

# owner's manual LCD MONITOR

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

LCD MONITOR MODEL IPS231P IPS231B

#### Please read these safety precautions carefully before using the product.

**Warning** Failure to follow those warnings may result in death, serious injury or damage to the product or other property.



#### / Warning

- Use only the power cord supplied with the unit or another manufacturer authorized cord.
   Failure to do so may result in fire or electrical shock or damage to the product.
- Use only a properly grounded plug and receptacle.
   If you do not you may be electrocuted or injured. Or the product might be damaged.
- Do not use a damaged or loose plug.
  - This may cause electrical shock or fire.
- Operate the display only from a power source(i.e. voltage) indicated in the product specification.
   Otherwise the product can be damaged, fire can occur or you may be electrocuted. If you are not sure what type of power supply you have, consult a certified electrician.
- In the presence of thunder and lightning, never touch the power cord and signal cable because it can be very dangerous.
  - It can cause electric shock.
- Do not connect several extension cords, electrical appliances or electrical heaters to a single outlet.
   Use a power bar with a grounding terminal designed for exclusive use with the computer.
   A fire can break out due to overheating.
- Do not touch the power plug with wet hands. Additionally, if the cord pin is wet or covered with dust, dry the power plug completely or wipe dust off before plugging in the cord. - You may be electrocuted due to excess moisture.
- If you don't intend to use the product for a long time, unplug the power cable from the product. - Covering dust can cause a fire, or insulation deterioration can cause electric leakage, electric shock or fire.
- Insert the power plug firm so it cannot come loose.
   A loose connect can cause fire.
- Hold the plug when pulling out the power cable. Do not pull the plug out by the wire. Do not bend the power cord with excessive force or put heavy objects on the power cord.
   The power line can be damaged, which may cause electric shock or fire.
- Do not insert conductive material (ea. metal chopstick) into the product opening into one end of the power cable while the other end is plugged in. Additionally, do not touch the power cable right after plugging into the wall input terminal.
  - You may be electrocuted.
- The power supply cord is used as the main disconnection device. Ensure that the socket-outlet shall be installed near the equipment and shall be easily accessible.
- Do not unplug the power cord while the product is in use.
   Electrical shock can damage the product.
- As long as this unit is connected to the AC wall outlet, it is not disconnected from the AC power source even if the unit is turned off.

# Precautions in installing the Product

#### 🔨 Warning

- Keep away from heat sources like electrical heaters, curdles or other open flames.
   Electrical shock, fire, malfunction or deformation may occur.
- Keep the packing anti-moisture material or vinyl packing out of the reach of children.
   Anti-moisture material is harmful if swallowed. If swallowed by mistake, force the patient to vomit and visit the nearest hospital. Additionally, vinyl packing can cause suffocation. Keep it out of the reach of children.
- Do not put heavy objects on the product on sit upon it.
   If the product collapses or is dropped, you may be injured. Children must pay particular attention.
- Do not leave the power or signal cable when someone can trip over it.
   The passerby can falter, which can cause electrical shock, fire, product breakdown or injury.
- Install the product in a neat and dry place. Do not use near water.
   Dust or moisture can cause electrical shock, fire or product damage.
- Do not add accessory that have not been designed for this display.
- If you smell smoke or other odors or hear a strange sound from the product unplug the power cord and contact the service center.

- If you continue to use without taking proper measures, electrical shock or fire can occur.

- If you dropped the product or the case is broken, turn off the product and unplug the power cord.
   If you continue to use without taking proper measures, electrical shock or fire can occur. Contact the service center.
- Do not drop an object on or apply impact to the product. Do not throw any toys or objects at the product. - It can cause injury to humans, problems to the product and damage the display.
- Keep out of reach of children and do not place toys near the product.
- Make sure the product ventilation hole is not blocked. Install the product more than 10cm from the wall. - If you install the product too close to the wall, it may be deformed or fire can break out due to internal heat build-up.
- Do not cover the product with cloth or other material (eg. plastic) while plugged in.
   The product can be deformed or fire can break out due to internal overheating inside the product.
- Place the product on a flat and stable surface that is large enough to support the product.
   If the product is dropped, you may be injured or the product may be broken.
- Install the product where no Electromagnetic Interference occurs.
- Keep the product away from direct sunlight.
  - The product can be damaged.
- Do not place the product on the floor.
   Small Children and others may trip over it.

## Precautions in Moving the Product

#### 🚹 Warning

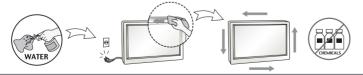
- Make sure to turn off the product.
  - You may be electrocuted or the product can be damaged.
- Make sure to remove all cables before moving the product.
  - You may be electrocuted or the product can be damaged.
- When lifting or moving the product, do not hold it upside down while holding only the stand. - This may cause the product to fall resulting in damage or injury.
- Do not shock the product when moving it.
  - You may be electrocuted or the product can be damaged.
    - 2

- Make sure the panel faces forward and hold it with both hands to move.
  - If you drop the product, the damaged product can cause electric shock or fire. Contact an authorized the service center for repair.
- Do not place the product face down.
- This may damage the TFT-LCD screen.

## Precautions in Using/Cleaning the Product

### \land Warning

- Do not attempt to disassemble, repair or modify the product yourself.
  - Fire or electric shock can occur.
  - Contact the service center for repair.
- When cleaning the product, unplug the power cord and scrub gently with a soft cloth to prevent scratching. Do not clean with a wet cloth. Or spray water or other liquids directly onto the product. An electric shock may occur. (Do not use chemicals such as benzene, paint thinners or alcohol)
- Keep the product away from water.
  - Fire or electric shock accident can occur.
- Avoid high temperatures and humidity.
- Do not put or store flammable substances near the product.
   There is a danger of explosion or fire.
- Keep the product clean at all times.
- Take a comfortable and natural position when working with a product to relax the muscles.
- Take a regular break when working with a product for a long time.
- Do not press on the panel with a hand or sharp object such as nail, pencil or pen, or make a scratch on it.
- Keep proper distance from the product and rest from time-to-time.
   Your vision may be impaired if you look at the product too closely or fpr too long.
- Set the appropriate resolution by referring to the User's Guide.
  Your vision can be impaired.
- Keep small accessories out of the reach of children.
- Leaving a fixed image on the screen for a long time may cause damage to the screen and cause image burn-in. Make sure to use a screen saver on the product. Burn-in and related problems are not covered by the warranty on this product.
- Spray water onto a soft cloth 2 to 4 times, and use it to clean the front frame; wipe in one direction only. Too much moisture may cause staining.



## 💿 On Disposal

- The fluorescent lamp used in this product contains a small amount of mercury.
- Do not dispose of this product with general household waste.
- Disposal of this product must be carried out in accordance to the regulations of your local authority.

#### NOTE

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

#### NOTE

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna.

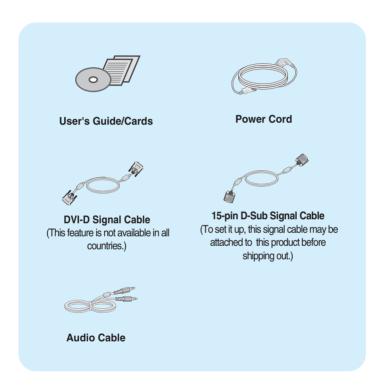
- -Increase the separation between the equipment and the receiver.
- -Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- -Consult the dealer or an experienced radio/TV technician for help.

#### NOTE

For displays with glossy bezels the user should consider the placement of the display as the bezel may cause disturbing reflections from surrounding light and bright surfaces.

# **!!!** Thank for selecting LGE products **!!!**

 Please make sure the following items are included with your monitor. If any items are missing, contact your dealer.



#### NOTE

- This accessories may look different from those shown here.
- User must use shielded signal interface cables (D-sub 15 pin cable, DVI-D cable) with ferrite cores to maintain standard compliance for the product.

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

## Connecting the stand base or Removing the stand base

**1.** Place the monitor with its front facing downward on a cushion or soft cloth.



**2.** Assemble the Stand Base into the Stand Body.

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



#### **Stop Pin**

**Stand Base** 

#### WARNING

- The tape and locking pin may only be removed from those monitors equipped with a standing base when the base is pulled up. Otherwise, you may be injured by the protruding sections of the stand.
- Product Handling with Care : When you lift up or move the product, Do Not hold or touch the front part of LCD panel. It will damage the panel. (Please hold the Stand Body or plastic cover of the product.)

**3.** Use a coin on the back of the stand base and turn the screw clockwise to tighten.



- **4.** Lift and turn the monitor to face towards the front after the connection is made to the female part of the cable you're attaching.
- **5.** When you desire to disintegrate the monitor from the stand base, use a coin to turn the screw counterclockwise.

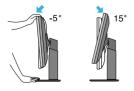
#### **IMPORTANT**

- This illustration depicts the general model of connection. Your monitor may differ from the items shown in the picture.
- Do not carry the product upside down holding only the stand base. The product may fall and get damaged or injure your foot.

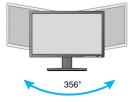
## Positioning your display

#### After installation, adjust the angle as shown below.

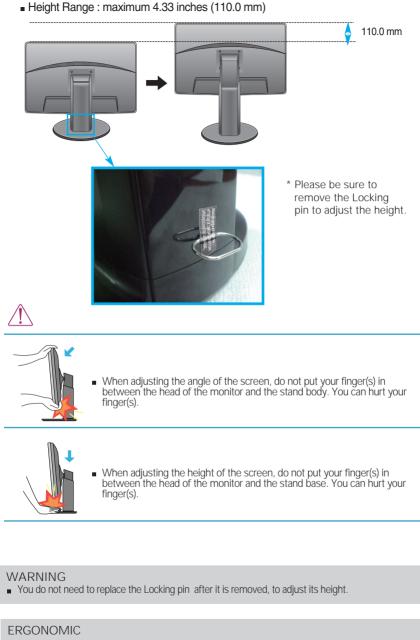
- **1.** Adjust the position of the panel in various ways for maximum comfort.
  - Tilt Range : -5° to 15°



■ Swivel Range : 356°







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

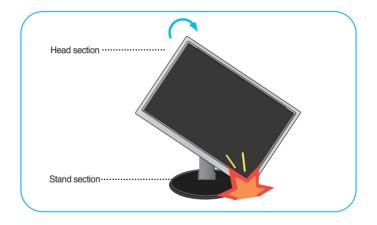
# Using the Pivot function

#### -The pivot function allows you to rotate the screen 90 degrees clockwise.

**1.** Lift the monitor to its highest height to utilize the Pivot function.

2. Landscape & Portrait : You can rotate the panel 90° clockwise.

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



**3.** Be careful with the cables when rotating the screen.



# Connecting with the PC

- **1.** Before setting up the monitor, ensure that the power to the monitor, the computer system, and other attached devices is turned off.
- 2. Connect signal input cable 1 and power cord 2 in order, then tighten the screw of the signal cable.

Connect Audio Cable

- Connect DVI-D(Digital signal) Cable
- B Connect D-sub(Analog signal) Cable

#### NOTE

- This is a simplified representation of the rear view.
- This rear view represents a general model; your display may differ from the view as shown.

When using a D-Sub signal input cable connector for Macintosh MAC 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. Varies according to model. AC-IN/ Connect the signal D-SUB DVI-D 电源输入 input cable and tighten **A** it up by turning in the D direction of the arrow Wall-outlet type as shown in the figure. DVI-D (This feature is not available in all countries.) PC PC PC dilline.

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



#### NOTE

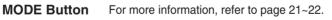
**Self Image Setting Function**? This function provides the user with optimal display settings. When the user connects the monitor for the first time, this function automatically adjusts the display to optimal settings for individual input signals.

**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.

## **Front Panel Controls**

| MONIT | OR SE | TUP  |       |      |  |  |
|-------|-------|------|-------|------|--|--|
|       | MODE  |      |       |      |  |  |
| MENU  | MODE  | AUTO | INPUT | EXIT |  |  |
|       |       | •    | •     |      |  |  |

| MENU Button  | OSD LOCKED/UNLOCKED   |
|--------------|---|
| OSD LOCKED   | This function allows you to lock the current control settings, so that they cannot be inadvertently changed. Press and hold the <b>MENU button</b> for several seconds. The message <b>"OSD LOCKED</b> " should appear. |
| OSD UNLOCKED | You can unlock the OSD controls at any time by pushing the <b>MENU button</b> for several seconds. The message <b>"OSD UNLOCKED"</b> should appear.   |







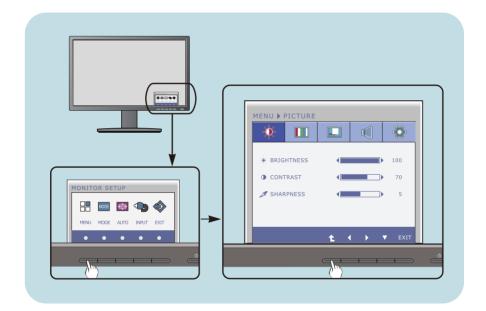
| 3 | AUTO Button                      | AUTO IMAGE ADJUSTMENT<br>When adjusting your display settings, always press<br>the AUTO button before entering the On Screen<br>Display(OSD). (Only Analog Mode)<br>This will automatically adjust your display image to<br>the ideal settings for the current screen resolution<br>size (display mode).<br>The best display mode is<br>IPS231P/IPS231B : 1920 x 1080 |
|---|----------------------------------|---|
| 4 | INPUT Button<br>(SOURCE Hot key) | When two input signals are connected, you can select the input signal (D-SUB/DVI) you want. When only one signal is connected, it is automatically detected. The default setting is D-Sub.  |
| 5 | EXIT Button                      | Exit the OSD(On Screen Display).  |
| 6 | Power Button                     | Use this button to turn the display on or off.  |
| 7 | Power Indicator                  | The power indicator stays blue if the display is running<br>properly (On Mode). If the display is in Sleep Mode<br>(Power Saving), the power indicator is blinking blue.  |

## **Screen Adjustment**

Making adjustments to the image size, position and operating parameters of the display is quick and easy with the On Screen Display Control system.

A short example is given below to familiarize you with the use of the controls. The following section is an outline of the available adjustments and selections you can make using the OSD.

To make adjustments in the On Screen Display, follow these steps:



- 1 Press the discretionary **Button**, then the main menu of the OSD appears.
- 7 To access a control, use the corresponding **Buttons**.
- 3 Use the **I buttons** to adjust the image to the desired level.
  - Use the **t** Button to select other sub-menu items.
- 4 Press the **EXIT Button** to exit from the OSD.

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

DSUB : D-SUB(Analog signal) input DVI-D : DVI-D(Digital signal) input

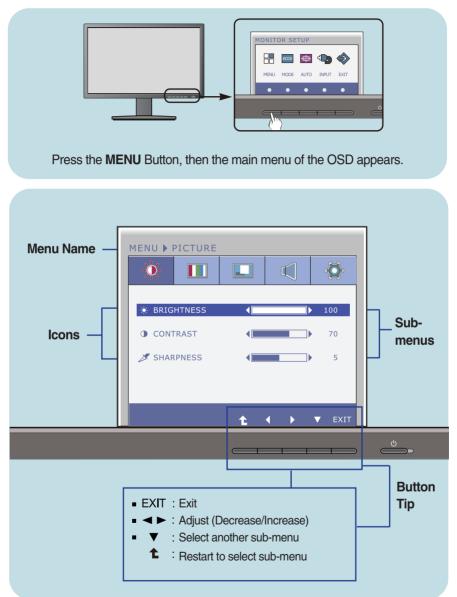
| Main menu | Sub-menu   | Supported signa                        | als Description  |
|-----------|--|--|--|
| PICTURE   | BRIGHTNESS<br>CONTRAST<br>SHARPNESS  | DSUB<br>DVI-D                          | Standard image settings.   |
| COLOR     | COLOR TEMP (PRESET) (USER) WARM MEDIUM COOL (RED/GREEN/ BLUE/CYAN/ MAGENTA/ YELLOW) HUE SATURATION RED GREEN BLUE GAMMA COLOR REST |  | Color temperature adjustments.   |
| DISPLAY   | HORIZONTAL<br>VERTICAL<br>CLOCK<br>PHASE   | DSUB<br>DSUB                           | To adjust the position of the screen<br>To improve the clarity and stability of the screen |
| VOLUME    |  | DSUB<br>DVI-D                          | To adjust the volume   |
| OTHERS    | LANGUAGE<br>POWER INDICATOR<br>WHITE BALANCE<br>SUPER ENERGY SAVING<br>ORIGINAL RATIO<br>FACTORY RESET                             | DSUB<br>DVI-D<br>DSUB<br>DSUB<br>DVI-D | To customize the screen status<br>for a user's operating<br>environment                    |

| Main menu | Sub-menu | Supported inp | out Description  |
|-----------|----------|---------------|--|
| MODE      | USER     | DSUB<br>DVI-D | It is a mode that the user can<br>adjust each element. It can adjust<br>the color mode of the Main Menu. |
|           | MOVIE    |               | It is a mode that the screen is<br>adjusted to the best to view the<br>videos.                           |
|           | TEXT     |               | It is a mode that the screen is<br>adjusted to the best for the text<br>works.                           |
|           | РНОТО    |               | It is a mode that the screen is<br>adjusted to the best to view<br>pictures.                             |
|           | sRGB     |               | It is a mode that the screen is adjusted to the standard sRGB.   |

#### NOTE

The order of icons may differ depending on the model (14~22).

■ ■ You were introduced to the procedure of selecting and adjusting an item using the OSD system. Listed below are the icons, icon names, and icon descriptions of the all items shown on the Menu.



#### NOTE

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

| Main menu   | Sub menu   | Description                             |
|---|------------|---|
|   |            |   |
| MENU > PICTURE  | BRIGHTNESS | To adjust the brightness of the screen. |
| * BRIGHTNESS  | CONTRAST   | To adjust the contrast of the screen.   |
| CONTRAST     CONTRAST     SHARPNESS     SHARPNES     SHARPPE     SHARPPE | SHARPNESS  | To adjust the clearness of the screen.  |
| ◆ ◆ ▶ ▼ EXIT  |            |   |

- EXIT : Exit
- Decrease
- ► : Increase
- ▼ : Select another sub-menu
- 1 : Restart to select sub-menu

| Main menu   | Sub menu   | Description  |
|---|------------|--|
| COLOR<br>PRESET Mode  | COLOR TEMP | Select either PRESET or USER to adjust the screen color.   |
| COLOR TEMP     PRESET       PRESET     WARM       SIX COLOR     50       GREN     50       BLUE     50       COLOR RESET     NO       COLOR RESET     NO | PRESET     | <ul> <li>Select the preset color temperature.</li> <li>WARM: Set the screen to warm colo<br/>temperature .</li> <li>MEDIUM: Set the screen to medium<br/>color temperature.</li> <li>COOL: Set the screen to cool color<br/>temperature.</li> </ul>  |
| MENU > COLOR  | USER       | SIX COLOR<br>Sets and stores the hue and saturation<br>for six colors(RED/GREEN/BLUE/CYA<br>N/MAGENTA/YELLOW) to satisfy the<br>color requirements of a user.<br>HUE<br>Adjusts the screen hue.<br>SATURATION<br>Adjusts the color sharpness on the<br>screen. Lower values make the color<br>sharpness weaker and colors lighter<br>while higher values make the color<br>sharpness stronger and colors darker. |
| BLUE SO<br>7 GAMMA GAMMA 2,2 ><br>C COLOR RESET NO<br>C EXIT<br>SIX COLOR   |            | RED<br>Set your own red color levels.<br>GREEN<br>Set your own green color levels.<br>BLUE<br>Set your own blue color levels.  |
| RED     HUE     SATURATION     STURATION     STURATION     STURATION     EXIT   | GAMMA      | Set your own gamma value. :<br>1.8/2.0/2.2/2.4/2.6<br>On the monitor, high gamma values<br>display whitish images and low gamm<br>values display blackish images.  |
| <ul> <li>EXIT : Exit</li> <li>I : Decrease</li> <li>Increase</li> <li>Select another sub-ment</li> <li>Restart to select sub-ment</li> </ul>  |            | Resets the color settings to the factory default settings for the current input device.  |

| Main menu  | Sub menu   | Description  |
|--|------------|--|
| DISPLAY  |            |  |
| MENU I DISPLAY   | HORIZONTAL | To move image left and right.  |
| ▲D HORIZONTAL         ▲         >         50           ▲ VERTICAL         ▲         >         50           第 DECK         ▲         >         50 | VERTICAL   | To move image up and down.   |
| PHASE  | CLOCK      | To minimize any vertical bars or<br>stripes visible on the screen<br>background.<br>The horizontal screen size will also<br>change.            |
| EXIT : Exit  |            | Ū.   |
| <ul> <li>■ : Decrease</li> <li>■ : Increase</li> <li>■ : Select another sub-mer</li> <li>■ : Restart to select sub-mer</li> </ul>                |            | To adjust the focus of the display.<br>This item allows you to remove any<br>horizontal noise and clear or sharpen<br>the image of characters. |

VOLUME To adjust the volume of headphone/Speaker.

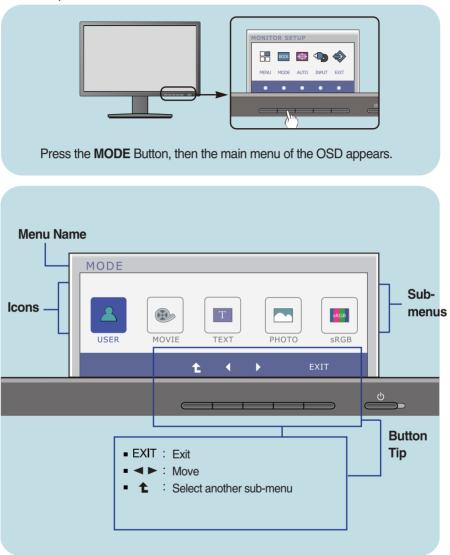
- EXIT : Exit
- I decrease
- Increase
- Mute : Mute
- Restart to select sub-menu

| Main menu S  | Sub menu                  | Description   |
|--|---------------------------|---|
| OTHERS   | LANGUAGE                  | To choose the language in which the control names are displayed.  |
| MENU > OTHERS  | POWER<br>INDICATOR        | Use this function to set the power<br>indicator on the front side of the monitor<br>to <b>ON</b> or <b>OFF</b> .<br>If you set <b>OFF</b> , it will go off.<br>If you set <b>ON</b> at any time, the power<br>indicator will automatically be turned on.  |
| <ul> <li>CRIGINAL RATIO</li> <li>WIDE</li> <li>FACTORY RESET</li> <li>NO</li> <li>EXIT : Exit</li> <li>EXIT : Exit</li> <li>EXIT : Exit</li> <li>Exit</li>     &lt;</ul> | WHITE<br>BALANCE          | If the output of the video card is different<br>the required specifications, the color level<br>may deteriorate due to video signal<br>distortion. Using this function, the signal<br>level is adjusted to fit into the standard<br>output level of the video card in order to<br>provide the optimal image.<br>Activate this function when white and blac<br>colors are present in the screen. |
|  | SUPER<br>ENERGY<br>SAVING | When SUPER ENERGY SAVING<br>function is ON , power can be saved<br>about 25%.<br>LG accumulate those values using<br>integrated function with 10 minutes<br>broadcast video signal.   |
|  | original<br>Ratio         | Sets the screen size.<br>- WIDE: Fits the screen to the panel size.<br>- ORIGINAL: Adjusts the aspect ratio<br>automatically depending on input image<br>signal.  |
|  |                           | WIDE ORIGINAL   |
|  |                           | * ORIGINAL RATIO is disabled when<br>the input signal has the recommended<br>resolution of 1920 x 1080.   |
|  | FACTORY<br>RESET          | Restore all factory default settings except<br><b>"LANGUAGE."</b><br>Press the ◀, ▶ buttons to reset<br>immediately.  |

#### NOTE

If this does not improve the screen image, restore the factory default settings. If necessary, execute the WHITE BALANCE function again. This function will be enabled only when the input signal is an analog signal.

■ ■ You were introduced to the procedure of selecting and adjusting an item using the OSD system. Listed below are the icons, icon names, and icon descriptions of the all items shown on the Menu.



#### NOTE

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



| Main menu   | Sub menu | Description  |
|---|----------|--|
| MODE<br>MODE<br>USER (MOVIE)<br>TEXT (PHOTO)<br>SIGB<br>C C C C C C         | USER     | It is a mode that the user can adjust<br>each element. It can adjust the color<br>mode of the Main Menu. |
| MODE<br>USER TEXT PHOTO SIRGB<br>t t EXT                                    | MOVIE    | It is a mode that the screen is adjusted to the best to view the videos.                                 |
| MODE<br>USER NOVIE TEXT PHOTO SRGB<br>C C C C C C C C C C C C C C C C C C C | ТЕХТ     | It is a mode that the screen is adjusted to the best for the text works.                                 |
| MODE<br>USER MOVIE TEXT PHOTO SIGG<br>t t EXT                               | рното    | It is a mode that the screen is adjusted to the best to view pictures.                                   |
| MODE<br>USER WOVE TEXT PHOTO SRGB   | sRGB     | It is a mode that the screen is adjusted to the standard sRGB.   |
| ■ EXIT : Exit<br>■ ◀ , ▶ : Move<br>■ ▲ : Select another sub-me              | enu      |  |

Select another sub-menu

Check the following before calling for service.

| No image appears  |  |  |  |
|---|--|--|--|
| Is the power cord of the<br>display connected?                    | <ul> <li>Check and see if the power cord is connected<br/>properly to the power outlet.</li> </ul>   |  |  |
| Is the power indicator<br>light on?                               | Press the Power button.  |  |  |
| Is the power indicator<br>flickering?                             | <ul> <li>If the display is in power saving mode, try moving<br/>the mouse or pressing any key on the keyboard to<br/>bring up the screen.</li> <li>Try to turn on the PC.</li> </ul>                               |  |  |
| Do you see an "OUT OF<br>RANGE" message on<br>the screen?         | • This message appears when the signal from the PC (video card) is out of horizontal or vertical frequency range of the display. See the 'Specifications' section of this manual and configure your display again. |  |  |
| Do you see a "CHECK<br>SIGNAL CABLE"<br>message on the<br>screen? | <ul> <li>This message appears when the signal cable<br/>between your PC and your display is not<br/>connected. Check the signal cable and try again.</li> </ul>  |  |  |

| Do you see a "OSD LOCKED" message on the screen?         |  |  |  |
|--|--|--|--|
| Do you see "OSD<br>LOCKED" when you<br>push MENU button? | <ul> <li>You can secure the current control settings,<br/>so that they cannot be inadvertently changed.<br/>You can unlock the OSD controls at any time<br/>by pushing the <b>MENU</b> button for several<br/>seconds: the message</li> <li>"OSD UNLOCKED" will appear.</li> </ul> |  |  |

| Display image is incorrect   |  |  |
|--|--|--|
| <ul> <li>Display Position is<br/>incorrect.</li> </ul>   | <ul> <li>Press the AUTO button to automatically adjust<br/>your display image to the ideal setting.</li> <li>If the results are unsatisfactory, adjust the image<br/>position using the H position and V position icon<br/>in the on screen display.</li> </ul>  |  |
| <ul> <li>On the screen<br/>background, vertical<br/>bars or stripes are<br/>visible.</li> </ul>                          | <ul> <li>Press the AUTO button to automatically adjust<br/>your display image to the ideal setting.</li> <li>If the results are unsatisfactory, decrease the<br/>vertical bars or stripes using the CLOCK icon in<br/>the on screen display.</li> </ul>  |  |
| <ul> <li>Any horizontal noise<br/>appearing in any<br/>image or characters<br/>are not clearly<br/>portrayed.</li> </ul> | <ul> <li>Press the AUTO button to automatically adjust your display image to the ideal setting. If the results are unsatisfactory, decrease the horizontal bars using the PHASE icon in the on screen display.</li> <li>Check Control Panel&gt; Display&gt; 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> |  |

#### **IMPORTANT**

- Check Control Panel --> Display --> Settings and see if the frequency or the resolution were changed. If yes, readjust the video card to the recommend resolution.
- 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                                    |   |  |
|---|---|--|
| <ul> <li>The screen color is<br/>mono or abnormal.</li> </ul> | <ul> <li>Check if the signal cable is properly connected<br/>and use a screwdriver to fasten if necessary.</li> <li>Make sure the video card is properly inserted in<br/>the slot.</li> <li>Set the color setting higher than 24 bits (true color)<br/>at <b>Control Panel - Settings</b>.</li> </ul> |  |
| The screen blinks.  | <ul> <li>Check if the screen is set to interlace mode and if<br/>yes, change it to the recommend resolution.</li> </ul>   |  |

| Do you see an "Unrecognized monitor, Plug&Play (VESA<br>DDC) monitor found" message? |  |
|--|--|
| Have you installed the<br>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 video card supports Plug&amp;Play function.</li> </ul> |

# Specifications

| Display                      | TFT (Thin Film Transistor) LCD (Liquid Crystal Display) Panel,<br>Anti-Glare coating<br>23 inch visible diagonal (58.4 cm)<br>0.265 x 0.265 mm (Pixel pitch)  |  |  |
|------------------------------|---|--|--|
| Sync Input                   | Horizontal Freq.30 kHz to 83 kHz (Automatic)Vertical Freq.56 Hz to 75 Hz (Automatic)Input FormSeparate Sync.Digital   |  |  |
| Video Input                  | Signal Input15 pin D-Sub Connector<br>DVI-D Connector (Digital)Input FormRGB Analog (0.7 Vp-p/ 75 ohm), Digital   |  |  |
| Resolution                   | Max         VESA 1920 x 1080 @ 60 Hz           Recommend         VESA 1920x 1080 @ 60 Hz  |  |  |
| Plug&Play                    | DDC 2B(Digital),DDC2AB(Anlaog)  |  |  |
| Power<br>Consumption         | On Mode         : 35 W(Typ.)           Sleep Mode         ≤ 0.3 W           Off Mode         ≤ 0.3 W  |  |  |
| Dimensions<br>& Weight       | With Stand         Without Stand           Width         54.82 cm (21.58 inch)         Width         54.82 cm (21.58 inch)           Height         36.67 cm (14.43 inch)(Min.)         Height         33.49 cm (13.18 inch)           47.67 cm (18.76 inch)(Max.)         Depth         2.244 cm (8.83 inch)         Depth         5.63 cm (2.21 inch)           Weight(excl. packing)         4.7 kg (10.51 lb)         4.7 kg (10.51 lb)         4.7 kg (10.51 lb) |  |  |
| Range                        | Tilt         -5° to 15°           Swivel         356°           Height         110 mm / 4.33 inch   |  |  |
| Power Input                  | AC 100 - 240 V~ 50 / 60 Hz 1.0 A  |  |  |
| Environment<br>al Conditions | Operating ConditionsTemperature10 °C to 35 °CHumidity10 % to 80 % non-CondensingStorage ConditionsTemperature-20 °C to 60 °CHumidity5 % to 90 % non-Condensing  |  |  |
| Stand Base                   | Attached ( ), Detached ( O )  |  |  |
| Power cord                   | Wall-outlet type  |  |  |
| NOTE                         | •   |  |  |

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Information in this document is subject to change without notice.

# Preset Modes (Resolution)

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

\*Recommend Mode

# Indicator

| MODE       | LED Color     |
|------------|---------------|
| On Mode    | Blue          |
| Sleep Mode | Blue Blinking |
| Off Mode   | Off           |

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

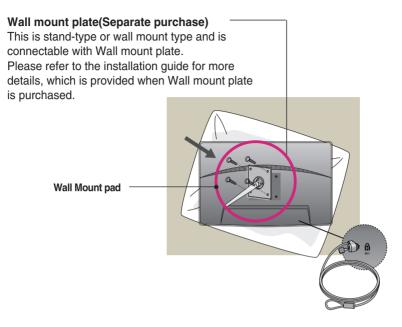


**1.** After moving the product to face downward, make sure to place it on a soft cloth or a cushion to avoid surface damage.



**2.** Separate the head and the stand with the use of a screwdriver.

**3.** Install the Wall mount plate.



<Screw Mounting Interface Dimension> Hole spacing : 75 mm x 75 mm.

#### Kensington Security Slot

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

#### NOTE

- VESA compatible only with respect to screw mounting interface dimensions and mounting screw specifications
- Please use VESA standard as below.
  - \* 784.8 mm and under (30.9 inch)
  - Wall Mount Pad Thickness: 2.6 mm
  - Screw :  $\phi$  4.0 mm x Pitch 0.7 mm x Length 10 mm
  - \* 787.4 mm and above (31.0 inch)
  - Please use VESA standard wall mount pad and screws.



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

Keep the OWNER'S MANUAL(CD) in an accessible place for furture reference.

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

MODEL

SERIAL

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.