

OWNER'S MANUAL

LED LCD MONITOR

(LED Monitor\*)

\* LG LED Monitor applies LCD screen with LED backlights. Please read this manual carefully before operating your set and retain it for future reference.

27UL650

27BL65U

27UL600

www.lg.com

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## **LICENSE**

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



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## **OPEN SOURCE SOFTWARE NOTICE INFORMATION**

To obtain the source code under GPL, LGPL, MPL, and other open source licenses, that is contained in this product, please visit http://opensource.lqe.com.

In addition to the source code, all referred license terms, warranty disclaimers and copyright notices are available for download.

LG Electronics will also provide open source code to you on CD-ROM for a charge covering the cost of performing such distribution (such as the cost of media, shipping, and handling) upon email request to *opensource@lge.com*. This offer is valid for a period of three years after our last shipment of this product. This offer is valid to anyone in receipt of this information.

## **ASSEMBLING AND PREPARING**

#### ! CAUTION

- · Always use genuine LG components to ensure safety and product performance.
- The product warranty will not cover damage or injury caused by the use of unauthorized components.
- It is recommended that use the supplied components.
- If you use generic cables not certified by LG, the screen may not display or there may be image noises.
- Illustrations in this document represent typical procedures, so they may look different from the actual product.
- Do not apply foreign substances (oils, lubricants, etc.) to the screw parts when assembling the product. (Doing so may damage the product.)
- Applying excessive force when tightening screws may cause damage to the monitor. Damage caused in this
  way will not be covered by the product warranty.
- Do not carry the monitor upside down by just holding the 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.



- The components may look different from those illustrated here.
- Without prior notice, all product information and specifications contained in this manual are subject to change to improve the performance of the product.
- To purchase optional accessories, visit an electronics store or an online shopping site, or contact the retailer from which you purchased the product.
- The power cord provided may differ depending upon the region.

## **Supported Drivers and Software**

You can download and install the latest version from the enclosed CD or from the LGE website (www.lg.com).

| Drivers and Software | Installation Priority |
|----------------------|-----------------------|
| Monitor Driver       | Recommended           |
| OnScreen Control     | Recommended           |
| Dual Controller      | Optional              |

### **Product and Button Description**



#### 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/up/down with your finger.

#### **Basic Functions**

|  | <b>w</b>    | Power on       | Press the joystick button once with your finger to turn on the monitor.                               |
|--|-------------|----------------|---|
|  |             | Power off      | Press and hold the joystick button once more than 5 seconds with your finger to turn off the monitor. |
|  | <b>⋖/</b> ▶ | Volume control | You can control the volume by moving the joystick button left/right.                                  |

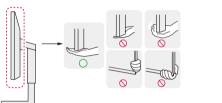
#### **NOTE**

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

## **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.

- 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 other cables.
- Hold the bottom and side 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 from being scratched.
- When transporting the monitor, do not expose the monitor to shock or excessive vibration.
- When moving the monitor, keep it upright and never turn the monitor on its side or tilt it sideways.





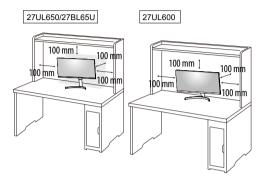
#### $\dot{\mathbb{L}}$ caution

- · Avoid touching the monitor screen as much as possible.
- This may result in damage to the screen or some of the pixels used to create images.
- If you use the monitor panel without the stand base, its joystick button may cause the monitor to become
  unstable and fall, resulting in damage to the monitor or human injury. In addition, this may cause the joystick
  button to malfunction.

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#### Installing on a Table

 Lift the monitor and place it on the table in an upright position. Place the monitor at least 100 mm away from the wall to ensure sufficient ventilation.



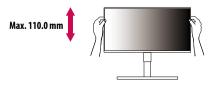
#### **!** CAUTION

- Unplug the power cord before moving or installing the monitor. There is risk of electric shock.
- Make sure to use the power cord that is provided in the product package and connect it to a grounded power outlet.
- If you need another power cord, please contact your local dealer or the nearest retail store.

#### **Adjusting the Stand Height**

#### 27UL650/27BL65U

- 1 Place the monitor mounted on the stand base in an upright position.
- 2 Handle the monitor with both hands for safety.



#### **WARNING**

• When adjusting the screen height, do not place your hand on the stand body to avoid injury to your fingers.

#### **Adjusting the Angle**

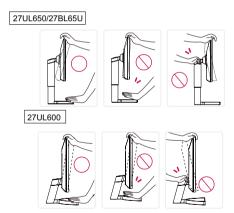
- 1 Place the monitor mounted on the stand base in an upright position.
- 2 Adjust the angle of the screen.

The angle of the screen can be adjusted forward or backward from -5° to 15° for a comfortable viewing experience.

#### $\Lambda$

#### WARNING

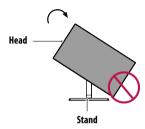
- To avoid injury to the fingers when adjusting the screen, do not hold the lower part of the monitor's frame as illustrated below.
- Be careful not to touch or press the screen area when adjusting the angle of the monitor.



#### **Pivot Feature**

#### 27UL650/27BL65U

The pivot feature allows the monitor to rotate 90° clockwise.



#### **WARNING**

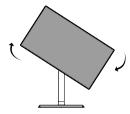
- To avoid scratching the stand base, make sure that when rotating the monitor using the pivot feature, the stand does not make contact with the monitor.
- 1 Raise the monitor to the maximum height.



2 Adjust the angle of the monitor in the direction of the arrow as shown in the figure.



3 Rotate the monitor clockwise as shown in the figure.



4 Complete the installation by rotating the monitor 90° as shown below.



#### **NOTE**

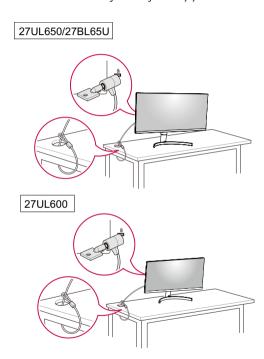
- · Auto Pivot feature of the display is not supported.
- The screen can be rotated easily using the screen pivot shortcut key provided with your Windows operating
  system. Note that some Windows versions and some graphics card drivers may use different settings for the
  screen pivot key or may not support the pivot key at all.

#### **Using the Kensington Lock**

The connector for the Kensington security system is located at the back of the monitor.

For more information on installation and usage, refer to the Kensington lock owner's manual or visit the website at http://www.kensington.com.

Connect the monitor to a table using the Kensington security system cable.





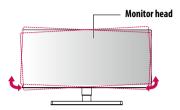
• The Kensington security system is optional. You can obtain optional accessories from most electronics stores.



#### **NOTE**

#### 27UL650/27BL65U

• The left or right side of the monitor head can be slightly rotated up or down (up to 3°). Adjust the horizontal level of the monitor head.



#### **Installing the Wall Mount Plate**

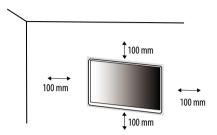
This monitor meets the specifications for the wall mount plate or other compatible devices.



- The wall mount plate is sold separately.
- For more information on installation, refer to the wall mount plate's installation guide.
- Be careful not to apply too much force while mounting the wall mount plate as it may cause damage to the
- Remove the stand before installing the monitor on a wall mount by performing the stand attachment in reverse.

#### Installing on the Wall

Install the monitor at least 100 mm away from the wall and leave about 100 mm of space at each side of the monitor to ensure sufficient ventilation. Detailed installation instructions can be obtained from your local retail store. Alternatively, please refer to the manual for how to install and set up a tilting wall mounting bracket.



To install the monitor to a wall, attach a wall mounting bracket (optional) to the back of the monitor. Make sure that the wall mounting bracket is securely fixed to the monitor and to the wall.

| Wall Mount (mm)             | 100 x 100 |
|-----------------------------|-----------|
| Standard screw              | M4 x L10  |
| Number of screws            | 4         |
| Wall Mount Plate (Optional) | RW120     |
|                             |           |

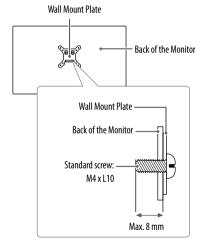
#### **NOTE**

- A non-VESA standard screw may damage the product and cause the monitor to fall. LG Electronics is not liable
  for any accidents relating to the use of non-standard screws.
- The wall mount kit includes the installation guide and all necessary parts.

- The wall mounting bracket is optional. You can obtain optional accessories from your local dealer.
- The length of the screw may differ for each wall mounting bracket. If you use screws longer than the standard length, it may damage the inside of the product.
- For more information, please refer to the user manual for the wall mounting bracket.

#### **AUTION**

- Unplug the power cord before moving or installing the monitor to avoid electric shock.
- Installing the monitor on the ceiling or on a slanted wall may result in the monitor falling off, which could lead
  to injury. Use an authorized LG wall mount and contact the local dealer or qualified personnel.
- Applying excessive force when tightening screws may cause damage to the monitor. Damage caused in this
  way will not be covered by the product warranty.
- Use the wall mounting bracket and screws that conform to VESA standards. Damage caused by the use or misuse of inappropriate components will not be covered by the product warranty.
- When measured from the back of the monitor, the length of each installed screw must be 8 mm or less.



## **USING THE MONITOR**

• Illustrations in this manual may differ from the actual product.

Press the joystick button, go to **Settings**  $\rightarrow$  **Input**, and then select the input option.

#### **!** CAUTION

- Do not press the screen for a prolonged time. This may cause image distortion.
- Do not display a still image on the screen for a prolonged time. This may cause image retention. Use a PC screensaver if possible.
- When connecting the power cord to the outlet, use a grounded (3-hole) power strip or a grounded power
- The monitor may flicker when turned on in an area where the temperature is low. This is normal.
- Sometimes red, green, or blue spots may appear on the screen. This is normal.

## Connecting to a PC

- This monitor supports the \*Plug and Play feature.
- \* Plug and Play: A feature that allows you to add a device to your computer without having to reconfigure anything or install any manual drivers.

#### **HDMI Connection**

Transmits digital video and audio signals from your PC to the monitor.



- Using a DVI to HDMI / DP (DisplayPort) to HDMI cable may cause compatibility issues.
- Use a certified cable with the HDMI logo attached. If you do not use a certified HDMI cable, the screen may not display or a connection error may occur.
- Recommended HDMI cable types
- High-Speed HDMI<sup>®</sup>/™ cable
- High-Speed HDMI°/TM cable with Ethernet

#### **DisplayPort Connection**

Transmits digital video and audio signals from your PC to the monitor.



- There may be no video or audio output depending on the DP (DisplayPort) version of the PC.
- Make sure to use the supplied DisplayPort cable of the product. Otherwise, this may cause the device to malfunction.
- If you are using a Mini DisplayPort output graphics card, use a Mini DP to DP (Mini DisplayPort to DisplayPort) cable or gender that supports DisplayPort1.2 or 1.4. (Sold separately)

## **Connecting AV Devices**

#### **HDMI Connection**

HDMI transmits digital video and audio signals from your AV device to the monitor.



- Using a DVI to HDMI / DP (DisplayPort) to HDMI cable may cause compatibility issues.
- Use a certified cable with the HDMI logo attached. If you do not use a certified HDMI cable, the screen may not display or a connection error may occur.
- Recommended HDMI cable types
  - High-Speed HDMI°/™ cable
  - High-Speed HDMI\*/™ cable with Ethernet

## **Connecting Peripherals**

#### **Headphones Connection**

Connect peripherals to the monitor via the headphones port.



- Peripheral devices are sold separately.
- Depending on the audio settings of the PC and external device, headphones and speaker functions may be limited.
- If you use angled earphones, it may cause a problem with connecting another external device to the monitor.
   Therefore, it is recommended to use straight earphones.



Angled



Straight (Recommend)

## **USER SETTINGS**



• Your monitor's OSD (On Screen Display) may differ slightly from that shown in this manual.

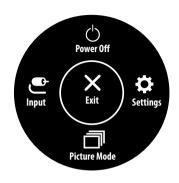
## **Activating the Main Menu**



- 1 Press the joystick button on the bottom of the monitor.
- 2 Move the joystick up/down and left/right to set the options.
- Press the joystick button once more to exit the main menu.

| Button   | Menu Status        |                    | Description  |  |  |
|----------|--------------------|--------------------|--|--|--|
|          | Main menu disabled |                    | Enables the main menu.   |  |  |
|          | Main menu enabled  |                    | Exits the main menu. (Holding down the button more than 5 seconds 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 | Adjusts the monitor volume level.  |  |  |
|          |                    | Main menu enabled  | Enters the <b>Input</b> features.  |  |  |
|          |                    | Main menu disabled | Adjusts the monitor volume level.  |  |  |
|          | Main menu enabled  |                    | Enters the <b>Settings</b> feature.  |  |  |
| <b>A</b> |                    | Main menu disabled | Displays the information on the current input.   |  |  |
|          |                    | Main menu enabled  | Turns off the monitor.   |  |  |
|          |                    | Main menu disabled | Displays the information on the current input.   |  |  |
| <b>,</b> | Main menu enabled  |                    | Enters the <b>Picture Mode</b> feature.  |  |  |

#### **Main Menu Features**



| Main Menu    | Description                     |  |
|--------------|---------------------------------|--|
| Input        | Sets input mode.                |  |
| Power Off    | Turns off the monitor.          |  |
| Settings     | Configures the screen settings. |  |
| Picture Mode | Sets the picture mode.          |  |
| Exit         | Exits the main menu.            |  |

### **Menu Settings**

- 1 To view the OSD menu, press the joystick button at the bottom of the monitor and then enter the **Settings**.
- 2 Move the joystick up/down and left/right to set the options.
- 3 To return to the upper menu or set other menu items, move the joystick to ◀ or pressing (؈) it.
- 4 If you want to exit the OSD menu, move the joystick to ◀until you exit.









**Quick Settings** 

Input

Picture

General

## **Quick Settings**

| Settings > Quick Settings | Description   |   |  |  |
|---------------------------|---|---|--|--|
| Brightness                | A di  |   |  |  |
| Contrast                  | Adjusts the contrast and prigntness of  | Adjusts the contrast and brightness of the screen.              |  |  |
|                           | Adjusts the volume.   | Adjusts the volume.   |  |  |
| Volume                    | NOTE  |   |  |  |
|                           | - You can adjust <b>Mute</b> / <b>Unmute</b> by moving the joystick button to ▼ in the Volume menu. |   |  |  |
|                           | Custom  | The user can adjust it to red, green, or blue by customization. |  |  |
| Color Torre               | Warm  | Sets the screen color to a reddish tone.                        |  |  |
| Color Temp                | Medium  | Sets the screen color between a red and blue tone.              |  |  |
|                           | Cool  | Sets the screen color to a bluish tone.                         |  |  |

### Input

| Settings > Input |   | Description   |  |  |
|------------------|---|---|--|--|
| Input List       | Selects the input mode.                 | Selects the input mode.   |  |  |
|                  | Adjusts the aspect ratio of the screen. |   |  |  |
|                  | Full Wide                               | Displays the video in widescreen, regardless of the video signal input.   |  |  |
|                  | Original                                | Displays video according to the aspect ratio of the video signal input.   |  |  |
| Aspect Ratio     | Just Scan                               | The aspect ratio is not adjusted from the original.   |  |  |
|                  | . , ,                                   | <ul> <li>NOTE</li> <li>The display may look the same for Full Wide, Original, and Just Scan options at the recommended resolution (3840 x 2160).</li> <li>There is no Just Scan menu on FreeSync Mode. (Go to Picture → Game Adjust → FreeSync, to set from FreeSync Basic or Extended to Off)</li> </ul> |  |  |

### Picture



• The **Picture Mode** that can be set depends on the Input signal.

### [Picture Mode on SDR (Non-HDR) signal]

| Settings > Picture |  | Description   |  |  |
|--------------------|--|---|--|--|
|                    | Custom   | Allows the user to adjust each element.   |  |  |
|                    | Vivid  | Heightens contrast, brightness and sharpness to display vivid images.   |  |  |
|                    | HDR Effect   | Optimizes the screen for high dynamic range.  |  |  |
|                    | Reader   | Optimizes the screen for viewing documents. You can brighten the screen in the OSD menu.  |  |  |
|                    | Cinema   | Optimizes the screen for video.   |  |  |
| Picture Mode       | FPS  | This mode is optimized for FPS games.   |  |  |
|                    | RTS  | This mode is optimized for RTS Game.  |  |  |
| Ticture mode       | Color Weakness   | This mode is for users who cannot distinguish between red and green. It enables users with color weakness to easily distinguish between the two colors. |  |  |
|                    | EBU  | A standard TV PAL color space for broadcasting.   |  |  |
|                    | REC709   | A standard HDTV color space for broadcasting.   |  |  |
|                    | SMPTE-C  | A standard TV NTSC color space for broadcasting.  |  |  |
|                    | NOTE   |   |  |  |
|                    | • If the <b>Picture Mode</b> is changed in the DP (DisplayPort) input, the screen may flicker or the resolution of your PC screen may be affected. |   |  |  |

#### [Picture Mode on HDR signal]

| Settings > Picture | Description   |  |  |  |
|--------------------|---|--|--|--|
|                    | Custom  | Allows the user to adjust each element.                                      |  |  |
|                    | Vivid   | Optimized the screen for HDR vivid colors.                                   |  |  |
|                    | Standard  | Optimized the screen for HDR standard.                                       |  |  |
| G                  | Cinema  | Optimized the screen for HDR video.  |  |  |
| Picture Mode       | FPS   | This mode is optimized for FPS games.It is suitable for very dark FPS games. |  |  |
|                    | RTS This mode is optimized for RTS Game.  |  |  |  |
|                    | <ul> <li>NOTE</li> <li>HDR content may not display correctly depending on Window10 OS settings, please check HDR On/Off settings in Windows.</li> <li>When the HDR function is turned on, the characters or picture quality may be poor according to Graphic card performance.</li> <li>While the HDR function is on, screen flickering or cracking may occur when changing the monitor input or power on/off according to Graphic card performance.</li> </ul> |  |  |  |

| Settings > Picture | Description       |  |  |
|--------------------|-------------------|--|--|
|                    | Brightness        | Adjusts the centra                                 | act and hightness of the serven  |
|                    | Contrast          | Adjusts the contrast and brightness of the screen. |  |
|                    | Sharpness         | Adjusts the sharpness of the screen.               |  |
|                    |                   | High   | Optimizes the screen for crystal clear images. Best for high-definition video or games.  |
|                    | SUPER RESOLUTION+ | Middle   | Optimizes the screen for comfortable viewing, with images at the middle level between the low and high modes. Best for UCC or SD videos.           |
|                    |                   | Low  | Optimizes the screen for smooth and natural images. Best for still images or images with less movement.  |
| Picture Adjust     |                   | Off  | Displays in the most common setting. Disables <b>SUPER RESOLUTION+</b> .   |
|                    |                   |  | a function to increase the sharpness of low resolution pictures, it is not recommended to use the function for |
|                    | Black Level H     |  | el (for HDMI only).<br>rence for a video signal, this is the darkest color the monitor can display.  |
|                    |                   | High   | Keeps the current contrast ratio of the screen.  |
|                    |                   | Low  | Lowers the black levels and raises the white levels from the current contrast ratio of the screen.   |
|                    | DFC               | On   | Adjusts the brightness automatically according to the screen.  |
|                    |                   | Off  | Disables the <b>DFC</b> feature.   |

| Settings > Picture | Description   |  |  |  |
|--------------------|---|--|--|--|
|                    | Response Time   | Sets a response time for displayed pictures based on the movement of the picture on the screen.  For a normal environment, it is recommended that you use <b>Fast</b> . When there is a lot of motion, it is recommended that y <b>Faster</b> .  Setting to Faster may cause image sticking. |  |  |
|                    |   | Faster   | Sets the response time to Faster.  |  |
|                    |   | Fast   | Sets the response time to Fast.  |  |
|                    |   | Normal   | Sets the response time to Normal.  |  |
|                    |   | Off  | Does not use the response time improvement feature.  |  |
|                    | FreeSync  | Provides seamless and natural images by synchronizing the vertical frequency of the input signal with that of the output signal  |  |  |
|                    |   | <b>∴</b> CAUTION   |  |  |
| Game Adjust        | Supported Interface: DisplayPort,HDMI.  |  | face: DisplayPort,HDMI.  |  |
|                    |   | Supported Grap   | hic Card : A graphic card that supports AMD's FreeSync is necessary.   |  |
|                    |   | Supported Versi  | on : Make sure to update the graphic card to the latest driver.  |  |
|                    |   | For more inform  | nation and requirement, refer to AMD website at http://www.amd.com/FreeSync                                      |  |
|                    |   | Extended   | Enable wider frequency range of FreeSync function than basic mode.   |  |
|                    |   |  | The screen may flicker during the game play.   |  |
|                    |   | Basic  | Enable basic frequency range of FreeSync function.   |  |
|                    |   | Off  | FreeSync function off.   |  |
|                    | Black Stabilizer  | You can control the black contrast to have better visibility in dark scenes.   |  |  |
|                    | Increasing the <b>Black Stabilizer</b> value brightens the low gray level area on the screen. (You can eagame screens.) |  | ck Stabilizer value brightens the low gray level area on the screen. (You can easily distinguish objects on dark |  |
|                    |   | Reducing the <b>Black Stabilizer</b> value darkens the low gray level area and increases the dynamic contrast on the screen.   |  |  |

| Settings > Picture | Description                                 |  |   |  |  |  |
|--------------------|---|--|---|--|--|--|
|                    | Gamma                                       | Mode 1,<br>Mode 2,<br>Mode 3   | The higher the gamma value, the darker the image becomes. Likewise, the lower the gamma value, the lighter the image becomes.   |  |  |  |
|                    |   | Mode 4   | If you do not need to adjust the gamma settings, select <b>Mode 4</b> .   |  |  |  |
|                    |   | Set your own color   | r temperature.  |  |  |  |
|                    |   | Custom   | The user can adjust it to red, green, or blue by customization.   |  |  |  |
|                    | Color Temp                                  | Warm   | Sets the screen color to a reddish tone.  |  |  |  |
| Color Adjust       |   | Meduim   | Sets the screen color to between a red and blue tone.   |  |  |  |
|                    |   | Cool   | Sets the screen color to a bluish tone.   |  |  |  |
|                    | Red/Green/Blue                              | You can customize the picture color using red, green, and blue colors.   |   |  |  |  |
|                    |   | Meets the user requirements for colors by adjusting the hue and saturation of the six colors (red, green, blue, cyan, magenta, and yellow) and then saving the settings. |   |  |  |  |
|                    | Six Color                                   | Hue  | Adjusts the tone of the screen colors.  |  |  |  |
|                    |   | Saturation   | Adjusts the saturation of the screen colors. The lower the value, the less saturated and brighter the colors become. The higher the value, the more saturated and darker the colors become. |  |  |  |
| Picture Reset      | Do you want to recet your nicture cottings? | No   | Cancel the select.  |  |  |  |
| ricture keset      | Do you want to reset your picture settings? | Yes  | Returns to the default settings.  |  |  |  |

### General

| Settings > General       |  | Description  |  |  |  |
|--------------------------|--|--|--|--|--|
| Language                 | Sets the menu screen to the desired language   | Sets the menu screen to the desired language.                              |  |  |  |
|                          | Conserve energy by using luminance compens   | sation algorithm.  |  |  |  |
|                          | High   | Saves energy using the high-efficiency <b>SMART ENERGY SAVING</b> feature. |  |  |  |
|                          | Low  | Saves energy using the low-efficiency <b>SMART ENERGY SAVING</b> feature.  |  |  |  |
| SMART ENERGY SAVING      | Off  | Disables the feature.  |  |  |  |
|                          | <ul> <li>NOTE</li> <li>The value of energy saving data may differ depending on panel and panel suppliers.</li> <li>If you select the option of SMART ENERGY SAVING is High or Low, monitor luminance become higher or lower depend on source.</li> </ul> |  |  |  |  |
| PowerLED                 | Turns the power LED on the bottom of the monitor on or off.  NOTE  When the Power LED function is turned on, it operates as follows:  On Mode: White  Sleep Mode: White  Off Mode: Off   |  |  |  |  |
| <b>Automatic Standby</b> | Feature that automatically turns off the monitor when there is no movement on the screen for a period of time. You can set a timer for the auto-off function.  (Off, 4 H, 6 H, and 8 H)  |  |  |  |  |
| DisplayPort Version      | Set DisplayPort Version to the same version as To use the HDR function, set to <b>1.4</b> .  | the connected external device. (1.4, 1.2, and 1.1)                         |  |  |  |

| Settings > General        | Description  |  |                   |               |  |  |  |
|---------------------------|--|--|-------------------|---------------|--|--|--|
|                           | Provides sharper images when connected to a  | Provides sharper images when connected to a device supporting ULTRA HD Deep Color.               |                   |               |  |  |  |
|                           |  | 4K@ 60 Hz Su   | pport Format      |               |  |  |  |
|                           | Resolution   | Frame rate(Hz)   | Color Depth / Chr | roma Sampling |  |  |  |
|                           | Resolution   | rraille rate(nz)   | 8 bit             | 10 bit        |  |  |  |
|                           |  |  | YCbCr 4           | 4:2:0         |  |  |  |
| HDMI ULTRA HD Deep Color  | 3840 x 2160  | 59.94  | YCbCr 4           | 4:2:2         |  |  |  |
|                           | 3040 X 2100  | 60.00  | YCbCr 4:4:4       | -             |  |  |  |
|                           |  |  | RGB 4:4:4         | -             |  |  |  |
|                           | ● NOTE   |  |                   |               |  |  |  |
|                           | 1  | • To use HDMI ULTRA HD Deep Color, turn this function "On".                                      |                   |               |  |  |  |
|                           | <ul> <li>If the connected device does not support Deep Color, the screen or sound may not work properly. In this case, set this function to off.</li> <li>The HDMI ULTRA HD Deep Color function can be set individually for each HDMI port.</li> </ul> |  |                   |               |  |  |  |
| Buzzer                    | This feature lets you set the sound generated  | from Buzzer when your monitor powers on.   |                   |               |  |  |  |
| OSD Lock                  | This feature disables the configuration and ad   | justment of menus.   |                   |               |  |  |  |
| OSD Size                  | User can select OSD Size to Large or Small.  |  |                   |               |  |  |  |
| Information               | The following display information will be show   | The following display information will be shown; Serial Number, Total Power On Time, Resolution. |                   |               |  |  |  |
|                           | Do you want to reset your settings?  |  |                   |               |  |  |  |
| Reset to Initial Settings | Yes  | Returns to the default settings.   |                   |               |  |  |  |
|                           | No   | Cancel the reset.  |                   |               |  |  |  |

# **TROUBLESHOOTING**

| Nothing is displayed on the screen.                              |   |
|--|---|
| Is the monitor's power cord plugged in?                          | Check if the power cord is correctly plugged into the power outlet.   |
| Is the power LED on?   | Check the power cable connection and press the power button.  |
| Is the power on and the power LED displaying white?              | Check that the connected input is enabled (Settings > Input).   |
| Is the <b>No Signal</b> message being displayed?                 | This is displayed when the signal cable between the PC and the monitor is missing or disconnected. Check the cable and reconnect it.  |
| Is the <b>Out of Range</b> message being displayed?              | This occurs when signals transferred from the PC (graphics card) are out of the horizontal or vertical frequency range of the monitor. Please see the Product Specification section of this manual to set the appropriate frequency.  |
| Screen display is unstable and shaky. / Images displayed on the  | monitor leave shadow trails.  |
| Did you select the appropriate resolution?                       | If the selected resolution is HDMI 1080i 60/50 Hz (interlaced), the screen may be flickering. Change the resolution to 1080p or the recommended resolution.   |
|  | <ul> <li>Not setting the graphics card to the recommended (optimal) resolution may result in blurred text, a dimmed screen, a truncated display area or<br/>misalignment of the display.</li> </ul>   |
|  | The setting methods may be different depending on the computer or operating system, and some resolutions may not be available depending on the performance of the graphics card. If this is the case, contact the manufacturer of the computer or graphics card for assistance. |
| Does image sticking occur even when the monitor is turned off?   | <ul> <li>Displaying a still image for a prolonged time may cause damage to the screen, resulting in the retention of the image.</li> <li>To extend the lifetime of the monitor, use a screensaver.</li> </ul>   |
| Are there spots on the screen?                                   | • When using the monitor, pixilated spots (red, green, blue, white, or black) may appear on the screen. This is normal for an LCD screen. It is not an error, nor is it related to the monitor's performance.   |
| Some features are disabled.                                      |   |
| Are some functions not available when you press the Menu button? | The OSD is locked. Disable OSD Lock in General.   |

| Do you see an "Unrecognized monitor, Plug and Play (VESA DDC) monitor found" message? |   |  |  |  |
|---|---|--|--|--|
| Have you installed the display driver?  | <ul> <li>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.</li> <li>Make sure to check if the graphics card supports Plug and Play function.</li> </ul> |  |  |  |
| No sound from the headphone port.   | No sound from the headphone port.   |  |  |  |
| Are images displayed without sound?   | <ul> <li>Make sure that the headphone port connections are made properly.</li> <li>Try increasing the volume with the joystick.</li> <li>Set the audio output of the PC to the monitor you are using. (The settings may differ depending on the operating system (OS) you use.)</li> </ul>    |  |  |  |

### NOTE

LED can be lighted with Set OSD Menu.
 Settings – General – Power LED – On

## **PRODUCT SPECIFICATION**

### 27UL650/27BL65U

| Color Depth                | 8-bit / 10-bit color is supported.                              |   |                 |  |  |
|----------------------------|---|---|-----------------|--|--|
| Resolution                 | Max Resolution  | 3840 x 2160 @ 60 Hz   |                 |  |  |
| Resolution                 | Recommended Resolution  | 3840 x 2160 @ 60 Hz   |                 |  |  |
|                            | Power Rating  | 19V <del></del> 2.4 A   |                 |  |  |
| Power Sources              | Power Consumption   | On mode: 22 W Typ. (ENERGY STAR® standard)*  36 W Typ. (Outgoing condition)**  Sleep Mode ≤ 0.5 W  Off Mode ≤ 0.3 W |                 |  |  |
| AC/DC adaptor              | DA-48F19 type, Asian Power Devices Inc. Output: 19 V === 2.53 A |   |                 |  |  |
|                            | Operating Conditions  | Temperature   | 0 °C to 40 °C   |  |  |
| Environmental Conditions   |   | Humidity  | Less than 80 %  |  |  |
| Environmental Conditions   | Storing Conditions  | Temperature   | -20 °C to 60 °C |  |  |
|                            |   | Humidity  | Less than 85 %  |  |  |
|                            | Monitor Size (Width x Height x Depth)                           |   |                 |  |  |
| Dimensions                 | With Stand  | 613.1 mm x 567.3 mm x 230 mm  |                 |  |  |
|                            | Without Stand   | 613.1 mm x 364.4 mm x 44.6 mm   |                 |  |  |
| Weight (Without Darkaning) | With Stand  | 6.1 kg  |                 |  |  |
| Weight (Without Packaging) | Without Stand   | 4.4 kg  |                 |  |  |

The specifications are subject to change without notice.

<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  $\!\!\!^\circ$  test standard.

<sup>\*\*</sup> The On mode power consumption is measured with LGE test standard (Full White pattern, Maximum resolution).

## **PRODUCT SPECIFICATION**

27UL600

| Color Depth                | 8-bit / 10-bit color is supported.  |                                |                 |  |  |
|----------------------------|---|--------------------------------|-----------------|--|--|
| Resolution                 | Max Resolution  | 3840 x 2160 @ 60 Hz            |                 |  |  |
| Resolution                 | Recommended Resolution  | 3840 x 2160 @ 60 Hz            |                 |  |  |
|                            | Power Rating  | 19 V = 2.4 A                   |                 |  |  |
| Power Sources              | Power Consumption On mode: 22 W Typ. (ENERGY STAR* standard)* $36 \text{ W Typ. } (\text{Outgoing condition})^{**}$ $\text{Sleep Mode} \leq 0.5 \text{ W}$ $\text{Off Mode} \leq 0.3 \text{ W}$ |                                |                 |  |  |
| AC/DC adaptor              | DA-48F19 type, Asian Power Devices Inc. Output: 19 V = 2.53 A   |                                |                 |  |  |
|                            | Operating Conditions  | Temperature                    | 0 °C to 40 °C   |  |  |
| Environmental Conditions   |   | Humidity                       | Less than 80 %  |  |  |
| Environmental Conditions   | Storing Conditions  | Temperature                    | -20 °C to 60 °C |  |  |
|                            |   | Humidity                       | Less than 85 %  |  |  |
|                            | Monitor Size (Width x Height x Depth)   |                                |                 |  |  |
| Dimensions                 | With Stand  | 613.1 mm x 455.2 mm x 209.4 mm |                 |  |  |
|                            | Without Stand   | 613.1 mm x 364.4 mm x 73.0 mm  |                 |  |  |
| Woight (Without Packaging) | With Stand  | 5.2 kg                         |                 |  |  |
| Weight (Without Packaging) | Without Stand   | 4.7 kg                         |                 |  |  |

The specifications are subject to change without notice.

 $<sup>\</sup>ensuremath{^{*}}$  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> The On mode power consumption is measured with LGE test standard (Full White pattern , Maximum resolution).

# Factory Support Mode (Preset Mode, PC)

### DisplayPort

| Preset Mode | Horizontal Frequency (kHz) | Vertical Frequency (Hz) | Polarity (H/V) | Remarks             |
|-------------|----------------------------|-------------------------|----------------|---------------------|
| 640 x 480   | 31.469                     | 59.94                   | -/-            |                     |
| 800 x 600   | 37.879                     | 60.317                  | +/+            |                     |
| 1024 x 768  | 48.363                     | 60                      | -/-            |                     |
| 1152 x 864  | 54.347                     | 60.05                   | +/+            |                     |
| 1280 x 720  | 45.00                      | 60.00                   | +/+            |                     |
| 1280 x 800  | 49.702                     | 59.810                  | -/+            |                     |
| 1280 x 1024 | 63.981                     | 60.02                   | +/+            |                     |
| 1600 x 900  | 60.00                      | 60.00                   | +/+            |                     |
| 1920 x 1080 | 67.5                       | 60                      | +/-            |                     |
| 2560 x 1440 | 88.79                      | 59.95                   | +/-            |                     |
| 3840 x 2160 | 66.66                      | 30                      | +/-            |                     |
| 3840 x 2160 | 133.32                     | 60                      | +/-            | DP Preferred timing |

#### HDMI

| Preset Mode | Horizontal Frequency (kHz) | Vertical Frequency (Hz) | Polarity (H/V) | Remarks  |
|-------------|----------------------------|-------------------------|----------------|--|
| 640 x 480   | 31.469                     | 59.94                   | -/-            |  |
| 800 x 600   | 37.879                     | 60.317                  | +/+            |  |
| 1024 x 768  | 48.363                     | 60                      | -/-            |  |
| 1152 x 864  | 54.347                     | 60.05                   | +/+            |  |
| 1280 x 720  | 45.00                      | 60.00                   | +/+            |  |
| 1280 x 800  | 49.702                     | 59.810                  | -/+            |  |
| 1280 x 1024 | 63.981                     | 60.02                   | +/+            |  |
| 1600 x 900  | 60.00                      | 60.00                   | +/+            |  |
| 1920 x 1080 | 67.5                       | 60                      | +/-            |  |
| 2560 x 1440 | 88.79                      | 59.95                   | +/-            |  |
| 3840 x 2160 | 67.5                       | 30                      | +/-            | HDMI 1.4 Preferred timing, HDMI ULTRA HD Deep Color: Off |
| 3840 x 2160 | 135                        | 60                      | +/-            | HDMI2.0 Preferred timing, HDMI ULTRA HD Deep Color: On   |

# HDMI Timing (Video)

| Factory support mode<br>(Preset Mode) | Horizontal<br>Frequency(kHz) | Vertical Frequency(Hz) | Remarks                                    |
|---------------------------------------|------------------------------|------------------------|--|
| 480p                                  | 31.5                         | 60                     |  |
| 720p                                  | 45.0                         | 60                     |  |
| 1080p                                 | 67.5                         | 60                     |  |
| 2160p                                 | 135                          | 60                     | When HDMI ULTRA HD Deep Color is set to ON |



| This device meets the | FMC requirements | for home appliances | (Class R) | and is intended for | home usage |
|-----------------------|------------------|---------------------|-----------|---------------------|------------|
|                       |                  |                     |           |                     |            |

This device can be used in all regions. Read the owner's manual (CD) carefully and keep it at hand. Please note that the label attached to the product provides information for technical support.

| Model      |  |  |
|------------|--|--|
| Serial No. |  |  |

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 guidelines for energy efficiency.

Refer to ENERGY STAR.gov for more information on the ENERGY STAR program.