPBR-1, manufactured by SHENZHEN HONOR ELECTRONIC or Type ADS-40FSG-19 19025GPI-1, manufactured by SHENZHEN HONOR ELECTRONIC or Type ADS-40FSG-19 19025GPCU-1, manufactured by SHENZHEN HONOR ELECTRONIC or Type ADS-40FSG-19 19025GPB-2, manufactured by SHENZHEN HONOR ELECTRONIC or Type LCAP21, manufactured by LIEN CHANG ELECTRONIC ENTERPRISE or Type LCAP26-A, manufactured by LIEN CHANG ELECTRONIC ENTERPRISE or Type LCAP26-E, manufactured by LIEN CHANG ELECTRONIC ENTERPRISE or Type LCAP26-B, manufactured by LIEN CHANG ELECTRONIC ENTERPRISE or Type LCAP26-B, manufactured by LIEN CHANG ELECTRONIC ENTERPRISE			
Dimensions	With Stand	55.7 cm x 43.8 cm x 19.7 cm		
(Width x Height x Depth)	Without Stand	55.7 cm x 34.2 cm x 6.8 cm		
Weight	2.8 kg			
Tilt Range	-5° to 20°			
Environmental conditions	Operating Temperature Operating Humidity	10 % to 80 %		
	Storage Temperature Storage Humidity	-20°C to 60 °C 5 % to 90 % non-Condensing		
Stand Base	Attached ( ), Detached (O)			
Power cord	Wall-outlet type			

Product specifications shown above may be changed without prior notice due to upgrade of product functions.

<sup>\*</sup> The power consumption level can be different by operating condition and monitor setting. \* The On mode power consumption is measured with ENERGY STAR® test standard.

<sup>\*</sup> ENERGY STAR® is a US registered mark of the United States Environmental Protection Agency.

			24M47D	24M47H	24M47HQ	24M47VQ
Sync Input	Horizontal Frequency	30 kHz to 83 kHz (Automatic)	•	•	•	•
		30 kHz to 61 kHz (Automatic)				
	Vertical	56 Hz to 75 Hz (D-SUB)	•	•	•	•
	Frequency	56 Hz to 75 Hz (DVI-D)	•			•
		56 Hz to 61 Hz (HDMI)		•	•	•
	Input Form	Separate Sync.	•	•	•	•
		Digital	•	•	•	•
Video Input	Signal Input	15 pin D-SUB Connector	•	•	•	•
		DVI-D Connector (Digital)	•			•
		HDMI Connector		•	•	•
	Input Form	RGB Analog (0.7 Vp-p/ 75 ohm)	•	•	•	•
		Digital	•	•	•	•
Plug & Play	DDC 2B(Analog)		•	•	•	•
	DDC 2B(Digital)		•			•
	DDC 2B(HDMI)			•	•	•

# **Preset Modes (Resolution)**

# **D-SUB/DVI-D Timing**

Display Modes (Resolution)	Horizontal Frequency(kHz)	Vertical Frequency(Hz)	Polarity(H/V)	
720 x 400	31.468	70	-/+	
640 x 480	31.469	60	-/-	
640 x 480	37.500	75	-/-	
800 x 600	37.879	60	+/+	
800 x 600	46.875	75	+/+	
1024 x 768	48.363	60	-/-	
1024 x 768	60.023	75	+/+	
1152 x 864	67.500	75	+/+	
1280 x 1024	63.981	60	+/+	
1280 x 1024	79.976	75	+/+	
1680 x 1050	65.290	60	-/+	
1920 x 1080	67.500	60	+/+	Recommend Mode

# **HDMI Timing**

22M47VQ 22M47H 22M47HQ 23M47VQ 23M47H 24M47HQ 24M47VQ

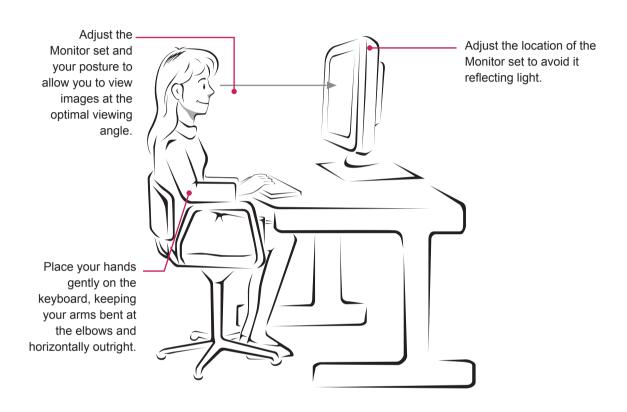
Factory support mode (Preset Mode)	Horizontal Frequency(kHz)	Vertical Frequency(Hz)	НДМІ
480P	31.50	60	0
576P	31.25	50	0
720P	37.50	50	0
720P	45.00	60	0
1080P	56.25	50	0
1080P	67.50	60	O Recommend Mode

## **Indicator**

Mode	LED Color
On Mode	White (Only 15 seconds)
Sleep Mode	Blinking White
Off Mode	Off

# PROPER POSTURE

# Proper posture for using the Monitor set.





#### **Declaration of Conformity**

Trade Name: LG

Model: 22M47D,22M47VQ,22M47H,22M47HQ,

23M47D,23M47VQ,23M47H,

24M47D,24M47VQ,24M47H,24M47HQ

Responsible Party: LG Electronics Inc.

Address: 1000 Sylvan Ave. Englewood Cliffs

NJ 07632 U.S.A

TEL: 201-266-2534

Make sure to read the Safety Precautions before using the product.

Keep the Owner's Manual (CD) in an accessible place for future reference.

The model and serial number of the SET is located on the back and one side of the SET. Record it below should you ever need service.

MODEL		
SFRIAI		

ENERGY STAR is a set of power-saving guidelines issued by the U.S.Environmental Protection Agency(EPA).



As an ENERGY STAR Partner LGE U. S. A.,Inc. has determined that this product meets the ENERGY STAR **ENERGY STAR** guidelines for energy efficiency.

<sup>\*</sup>above information is only for USA FCC Regulatory