## OWNER'S MANUAL <br> CINEMA 3D MONITOR

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

## CINEMA 3D MONITOR MODEL <br> D237IPS <br> D2770P

## CONTENTS

## 3 ASSEMBLING AND PREPARING

3 Unpacking
4 Parts and buttons
6 Lifting and moving the Monitor set
6 Setting up the Monitor
6 - Attaching the Stand Base
6 - Detaching the Stand Base and Body
7 - Mounting on a table
9 - Mounting on a wall

## 11 USING THE MONITOR SET

11 Connecting to a PC
11 - D-SUB connection
12 - DVI-D connection
12 - HDMI connection

## 14 CUSTOMIZING SETTINGS

14 Accessing The Main Menus
15 Customizing Settings
15 - Menu Settings
16 - Things you need to check before installing TriDef 3D
16 - 3D Settings(Only while in 3D mode)
17 - Volume Settings (Only supported in HDMI)
18 - SUPER ENERGY SAVING Settings
19 TROUBLESHOOtINg

## 21 troubleshooting when USING 3D MODE

## 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.


CD(Owner's Manual) /
Card


Stand Base


TriDef 3D software Program CD / Quick Installation Guide

D-SUB Cable
(This signal cable may be attached to this product before shipping out.)



Power Cord

DVI-D Cable
(This cable is not included in all countries.)


3D Glasses
(Normal type)


3D Glasses
(Clip-on type)

## 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.
- User should use shielded signal interface cables (RGB cable / DVI-D cable) with ferrite cores to maintain standard compliance for the product.


## Parts and buttons



| Button | Description |  |
| :---: | :---: | :---: |
| MENU | Accesses the main menus.(See p.15) |  |
|  | OSD LOCKED/ UNLOCKED | This function allows you to lock the current control settings, so that they cannot be inadvertently changed. <br> Press and hold the MENU button for several seconds. <br> The message "OSD LOCKED" should appear. <br> You can unlock the OSD controls at any time by pushing the MENU button for several seconds. The message "OSD UNLOCKED" should appear. |
| 3D | 3D display settings.(See p.16) |  |
| AUTO | When adjusting your display settings, always press the AUTO button on the MONITOR SETUP OSD. (Only supported in Analog Mode) |  |
|  | The best display mode $1920 \times 1080$ |  |
| VOLUME (Only HDMI mode) | Adjust the volume of the Monitor set.(See p.17) |  |
| INPUT | You can choose the input signal. <br> - When two input signals are at least connected, you can select the input signal (D-SUB/DVI/HDMI) you want. <br> - When only one signal is connected, it is automatically detected. The default setting is $D-S U B$. |  |
| EXIT | Exit the OSD(On Screen Display). |  |
| J (Power Button) | Turns the power on or off. |  |
|  | Power Indicator | The power indicator stays Red if the display is running properly (On Mode). If the display is in Sleep Mode, the power indicator blinks Red. |

## Lifting and moving the

 Monitor setWhen moving or lifting the Monitor, read the following to prevent the Monitor from being scratched or damaged and for safe transportation regardless of its type and size.

## CAUTION

Avoid touching the screen at all times, as this may result in damage to the screen or some of the pixels used to create images.

- It is recommended to move the Monitor set in the box or packing material that the Monitor set originally came in.
- Before moving or lifting the Monitor set, disconnect the power cord and all cables.
- Hold the top and bottom of the Monitor set frame firmly. Make sure not to hold the transparent part area.

- When holding the Monitor set, the screen should face away from you to prevent the screen from scratches.

- When transporting the Monitor set, do not expose the Monitor set to jolts or excessive vibration.
- When transporting the Monitor set, keep the Monitor set upright, never turn the Monitor set on its side, or tilt towards the left or right.


## Setting up the Monitor

## 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 Attach the Stand Base to the set by turning the screw to the right with a Coin.


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

2 Turn the screw to the left, and then pull out the Stand Base from the Stand Body.


3 Loosen 2 or 4 screws and remove the stand body from the monitor.

D237IPS


D2770P


## CAUTION

- 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.


## 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 Power Cord to a wall outlet.


3 Press (Jower) button on the Monitor set to turn the power on.

## CAUTION

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

## 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.


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


## NOTE

The angle of the screen can be adjusted forwards or backwards from $-5^{\circ}$ to $18^{\circ}$ for a comfortable viewing experience.


## 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 http://www.kensington.com.

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 the wall mounting interface (optional parts), attach it carefully so it will not drop.

1 Please, Use the screw and wall mount interface in accordance with VESA Standards.

2 If you use screw longer than standard, the monitor might be damaged internally.

3 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.

4 VESA compatible only with respect to screw mounting interface dimensions and mounting screw specifications.

5 Please use VESA standard as below.

- 784.8 mm (30.9 inch) and under
* Wall Mount Pad Thickness : 2.6 mm
* Screw : $\Phi 4.0 \mathrm{~mm} \times$ Pitch $0.7 \mathrm{~mm} \times$ Length 10 mm
- 787.4 mm (31.0 inch) and above
* Please use VESA standard wall mount pad and screws.

| Model | D237IPS | D2770P |  |
| :--- | :--- | :--- | :--- |
| VESA (A x B) | $100 \times 100$ | $200 \times 100$ |  |
| Standard screw | M4 | M4 |  |
| Number of <br> screws | 4 | 4 |  |
| Wall mount <br> bracket <br> (optional) | RW120 | RW240 |  |
|  |  | 0 | 0 |

- VESA (A x B)



## 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.


## ! 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: This is the function that allows a PC to use the monitor without installing a driver.


## 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.

- 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 or A/V to the Monitor set. Connect the PC or $\mathrm{A} / \mathrm{V}$ and the Monitor set with the HDMI cable as shown in the following illustrations. When the HDMI cable is connected, you can listen to the sound through headphones, earphones or an external speaker.


## ( N Note

- If you use HDMI PC, it can cause compatibility problem.
- Sound output is available only in HDMI input mode. The quality of the sound may be reduced depending on the performance of headphones, earphones or external speaker.


## 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 the Monitor, please connect the signal cable(D-SUB/ DVI-D/HDMI) respectively in the 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.


## Self Image Setting Function

Press the power button to turn the power on. When monitor power is turned on, the "Self Image Setting" Function is executed automatically. (Only supported in Analog Mode)


## ? 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.(Only supported in Analog Mode)

- 'AUTO' 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 function button to improve resolution. (Only supported in Analog Mode)

## CUSTOMIZING SETTINGS

## Accessing The Main Menus

1 Press any button(Except the power button) on the Monitor set to display the MONITOR SETUP OSD menu.

2 Press the desired menu item.
3 Change the value of the menu item by pressing the buttons on the Monitor set. To return to the upper menu or set other menu items, use the up arrow ( $\boldsymbol{\Lambda}$ ) button.

4 Select EXIT to leave the OSD menu.


MENU (See p.15)
Sets the screen options.

AUTO (See p.5)
Optimizes the resolution.

EXIT
Exits the OSD menu.

3D (See p.16)
Sets the 3D mode.

VOLUME (See p.17)
Sets the volume.

INPUT (See p.5)
Sets the external input.

## ! NOTE

Different menu items are enabled depending on the type of input signal.

- D-SUB / DVI Mode: MENU, 3D, AUTO, INPUT, EXIT
- HDMI Mode: MENU, 3D, VOLUME, INPUT, EXIT


## Customizing Settings

## Menu Settings

1 Press any button(Except the power button) on the Monitor set to display the MONITOR SETUP OSD menu.

2 Press the MENU button to display the options in the OSD menu.

3 Set the options by pressing the buttons on the Monitor set.
4 Select EXIT to leave the OSD menu.
To return to the upper menu or set other menu items, use the up arrow ( $\mathbf{(}$ ) button.


The available Menu settings are described below.

| Menu | Analog | Digital | HDMI | Description |
| :--- | :---: | :---: | :---: | :--- | :--- |
| BRIGHTNESS | $\mathbf{o}$ | $\mathbf{o}$ | $\mathbf{o}$ | Adjusts the brightness of the screen. |


| AUTO BRIGHT | $\mathbf{o}$ | $\mathbf{o}$ | $\mathbf{o}$ | If this option is enabled, the sensor that detects the ambient <br> brightness adjusts the monitor backlight or the screen brightness <br> according to the input data to optimize the screen display. |
| :--- | :---: | :---: | :---: | :--- |
| SUPER ENERGY <br> SAVING | $\mathbf{o}$ | $\mathbf{o}$ | $\mathbf{o}$ | Sets the SUPER ENERGY SAVING function. |
| FACTORY RESET | $\mathbf{o}$ | $\mathbf{o}$ | $\mathbf{o}$ | Returns the monitor to original factory settings. |

- Analog: D-SUB(Analog signal) input.
- Digital: DVI-D(Digital signal) input.
- HDMI: HDMI(Digital signal) input.


## Things you need to check before installing TriDef 3D

- Before you install the TriDef 3D program, connect the LG 3D monitor to your PC and reboot.
- If you are using two monitors or connecting a monitor to your laptop, set the LG 3D monitor as the main/default screen one and change the resolution to 1920*1080.
- To run a TriDef Movie file on Windows XP, you must install Windows Media Player 11 for Windows XP.


## 3D Settings(Only while in 3D mode)

* The 3D option OSD is enabled only for HDMI video timing.

1 Press any button(Except the power button) on the Monitor to display the MONITOR SETUP OSD menu.


2 Press the 3D button to display the options in the OSD menu.
3 Set the options by pressing the buttons on the Monitor set.
4 Select EXIT to leave the OSD menu.
To return to the upper menu or set other menu items, use the up arrow ( $\mathbf{t}$ ) button.

The available 3D settings are described below.

| Menu | Description |  |
| :--- | :--- | :--- |
| 3D MODE | Select the format of 3D video data. (Enabled only for HDMI VIDEO TIMING) |  |
|  | SIDE BY SIDE | Left and right pictures are arranged in Side by Side layout. |
|  | TOP \& BOTTOM | Left and right pictures are arranged in Top and Bottom layout. |
|  | LINE INTERLACED | Left and right pictures are arranged in line by line. |
|  | OFF | Turns off 3D Mode. |
| 3D L/R CHANGE | Changes which frame is shown to each eye. |  |
|  | R-L | Odd lines are Right picture and even lines are Left picture. |
|  | L-R | Odd lines are Left picture and even lines are Right picture. |
|  | Converts 3D images into 2D. (Enabled only for HDMI VIDEO TIMING) |  |
|  | OFF | Displays images in 3D. |
|  | ON | Displays images in 2D. |

## (!) NOTE

- 3D Mode.

| SIDE BY SIDE | TOP \& BOTTOM | LINE INTERLACED |
| :---: | :---: | :---: |
| (1) 0 (0) |  |  |

- Select the appropriate format according to the 3D input signal.
- If the 3D option selected is incorrect, images may not be displayed properly.
- To watch 3D images, select 3D mode.


## Volume Settings (Only supported in HDMI)

1 Press any button(Except the power button) on the Monitor set to display the MONITOR SETUP OSD menu.

2 Press the VOLUME button to display the options in the OSD menu.
3 Set the options by pressing the buttons on the Monitor set.


4 Select EXIT to leave the OSD menu.
To return to the upper menu or set other menu items, use the up arrow ( $\mathbf{(})$ button.

## SUPER ENERGY SAVING Settings

1 Press any button(Except the power button) on the Monitor set to display the MONITOR SETUP OSD menu.

2 Press the MENU button to display the options in the OSD menu.

3 Select SUPER ENERGY SAVING by pressing the buttons on the Monitor set and set the options.

4 Select EXIT to leave the OSD menu.
To return to the upper menu or set other menu items,
 use the up arrow ( $\mathbf{\Psi}$ ) button.

The available SUPER ENERGY SAVING settings are described below.

| Menu |  |
| :--- | :--- |
| ON | Enables SUPER ENERGY SAVING. |
| OFF | Disables SUPER ENERGY SAVING. |
| RESET | Resets the values of total energy consumption reduction and CO2 emission reduction estimates. |

## (!) NOTE

- TOTAL POWER REDUCTION: Shows the approximate amount of power saved by using the energy saver function.
- TOTAL CO2 REDUCTION: Shows the approximate Carbon Dioxide saved by using the energy saver function.
- SAVING DATA(W/h)

|  | D237IPS | D2770P |
| :--- | :--- | :--- |
|  | $584.2 \mathrm{~mm}(23 \mathrm{inch})$ | $686 \mathrm{~mm}(27 \mathrm{inch})$ |
| SUPER SAVING | $5 \mathrm{~W} / \mathrm{h}$ | $6 \mathrm{~W} / \mathrm{h}$ |
| LED SAVING | $12 \mathrm{~W} / \mathrm{h}$ | $10 \mathrm{~W} / \mathrm{h}$ |

- These values will be different from each panel and panel vendor.
- LG calculated these values while using a "broadcast video signal".
- LED Saving refers to how much power can be saved using a WLED Panel instead of a CCFL panel.
- SUPER SAVING refers to how much power can be saved using the SUPER ENERGY SAVING function.


## TROUBLESHOOTING

Check the following before calling for service.

| No image appears |  |
| :--- | :--- |
| Is the power cord of the display <br> connected? | • Check and see if the power cord is connected properly to the power <br> outlet. |
| Is the power indicator light on? | • Press the Power button. |
| Is the power indicator displaying as <br> red? | • Adjust the brightness and the contrast. |
| Is the power indicator flickering? | - If the display is in power saving mode, try moving the mouse or <br> pressing any key on the keyboard to bring up the screen. <br> - Check that your PC is turned on. |
| Do you see an "OUT OF RANGE" <br> message on the screen? | - This message appears when the signal from the PC (video card) is <br> out of horizontal or vertical frequency range of the display. See the <br> 'Specifications' section of this manual and configure your display <br> again. |
| Do you see a "CHECK SIGNAL <br> CABLE" message on the screen? | - This message appears when the signal cable between your PC and <br> 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 (For analog (D-SUB)) |  |
| :--- | :--- |
| Display Position is incorrect. | - Press the AUTO button to automatically adjust your display image to <br> the ideal setting. |
| On the screen background, vertical <br> bars or stripes are visible. | - Press the AUTO button to automatically adjust your display image to <br> the ideal setting. |
| Any horizontal noise appearing in <br> any mage or characters are not <br> clearly portrayed. | - Press the AUTO button to automatically adjust your display image to <br> the ideal setting. |
| - Check Control Panel DisplayCottings and adjust the display <br> to the recommended resolution or adjust the display image to the <br> ideal setting. Set the color setting higher than 24 bits (true color). |  |

## 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 configuration procedure may differ depending on your computer and/or operating system (See p.24). In addition, some video cards may not support certain resolutions. If this is the case, contact the manufacturer of the computer or video card for assistance.

| Display image is incorrect | - Check if the signal cable is properly connected and use a <br> screwdriver to fasten if necessary. <br> - Make sure the video card is properly inserted in the slot. <br> - She screen color is mono or <br> abnormal. |
| :--- | :--- |
|  | - Settings. |
| The sce 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.


## TROUBLESHOOTING WHEN USING 3D MODE

I can see a swirling oil-like pattern on the monitor when the monitor is turned off.

- This is caused by the interference of external light in the air layer between the LCD surface and 3D filter. The pattern becomes almost invisible when you turn on the power again.

| I cannot see 3D image properly |  |
| :--- | :--- | :--- |
| If you are not using the glasses <br> provided with the monitor, | - When you view 3D images with this monitor, it is very important <br> that you use the glasses provided with the monitor. The glasses are <br> designed to compensate optically for the 3D fiter attached to the <br> surface of the monitor. If you wear third-party glasses, you may not <br> see 3D images properly on the monitor. |

## SPECIFICATIONS

## D237IPS

| Display | Screen Type | 58.42 cm (23 inch) Hard coating(3H) \& Anti-Glare treatment of the front polarizer Visible diagonal size: 58.42 cm |
| :---: | :---: | :---: |
|  | Pixel Pitch | $0.2652 \mathrm{~mm} \times 0.2652 \mathrm{~mm}$ (Pixel Pitch) |
| Sync Input | Horizontal Frequency | 30 kHz to 83 kHz (Automatic) |
|  | Vertical Frequency | $\begin{aligned} & 56 \mathrm{~Hz} \text { to } 75 \mathrm{~Hz} \text { (D-SUB, DVI-D) } \\ & 56 \mathrm{~Hz} \text { to } 61 \mathrm{~Hz} \text { (HDMI) } \end{aligned}$ |
|  | 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 |
| Resolution | Max | $\begin{aligned} & \text { D-SUB(Analog) : } 1920 \times 1080 @ 60 \mathrm{~Hz} \\ & \text { DVI / HDMI (Digital) : } 1920 \times 1080 @ 60 \mathrm{~Hz} \end{aligned}$ |
|  | Recommend | VESA $1920 \times 1080$ @ 60 Hz |
| Plug \& Play | DDC 2B(Analog, Digital,HDMI) |  |
| Power Consumption | On Mode : 41 W(Typ.) <br> Sleep Mode $\leq 1$ W <br> Off Mode $\leq 1 \mathrm{~W}$ |  |
| Power Input | AC 100-240 V $50 / 60 \mathrm{~Hz} \mathrm{0.7} \mathrm{~A}$ |  |
| Dimensions (Width x Height x Depth) | With Stand | $55.62 \mathrm{~cm} \times 41.27 \mathrm{~cm} \times 17.78 \mathrm{~cm}$ |
|  | Without Stand | $55.62 \mathrm{~cm} \times 34.51 \mathrm{~cm} \times 6.04 \mathrm{~cm}$ |
| Weight | 4.86 kg |  |
| Tilt Range | $-5^{\circ}$ to $18^{\circ}$ |  |
| Environmental conditions | Operating Temperature Operating Humidity | $\begin{aligned} & 10^{\circ} \mathrm{C} \text { to } 35^{\circ} \mathrm{C} \\ & 10 \% \text { to } 80 \% \end{aligned}$ |
|  | Storage Temperature Storage Humidity | $\begin{aligned} & -20^{\circ} \mathrm{C} \text { to } 60^{\circ} \mathrm{C} \\ & 5 \% \text { to } 90 \% \text { non-Condensing } \end{aligned}$ |
| 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.

## D2770P

| Display | Screen Type | 68.6 cm (27 inch) Hard coating(3H) \& Anti-Glare treatment of the front polarizer Visible diagonal size: 68.6 cm |
| :---: | :---: | :---: |
|  | Pixel Pitch | $0.3114 \mathrm{~mm} \times 0.3114 \mathrm{~mm}$ (Pixel Pitch) |
| Sync Input | Horizontal Frequency | 30 kHz to 83 kHz (Automatic) |
|  | Vertical Frequency | $\begin{aligned} & 56 \mathrm{~Hz} \text { to } 75 \mathrm{~Hz} \text { (D-SUB, DVI-D) } \\ & 56 \mathrm{~Hz} \text { to } 61 \mathrm{~Hz} \text { (HDMI) } \end{aligned}$ |
|  | 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 |
| Resolution | Max | $\begin{aligned} & \hline \text { D-SUB(Analog) : } 1920 \times 1080 @ 60 \mathrm{~Hz} \\ & \text { DVI / HDMI (Digital) : } 1920 \times 1080 @ 60 \mathrm{~Hz} \end{aligned}$ |
|  | Recommend | VESA $1920 \times 1080$ @ 60 Hz |
| Plug \& Play | DDC 2B(Analog,Digital,HDMI) |  |
| Power Consumption | On Mode : 43 W(Typ.) Sleep Mode $\leq 1$ W Off Mode $\leq 1 \mathrm{~W}$ |  |
| Power Input | AC 100-240 V $\sim 50 / 60 \mathrm{~Hz} 0.7 \mathrm{~A}$ |  |
| Dimensions (Width x Height x Depth) | With Stand | $65.46 \mathrm{~cm} \times 48.85 \mathrm{~cm} \times 23.08 \mathrm{~cm}$ |
|  | Without Stand | $65.46 \mathrm{~cm} \times 40.45 \mathrm{~cm} \times 6.04 \mathrm{~cm}$ |
| Weight | 5.73 kg |  |
| Tilt Range | $-5^{\circ}$ to $18^{\circ}$ |  |
| Environmental conditions | Operating Temperature Operating Humidity | $\begin{aligned} & 10^{\circ} \mathrm{C} \text { to } 35^{\circ} \mathrm{C} \\ & 10 \% \text { to } 80 \% \end{aligned}$ |
|  | Storage Temperature Storage Humidity | $\begin{array}{\|l\|} \hline-20^{\circ} \mathrm{C} \text { to } 60^{\circ} \mathrm{C} \\ 5 \% \text { to } 90 \% \text { non-Condensing } \end{array}$ |
| 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.

## Preset Modes (Resolution)

| Display Modes (Resolution) | Horizontal Frequency(kHz) | Vertical Frequency(Hz) | Limitation |
| :--- | :--- | :--- | :--- |
| $720 \times 400$ | 31.468 | 70.08 | $*$ |
| $640 \times 480$ | 31.469 | 59.94 |  |
| $640 \times 480$ | 37.500 | 75 | $*$ |
| $800 \times 600$ | 37.879 | 60.317 | $*$ |
| $800 \times 600$ | 46.875 | 75 | $*$ |
| $1024 \times 768$ | 48.363 | 60 | $*$ |
| $1024 \times 768$ | 60.023 | 75.029 | $*$ |
| $1152 \times 864$ | 67.500 | 75 | $*$ |
| $1280 \times 1024$ | 63.981 | 60.02 | * |
| $1280 \times 1024$ | 79.976 | 75.035 | Recommend Mode |
| $1680 \times 1050$ | 65.290 | 59.954 |  |
| $1920 \times 1080$ | 67.500 | 60 |  |

* HDMI PC mode not supported


## HDMI 3D TIMING

| 3D Format | Resolution | Refresh Rate | Limitation |
| :--- | :--- | :--- | :--- |
| Frame Packing | 1080 p | 24 Hz |  |
| Frame Packing | 720 p | $50 / 60 \mathrm{~Hz}$ |  |
| Side-by-Side(Half) | 1080 p | $50 / 60 \mathrm{~Hz}$ |  |
| Side-by-Side(Half) | 1080 i | $50 / 60 \mathrm{~Hz}$ |  |
| Side-by-Side(Half) | 720 p | $50 / 60 \mathrm{~Hz}$ |  |
| Top-and-Bottom | 1080 p | $50 / 60 \mathrm{~Hz}$ |  |
| Top-and-Bottom | 1080 p | 24 Hz |  |
| Top-and-Bottom | 720 p | $50 / 60 \mathrm{~Hz}$ |  |

## HDMI VIDEO TIMING

| Display Modes (Resolution) | Horizontal Frequency(kHz) | Vertical Frequency(Hz) |
| :--- | :--- | :--- |
| 576 p | 31.25 | 50 |
| 720 p | 37.5 | 50 |
| 720 p | 45 | 60 |
| 1080 i | 28.12 | 50 |
| 1080 i | 33.75 | 60 |
| 1080 p | 56.25 | 50 |
| 1080 p | 67.5 | 60 |

## Indicator

| Mode | LED Color |
| :--- | :--- |
| On Mode | Red |
| Sleep Mode | Blinking Red |
| Off Mode | Off |

## SAFETY PRECAUTIONS

## Precautions to take when viewing 3D images

If you view 3D images from too close a distance, your eyesight may deteriorate.

If you view images in 3D for a long period of time, you may feel dizzy or experience blurred vision.

If you are pregnant, elderly, have heart problems, experience severe nausea or if you are under the influence of alcohol, we recommend that you do not view 3D images. This is because the 3D images can cause disorientation and confusion.

Put fragile or breakable objects away when viewing 3D images. Such objects may break, or cause personal injuries when you are startled by the realistic 3D images.

Parents should prevent children who are 5 years or younger from watching 3D images because viewing 3D images can be harmful to vision development.

Warning about photosensitivity seizures
Some users may have a seizure or other abnormal reactions when they are exposed to a flashing light or a particular pattern in a video game or film. If anyone in your family has a history of epilepsy or has ever experienced any kind of seizure, please consult your doctor before viewing 3D images. If you exhibit any of the symptoms listed below when viewing 3D images, stop viewing immediately and have a break.

- Dizziness, blurred vision or facial tics, involuntary movements, twitching, blackouts, confusion and disorientation. Please consult your doctor if such symptoms persist.

To prevent a photosensitivity seizure, please take the following precautions.

- Have a 5- to 15-minute break every hour.
- If your left and right eye sight is significantly different, correct the sight difference first.
- You should be able to see all of the screen at eye level.
- If you experience headaches, fatigue or dizziness, stop viewing and have a rest.
- Do not view 3D images when you are tired or ill.


## Precautions to take when viewing 3D images

Parents/guardians should monitor children's viewing of 3D images because they may not be accustomed to the 3D viewing experience and lack knowledge on how to handle potential risks.

## When using 3D Glasses

- Do not use the 3D glasses as regular glasses, sunglasses, or goggles. This may cause your vision to get worse.
- Do not keep the 3D glasses in an extremely hot or cold place. This may cause damage to the shape. Do not use the 3D glasses if they are damaged because this may cause your vision to get worse or dizziness.
- The lenses of the 3D glasses (polarizing film) are easily scratched. Use a soft and clean cloth when cleaning it. Do not use any chemicals.


## PROPER POSTURE

## Proper posture for using the Monitor set.



## D237IPS

| Mode | Size | Monitor 3D viewing range (L) | Optimal viewing angle (D) |
| :---: | :---: | :---: | :---: |
| When viewing 3D images | 58.42 cm | 50 cm to 150 cm | $12^{\circ}$ |

## D2770P

| Mode | Size | Monitor 3D viewing range (L) | Optimal viewing angle (D) |
| :---: | :---: | :---: | :---: |
| When viewing 3D images | 68.6 cm | 50 cm to 150 cm | $14^{\circ}$ |

## Precautions to take when viewing 3D images

- Wear the 3D glasses provided with the Monitor set.
- Watch your posture.
- Remain at the optimal distance and angle when viewing 3D images.
(Viewing 3D images too closely may cause your vision to worsen, or you may experience dizziness.)


## LICENSES

Supported licenses may differ by model. For more information of the licenses, visit www.lg.com.

HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.

## 다 LG

## Life's Good

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
SERIAL
$\qquad$

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.

