

# **OWNER'S MANUAL**

# LG Digital Signage

(MONITOR SIGNAGE)

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

47WV50BR 47WV50MS

47WV50BS

# **TABLE OF CONTENTS**

#### 4 LICENSES

# 5 ASSEMBLING AND PREPARING

- 5 Accessories
- 6 Parts
- 7 To Install in a Portrait Layout
- 7 Remove I -brackets before Installation.
- 8 STORAGE METHOD FOR PANEL PROTECTION
- 8 Correct Method
- 8 Incorrect Method
- 9 Installing on a Wall
- 11 EXTERNAL EQUIPMENT SETUP
- 11 IR RECEIVER
- 12 Tiling Displays
- 12 How to Mount the Set
- 13 How to Join Sets

# 14 REMOTE CONTROL

16 Displaying the Device Name Connected to an Input Port

# 17 USING THE MONITOR SET

- 17 Connecting to a PC
- 17 RGB Connection
- 18 DVI Connection
- 18 HDMI Connection
- 19 Display Port Connection
- 19 IR Receiver Connection
- 20 Adjusting the Screen
- 20 Selecting an Image Mode
- 20 Customizing Image Options

- 21 Customizing PC Display Options
- 21 Adjusting the Sound
- 21 Selecting an Sound Mode
- 22 Customizing Sound Options
- 22 Using Additional Options
- 22 Adjusting Aspect Ratio
- 24 Using the Input List

#### 25 ENTERTAINMENT

- 25 Connecting to a Wired Network
- 26 Network Status
- 27 Connecting USB Storage Devices
- 28 Browsing Files
- 30 Viewing Movies
- 33 Viewing Photos
- 36 Listening to Music
- 38 Viewing the Contents List
- 39 DivX® VOD Guide
- 40 Using PIP/PBP

## 41 CUSTOMIZING SETTINGS

- 41 Accessing the Main Menus
- 42 PICTURE Settings
- 45 AUDIO Settings
- 46 TIME Settings
- 47 OPTION Settings
- 52 Picture ID
- 53 NETWORK Settings

## 54 MAKING CONNECTIONS

- 55 External Device Connection
- 55 DVI Connection
- 55 HDMI Connection
- 56 Component Connection
- 56 AV(CVBS) Connection
- 57 Connecting to the LAN
- 57 Connecting to a USB
- 58 Daisy Chain Monitors
- 58 RGB Cable

| 58 - | DVI | Cabl | е |
|------|-----|------|---|
|------|-----|------|---|

# 59 TROUBLESHOOTING

# 62 SPECIFICATIONS

# 65 IR CODES

# 66 CONTROLLING THE MULTIPLE PRODUCT

- 66 Connecting the cable
- 66 RS-232C Configurations
- 66 Communication Parameter
- 67 Command Reference List
- 69 Transmission / Receiving Protocol

# **LICENSES**

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



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



This DivX Certified<sup>®</sup> device has passed rigorous testing to ensure it plays DivX<sup>®</sup> video.

To play purchased DivX movies, first register your device at *vod.divx.com*. Find your registration code in the DivX VOD section of your device setup menu.

DivX Certified  $^{\!0}$  to play DivX  $^{\!0}$  video up to HD 1080p, including premium content.

DivX®, DivX Certified® and associated logos are trademarks of DivX, LLC and are used under license.

Covered by one or more of the following U.S. patents: 7,295,673; 7,460,668; 7,515,710; 8,656,183; 8,731,369; RE45,052.



Manufactured under license from Dolby Laboratories. Dolby and the double-D symbol are trademarks of Dolby Laboratories.

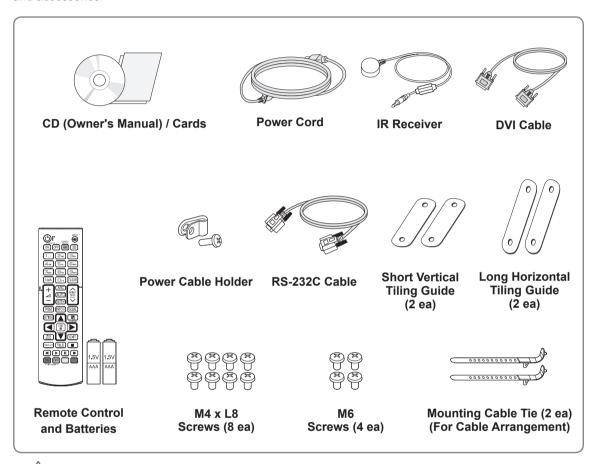


- Product damage from moving or changing the installation location is not covered by warranty.
- The warranty will not cover any damages caused by using the product in an excessively dusty environment.

# ASSEMBLING AND PREPARING

#### **Accessories**

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





#### CAUTION

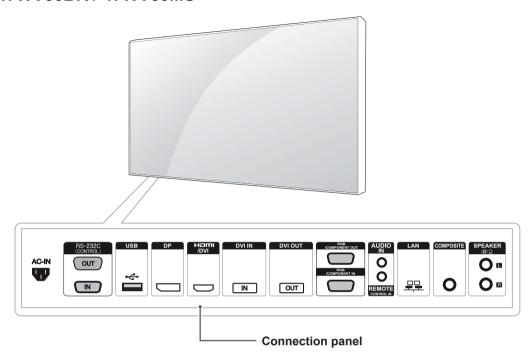
- Do not use any pirated items to ensure the safety and product life span.
- Any damages or injuries by using pirated items are not covered by the warranty.

# 0

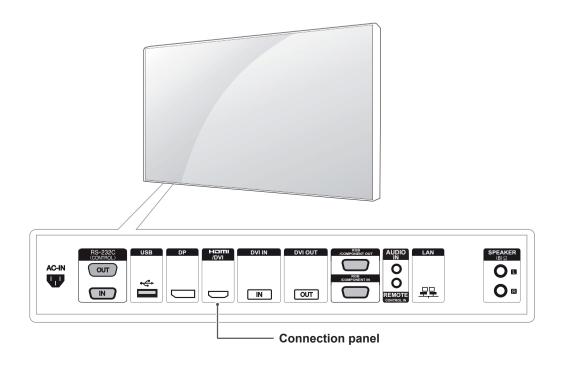
- The accessories supplied with your product may vary depending on the model.
- Product specifications or contents in this manual may be changed without prior notice due to upgrade
  of product functions.
- · SuperSign SW & Manual
  - Downloading from the LG Electronics website.
  - Visit the LG Electronics website (http://partner.lge.com) and download the latest software for your model.

# **Parts**

# < 47WV50BR / 47WV50MS >

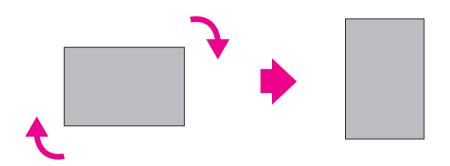


## < 47WV50BS >



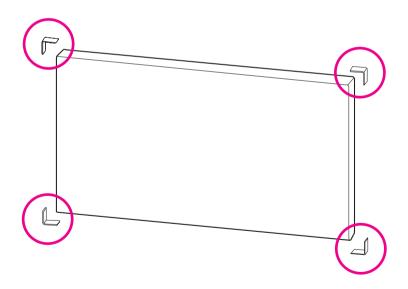
# To Install in a Portrait Layout

When installing in a Portrait Layout, rotate the monitor clockwise 90 degrees (when facing the screen).



# **Remove L-brackets before Installation**

Remove the L-brackets from each corner of the monitor before installing it.

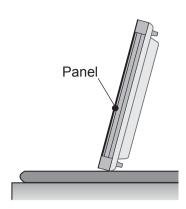




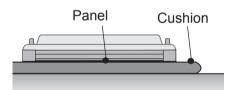
• Keep the removed L-brackets and use them when moving the monitor later.

## STORAGE METHOD FOR PANEL PROTECTION

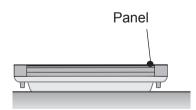
#### **Correct Method**



If the product needs to be set upright, hold both sides of the product, and tilt backward carefully for. Do not let the panel not to touch the floor.

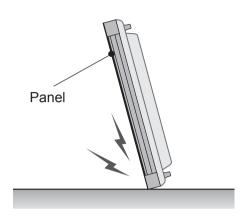


When laying down the product, lay a cushion on a flat floor. Put the product on it with the panel of the product facing down.

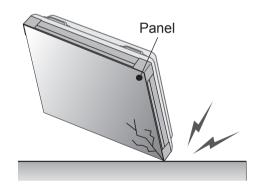


If there is not a cushion available, ensure the floor is clean and then lay the product down carefully with the panel facing either upward or downward. At this time, be careful for objects not to fall on the panel.

#### **Incorrect Method**



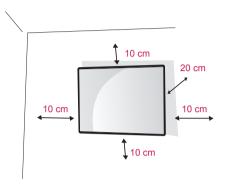
If the product is tilted onto the bezel, the bottom of the panel may be damaged.



If the product is tilted onto the edge of the panel, the panel may be damaged.

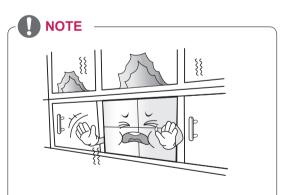
# Installing on a Wall

To install the Monitor on a wall (optional), use the VESA screws provided as accessories to fasten it.



Install the monitor at least 10 cm away from the wall and leave about 10 cm of space at each side of the monitor to ensure sufficient ventilation.

Use the wall mount plate and screws that comply with the VESA standard.



Do not install the product in a place with no ventilation (e.g., on a bookshelf or in a closet) or on a carpet or cushion. If there is no other option but to mount the product on the wall, make sure that sufficient ventilation is provided before installation.

- Failure to do so may result in a fire due to the increase in the internal temperature.

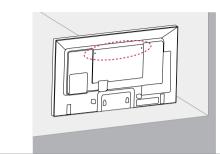
# -/<u>!</u>\

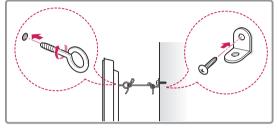
#### **CAUTION**

- 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.
- Do not over tighten the screws as this may cause damage to the monitor set and void your warranty.
- Use the 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.
- To prevent injury, this apparatus must be securely attached to the wall in accordance with the installation instructions. (This only pertains to Australia and New Zealand.)

#### Securing the product to a wall (optional)

(Depending on model)





- Insert and tighten the eye-bolts, or product brackets and bolts on the back of the product.
  - If there are bolts inserted at the eye-bolts position, remove the bolts first.
- 2 Mount the wall brackets with the bolts to the wall.
  - Match the location of the wall bracket and the eye-bolts on the rear of the product.
- 3 Connect the eye-bolts and wall brackets tightly with a sturdy rope.
  - Make sure to keep the rope horizontal with the flat surface.



#### CAUTION

 Make sure that children do not climb on or hang on the product.



#### NOTE

- Use a platform or cabinet that is strong and large enough to support the product securely.
- Brackets, bolts, and ropes are optional. You can obtain additional accessories from your local dealer.



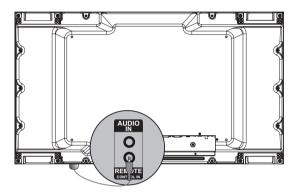
#### WARNING

- If a product is not positioned in a sufficiently stable location, it can be potentially hazardous due to falling. Many injuries, particularly to children, can be avoided by taking simple precautions such as:
  - » Using cabinets or stands recommended by the manufacturer of the product.
  - » Only using furniture that can safely support the product.
  - » Ensuring the product is not overhanging the edge of the supporting furniture.
  - » Not placing the product on tall furniture (for example, cupboards or bookcases) without anchoring both the furniture and the product to a suitable support.
  - » Not standing the product on cloth or other materials placed between the product and supporting furniture.
  - » Educating children about the dangers of climbing on furniture to reach the product or its controls.

# **EXTERNAL EQUIPMENT SETUP**

## IR RECEIVER

This allows a remote control sensor to be placed in a custom location. Then that display can control other displays via an RS-232C cable.





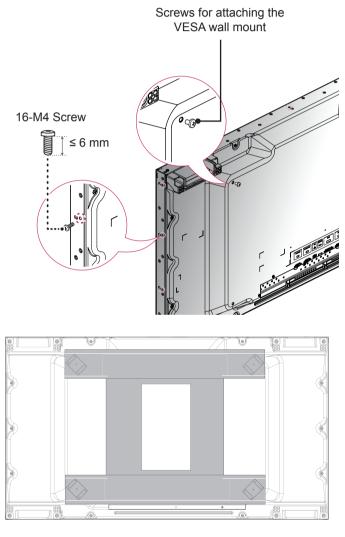
• Make sure that you unplug the power cord before connecting or removing the IR Receiver.

# **Tiling Displays**

## **How to Mount the Set**

## Example of 2 x 2 Tiling

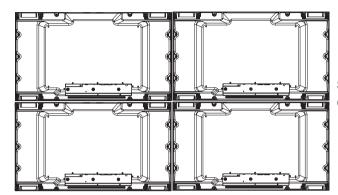
Using the screws for attaching the VESA wall mount, mount the set to the wall mount plate or the wall.



<Rear view of the set with the wall mount plate>

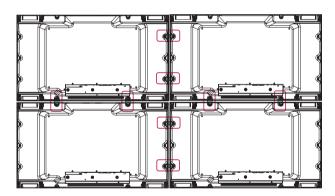
#### **How to Join Sets**

1 Join other sets using screws for fixing the VESA wall mount in the same way as above.



Set 4 joined to the rest of the sets (2 x 2 tiling)

2 After joining the sets, use the tiling guide to adjust the gap between the sets.



3 Now the 2 x 2 tiling is complete.
You can tile in various combinations, such as 3 x 3.

- The load applied to each set should be supported by the wall mount plate or the wall using a VESA wall mount (600 x 400).
- The load applied to each set should be supported by the wall mount plate using a VESA wall mount. (Each set must be firmly mounted to the wall mount plate or the wall.)
- You may mount the set without using the tiling guide; this does not affect the performance of the device.
- Loosen the screws on the set to install the tiling guides. (The screws are enclosed with the other components in the box, including the tiling guides.)

# REMOTE CONTROL

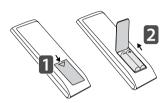
The descriptions in this manual are based on the buttons of the remote control. Please read this manual carefully and use the monitor set correctly.

To replace batteries, open the battery cover, replace batteries (1.5 V AAA) matching  $\oplus$  and  $\bigcirc$  ends to the label inside the compartment, and close the battery cover.

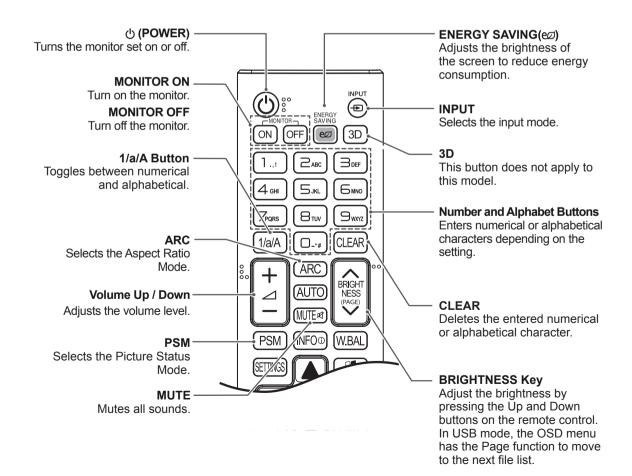
To remove the batteries, perform the installation actions in reverse.



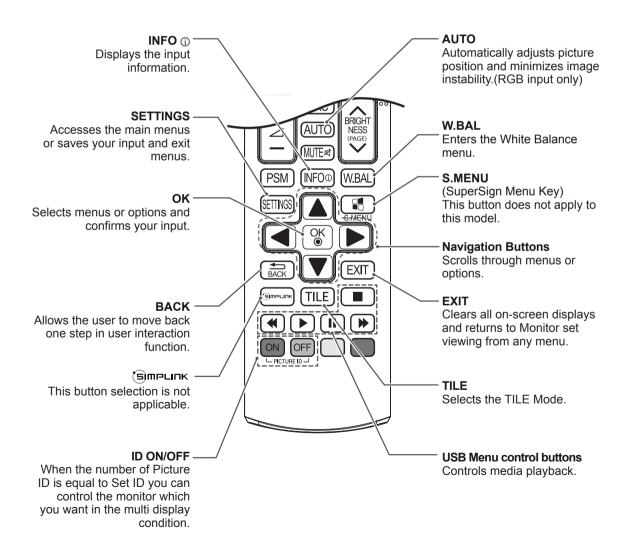
- Do not mix old and new batteries, as this may damage the remote control.
- Make sure to point the remote control to the remote control sensor on the monitor set.











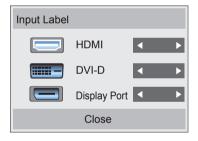
# **Displaying the Device Name Connected to an Input Port**

Display which devices are connected to which external input ports.

1 Access the Input list screen and press the blue (input label) button on the remote control.



You can assign an input label for every input except USB.



- External inputs supported: HDMI, DVI-D, Display Port
- · Labels available: PC, DTV
- The input labels are displayed on the Input Label screen or at the top left of the screen when you change the external input setting.
- For DTV/PC-compatible signals, such as 1080p 60 Hz, the screen settings may change according to the input label. The Just Scan option is available if a PC is connected as an external device.

# **USING THE MONITOR SET**

# Connecting to a PC

Your Monitor set supports the Plug & Play\* feature.

\* Plug & Play: A PC will have a built-in driver for the monitor, no extra software is needed.

#### **RGB Connection**

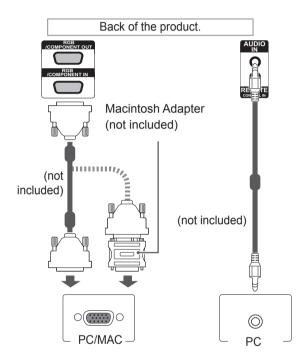
Transmits the analog video signal from your PC to the monitor set. Connect the PC and the Monitor set with the 15-pin signal cable as shown the following illustrations.

Select RGB input.



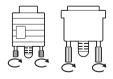
#### NOTE

- It is recommended to use the monitor set with the HDMI connection for the best image quality.
- To comply with the specifications of the product, use a shielded interface cable with ferrite core, such as a D-sub 15-pin cable and DVI/HDMI cable.
- If you turn the monitor set on when the set becomes cold, the screen may flicker. This is normal.
- Some red, green, or blue spots may appear on the screen. This is normal.





#### **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.



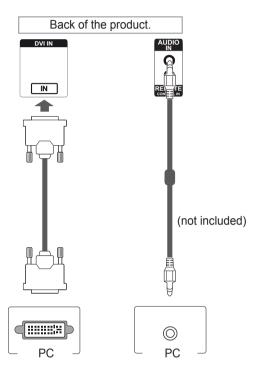


- Use the standard Macintosh adapter since an incompatible adapter is available in the market. (Different signaling system)
- Apple computers may require an adapter to connect to this monitor. Call or visit their web site for more information.

#### **DVI Connection**

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

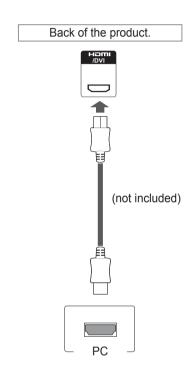
Select DVI input.



#### **HDMI Connection**

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

Select HDMI input.



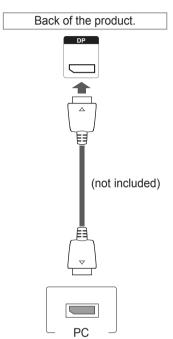


- Use a High Speed HDMI<sup>®</sup>/<sup>™</sup> Cable.
- Please check the PC environment if you cannot hear audio in HDMI mode. Some PCs require you to manually change the default audio output to HDMI.
- If you want to use HDMI-PC mode, you must set the input label to PC mode.
- When HDMI PC is used, a compatiblity problem might occur.
- 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

# **Display Port Connection**

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

Select Display Port input source.



# **IR Receiver Connection**

Allows the use of IR receiver extension.





 Sound may not be available depending on the DP version of your PC.

# **Adjusting the Screen**

## Selecting an Image Mode

Display images in its optimized settings by selecting one of the preset image modes.

- 1 Press **SETTINGS** to access the main menus.
- 2 Press the navigation buttons to scroll to PICTURE and press OK.
- 3 Press the navigation buttons to scroll to Picture Mode and press OK.
- 4 Press the navigation buttons to scroll to an image mode you want and press **OK**.

| Mode     | Description                               |
|----------|---|
| Vivid    | Adjusts the video image for the retail    |
|          | environment by enhancing the contrast,    |
|          | brightness, color, and sharpness.         |
| Standard | Adjusts the image for the normal          |
|          | environment.                              |
| Cinema   | Optimizes the video image for a cinematic |
|          | look to enjoy movies as if you are in a   |
|          | movie theater.                            |
| Sport    | Optimizes the video image for high and    |
|          | dynamic actions by emphasizing primary    |
|          | colors such as white, grass, or sky blue. |
| Game     | Optimizes the video image for a fast      |
|          | gaming screen such as PCs or games.       |

When you are finished, press EXIT.
When you return to the previous menu, press BACK.

# **Customizing Image Options**

Customize basic and advanced options of each image mode for the best screen performance.

- 1 Press **SETTINGS** to access the main menus.
- 2 Press the navigation buttons to scroll to **PICTURE** and press **OK**.
- 3 Press the navigation buttons to scroll to **Picture Mode** and press **OK**.
- 4 Press the navigation buttons to scroll to an image mode you want and press **OK**.
- 5 Select and adjust following options, and then press **OK**.

| Option        | Description  |
|---------------|--|
| Backlight     | Adjusts the brightness of the screen<br>by controlling the LCD backlight. If<br>you decrease the brightness level,<br>the screen becomes darker and the<br>power consumption will be reduced |
| Contrast      | without any video signal loss.  Increases or decreases the gradient of the video signal. You may use Contrast when the bright part of the picture is saturated.                              |
| Brightness    | Adjusts the base level of the signal in the picture. You may use Brightness when the dark part of the picture is saturated.  |
| Sharpness     | Adjusts the level of crispness in the edges between the light and dark areas of the picture. The lower the level, the softer the image.  |
| Color         | Adjusts intensity of all colors.   |
| Tint          | Adjusts the balance between red and green levels.  |
| Color Temp.   | Set to warm to enhance hotter Colors such as red, or set to cool to make picture bluish.   |
| Advanced      | Customizes the advanced options.   |
| Control       | Refer to the Advanced image options.   |
| Picture Reset | Restores the options to the default setting.   |

6 When you are finished, press EXIT.
When you return to the previous menu, press BACK.

# **Customizing PC Display Options**

Customize options of each image mode for the best image quality.

- This function works in the following mode: RGB [PC] mode.
- 1 Press SETTINGS to access the main menus.
- 2 Press the navigation buttons to scroll to PICTURE and press OK.
- 3 Press the navigation buttons to scroll to **Screen** and press **OK**.
- 4 Select and adjust following options, and then press **OK**.

| Option                  | Description   |
|-------------------------|---|
| Resolution              | Selects a proper resolution.  |
| Auto<br>Config.         | Sets to adjust the screen position, clock, and phase automatically. The displayed image may be unstable for a few seconds while the configuration is in progress. |
| Position/<br>Size/Phase | Adjusts the options when the picture is not clear, especially when characters are shaky, after the auto configuration.  |
| Reset                   | Restores the options to the default setting.  |

When you are finished, press EXIT.
When you return to the previous menu, press BACK.

# **Adjusting the Sound**

## **Selecting an Sound Mode**

Play the sound in its optimized settings by selecting one of the preset sound modes.

- 1 Press **SETTINGS** to access the main menus.
- 2 Press the navigation buttons to scroll to AUDIO and press OK.
- 3 Press the navigation buttons to scroll to Sound Mode and press OK.
- 4 Press the navigation buttons to scroll to a sound mode you want and press **OK**.

| Mode     | Description                                  |  |
|----------|--|--|
| Standard | Select when you want standard-quality sound. |  |
| Music    | Select when you listen to music.             |  |
| Cinema   | Select when you watch movies.                |  |
| Sports   | Select when you watch sports events.         |  |
| Game     | Select when you play games.                  |  |

When you are finished, press EXIT.
When you return to the previous menu, press BACK.

# **Customizing Sound Options**

Customize options of each sound mode for the best sound quality.

- 1 Press **SETTINGS** to access the main menus.
- 2 Press the navigation buttons to scroll to AUDIO and press OK.
- 3 Press the navigation buttons to scroll to Sound Mode and press OK.
- 4 Press the navigation buttons to scroll to a sound mode you want and press **OK**.
- 5 Select and adjust following options, and then press **OK**.

| Option   | Description                             |  |  |
|----------|---|--|--|
| Infinite | LG's Infinity Sound option provides 5.1 |  |  |
| Sound    | channel stereo sound quality from two   |  |  |
|          | speakers.                               |  |  |
| Treble   | Increases the intensity of the high     |  |  |
|          | frequency part of audio.                |  |  |
| Bass     | Increases the intensity of the low      |  |  |
|          | frequency part of audio.                |  |  |
| Reset    | Resets the sound mode to the default    |  |  |
|          | setting.                                |  |  |

6 When you are finished, press EXIT.
When you return to the previous menu, press BACK.

# **Using Additional Options**

## **Adjusting Aspect Ratio**

Resize the image to view the image at its optimal size by pressing **ARC** while you are watching Monitor set.



#### **CAUTION**

- If a fixed image displays on the screen for a long period of time, it could be imprinted and become a permanent disfigurement on the screen. This is image burn or burn-in and not covered by the warranty.
- If the aspect ratio is set to 4:3 for a long period of time, image burn may occur on the letterboxed area of the screen.



- You can also change the image size by accessing the main menus.
- 47WV50BS is not supporting composite(AV) signal & input.

| MODE           | AV | Component | RGB | Display<br>Port |    | DVI-D |    | HDMI |    |
|----------------|----|-----------|-----|-----------------|----|-------|----|------|----|
| ARC            |    |           | PC  | DTV             | РС | DTV   | РС | DTV  | РС |
| 16:9           | 0  | 0         | 0   | 0               | 0  | 0     | 0  | 0    | 0  |
| Just Scan      | х  | 0         | х   | О               | х  | 0     | х  | 0    | х  |
| 1:1            | х  | х         | 0   | х               | О  | х     | 0  | х    | 0  |
| 4:3            | 0  | 0         | 0   | О               | О  | 0     | 0  | 0    | 0  |
| Zoom           | 0  | 0         | х   | О               | х  | 0     | х  | 0    | х  |
| Cinema<br>Zoom | 0  | 0         | х   | 0               | х  | 0     | х  | 0    | х  |

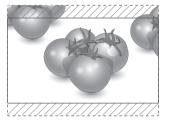
- 16:9: This selection will allow you to adjust the picture horizontally, in linear proportion, to fill the entire screen(useful for viewing 4:3 formatted DVDs).
- 4:3: This selection will allow you to view a
  picture with an original 4:3 aspect ratio, black
  bars will appear on both the left and right of the
  screen.



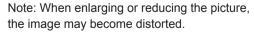


- Just Scan: This Selection will allow you view the picture of best quality without loss of original picture in high resolution image. Note: If there is noise in original Picture, You can see the noise at the edge.
- Zoom: This selection will allow you to view the picture without any alteration, while filling the entire screen. However, the top and bottom of the picture will be cropped.





- 1:1: The aspect ratio is not adjusted from the original. (Only Display Port PC, HDMI PC, DVI-D PC, RGB PC)
- Cinema Zoom: Choose Cinema Zoom when you want to enlarge the picture in correct proportion.







# **Using the Input List**

## Selecting an Input Source

- 1 Press INPUT to access the input source list.
- 2 Press the navigation buttons to scroll to one of the input sources and press **OK**.

| Input source | Description   |
|--------------|---|
| AV           | Watch video from a VCR or other external devices.   |
| Component    | Watch the content from a DVD or other external devices, or through a digital set-top box. |
| RGB          | View a PC display on the screen.  |
| DVI-D        | View a PC display on the screen.  |
| HDMI         | Watch contents from a PC, DVD of Digital set-top box other high definition devices.       |
| Display Port | Watch contents in a PC, DVD of Digital set-top box other high definition devices.         |
| USB          | Plays the multimedia file saved in the USB.   |



 47WV50BS is not supporting composite(AV) signal & input.

# **ENTERTAINMENT**

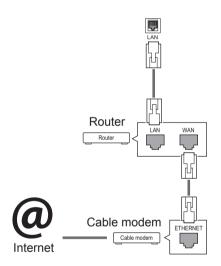
# **Connecting to a Wired Network**

Connect the display to a local area network (LAN) via the LAN port as shown on the following illustration and set up the network settings.

Only supports wired network connection.

After making a physical connection, a small number of networks may require the display network settings to be adjusted. For most networks, the display will connect to automatically without any adjustments.

For detail information, contact your internet provider or router manual.



To set up the network settings: (Even if your display has already connected automatically, running setup again will not harm anything),

- Press **SETTINGS** to access the main menus.
- 2 Press the navigation buttons to scroll to NET-WORK and press OK.
- 3 Press the navigation buttons to select Network Setting and press OK.
- 4 If you already set Network Setting, select **Resetting**. The new connection settings resets the current network settings.
- 5 Select IP Auto Setting or IP Manual Setting.
  - IP Manual Setting: Press the navigation and number buttons. IP addresses will need to be input manually.
  - IP Auto Setting: Select this if there is a DHCP server (Router) on the local area network (LAN) via wired connection, the display will automatically be allocated an IP address. If you're using a broadband router or broadband modem that has a DHCP (Dynamic Host Configuration Protocol) server function. The IP address will automatically be determined.
- 6 When you are finished, press EXIT.



#### **CAUTION**

- Do not connect a modular phone cable to the LAN port.
- Since there are various connection methods, please follow the specifications of your telecommunication carrier or internet service provider.



#### **CAUTION**

- Network setting menu will not be available until the display connected to physical network.
- Since there are various connection methods, please follow the specifications of your telecommunication carrier or internet service provider.



#### **NOTE**

- If you want to access the Internet directly on your display, the Internet connection should always be on.
- If you cannot access the Internet, check the network conditions from a PC on your network.
- When you use **Network Setting**, check the LAN cable or check if DHCP in the router is turned on.
- If you do not complete the network settings, the network may not work properly.

#### **Tips for Network Setting**

- Use a standard LAN cable with this display.
   Cat5 or better with a RJ45 connector.
- Many network connection problems during set up can often be fixed by re-setting the router or modem. After connecting the display to the network, quickly power off and/or disconnect the power cable of the network router or cable modem. Then power on and/or connect the power cable again.
- Depending on the Internet service provider (ISP), the number of devices that can receive Internet service may be limited by the applicable terms of service. For details, contact your ISP.
- LG is not responsible for any malfunction of the display and/or the Internet connection feature due to communication errors/malfunctions associated with your Internet connection, or other connected equipment.
- LG is not responsible for problems within your internet connection.
- You may experience undesired results if the network connection speed does not meet the requirements of the content being accessed.
- Some internet connection operations may not be possible due to certain restrictions set by the Internet service provider (ISP) supplying your Internet connection.
- Any fees charged by an ISP including, without limitation, connection charges are your responsibility.
- A 10 Base-T or 100 Base-TX LAN port is required when using a wired connection to this display. If your internet service does not allow for such a connection, you will not be able to connect the display.

- A DSL modem is required to use DSL service and a cable modem is required to use cable modem service. Depending on the access method of and subscriber agreement with your ISP, you may not be able to use the internet connection feature contained in this display or you may be limited to the number of devices you can connect at the same time. (If your ISP limits sub-scription to one device, this display may not be allowed to connect when a PC is already connected.)
- The use of a "Router" may not be allowed or its usage may be limited depending on the policies and restrictions of your ISP. For details, contact your ISP directly.

#### **Network Status**

- 1 Press **SETTINGS** to access the main menus.
- 2 Press the navigation buttons to scroll to NETWORK and press OK.
- 3 Press the navigation buttons to select Network Status.
- 4 Press **OK** to check the network status.
- 5 When you are finished, press EXIT.

| Option                                      | Description  |  |  |
|---|--|--|--|
| Setting Return to the network setting menu. |  |  |  |
| Test  | Test the current network status after setting the network. |  |  |
| Close                                       | Return to the previous menu.                               |  |  |

# **Connecting USB Storage Devices**

Connect USB storage devices such as a USB flash memory, external hard drive to the display and use multimedia features (See "Browsing Files" on page 28).

Connect a USB flash memory or USB memory card reader to the Display as shown on the following illustration. The My media screen appears.





#### CAUTION

- Do not turn the display off or remove a USB storage device while EMF (my media) Menu is activated, as this could result in loss of files or damage to the USB storage device.
- Back up your files saved on a USB storage device frequently, as you may lose or damage the files and this may be not covered by the warranty.

#### **Tips for Using USB Storage Devices**

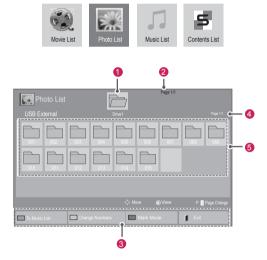
- Only a USB storage device is recognizable.
- If the USB storage device is connected through a USB hub, the device is not recognizable.
- A USB storage device using an automatic recognition programme may not be recognized.
- A USB storage device which uses its own driver may not be recognized.
- The recognition speed of a USB storage device may depend on each device.
- Please do not turn off the display or unplug the USB device when the connected USB storage device is working. When such device is suddenly separated or unplugged, the stored files or the USB storage device may be damaged.
- Please do not connect the USB storage device which was artificially maneuvered on the PC. The device may cause the product to malfunction or fail to be played. Never forget to use only a USB storage device which has normal music files, image files or movie files.
- Please use only a USB storage device which was formatted as a FAT32 file system, NTFS file system provided with the Windows operating system. In case of a storage device formatted as a different utility program which is not supported by Windows, it may not be recognized.
- Please connect power to a USB storage device (over 0.5 A) which requires an external power supply. If not, the device may not be recognized.
- Please connect a USB storage device with the cable offered by the device maker.
- Some USB storage devices may not be supported or operated smoothly.
- File alignment method of USB storage device is similar to Window XP and filename can recognize up to 100 English characters.

- Be sure to back up important files since data stored in a USB memory device may be damaged. We will not be responsible for any data loss.
- If the USB HDD does not have an external power source, the USB device may not be detected. So be sure to connect the external power source.
  - Please use a power adaptor for an external power source. We do not guarantee an USB cable for an external power source.
- If your USB memory device has multiple partitions, or if you use a USB multi-card reader, you can use up to 4 partitions or USB memory devices.
- If a USB memory device is connected to a USB multi-card reader, its volume data may not be detected.
- If the USB memory device does not work properly, disconnect and reconnect it.
- How fast a USB memory device is detected differs from device to device.
- If the USB is connected in Standby Mode, specific hard disk will automatically be loaded when the display is turned on.
- The recommended capacity is 1 TB or less for a USB external hard disk and 32 GB or less for USB memory.
- Any device with more than the recommended capacity may not work properly.
- If a USB external hard disk with a "Energy Saving" function does not work, turn the hard disk off and on again to make it work properly.
- USB storage devices below USB 2.0 are supported as well. But they may not work properly in the movie list.
- Maximum of 999 folders or files can be recognized under one folder.
- A USB 3.0 storage device may not work.
- Data on some USB storage devices may be damaged in a high temperature environment.

# **Browsing Files**

Access the photo, music, or movie lists and browse files

- 1 Connect a USB storage device.
- 2 Press SETTINGS to access the main menus.
- 3 Press the navigation buttons to scroll to My Media and press OK.
- 4 Press the Navigation buttons to choose from Movie List, Photo List, Music List or Contents List and press OK. (The function of Contents List may not be supported depending on the model.)



| No.              | Description  |
|------------------|--|
| 0                | Moves to upper level folder  |
| 2                | Current page/Total pages   |
| 3                | Corresponding buttons on the remote control  |
| 4                | Current page/ total pages of contents under the folder focused on 1  |
| 5                | Contents under the folder focused on 1   |
| Button           | Description  |
| Green<br>button  | Press the green button to toggle between Photo List -> Music List, Music List -> Contents List, Contents List -> Movie List or Movie List -> Photo List. |
| Yellow<br>button | A method to view in 5 large thumbnail or simple list.  |
| Blue             | Convert to Mark Mode.  |

# **Supported File Format**

| Type  | Supported file format  |                       |  |  |  |
|-------|--|-----------------------|--|--|--|
| Movie | DAT,MPG,MPEG,VOB,AVI,DIVX,MP4,MKV,TS,TRP,TP,ASF,WMV,FLV)   |                       |  |  |  |
| MOVIE | Movie(*.mpg/*.mpeg/*dat/*.ts/*.trp/*.tp/*.vob/*.mp4/*.mov/*.divx/*.avi/*.asf/*.wmv/*.flv/*.avi(motion-jpeg)/*. mp4(motion-jpeg)/*.mkv(motion-jpeg))supporting file Video format: DivX 3.11, DivX4, DivX5. DivX6 Xvid1.00, Xvid1.01, Xvid1.02, Xvid1.03, Xvid1.10 beta-1/beta-2, Mpeg-1, Mpeg-2, Mpeg-4, H.264/AVC, VC1, JPEG, Sorenson H.263 Audio format: Dolby Digital, AAC, Mpeg, MP3, LPCM, HE-AAC, ADPCM, WMA Bit rate: within 32 kbps to 320 kbps(MP3) |                       |  |  |  |
|       | External Subtit  | le format : *.sm      | i/*.srt/*.sub(MicroDVD,Subviewer1.0/2.0)/*.ass/*.ssa/*.txt(TMPlayer)/*.psb(PowerDivX)        |  |  |
|       | Internal Subtitle  | e format : only,      | XSUB (It is the subtitle format used in DivX6 files)   |  |  |
| Photo | JPEG Baseline: 64 x 64 to 15360 x 8640 Progressive: 64 x 64 to 1920 x 1440  You can play JPEG files only.  Non-supported files are displayed in the form of predefined icon.   |                       |  |  |  |
|       | File Item Profile  |                       |  |  |  |
|       | jpeg<br>jpg<br>jpe   | supported file format | SOF0: baseline SOF1: Extend Sequential SOF2: Progressive                                     |  |  |
|       |  | photo size            | Min: 64 x 64  Max-Normal Type:  15360 (W) x 8640 (H)  Progressive Type:  1920 (W) x 1440 (H) |  |  |
| Music | MP3 Bit rate 32 to 320 • Sampling rate MPEG1 Layer3: 32 kHz, 44.1 kHz, 48 kHz • Sampling rate MPEG2 Layer3: 16 kHz, 22.05 kHz, 24 kHz • Sampling rate MPEG2.5 Layer3: 8 kHz, 11.025 kHz, 12 kHz  |                       |  |  |  |

# **Viewing Movies**

Play video files on display. Your display shows all of the video files saved in a USB storage device or shared folder on a PC.

- 1 Press the navigation buttons to scroll to My Media and press OK.
- 2 Press the navigation buttons to scroll to Movie List and press OK.
- 3 Press the navigation buttons to scroll to a folder you want and press OK.
- 4 Press the navigation buttons to scroll to a file you want and press **OK**.





| Menu              | Description   |
|-------------------|---|
| Play Marked       | Play the selected movie file. Once a movie file finishes playing, the next selected one will be played automatically. |
| Mark All          | Mark all movie files on the screen.   |
| Unmark All        | Deselect all marked movie files.  |
| Exit Mark<br>Mode | Exit the Mark Mode.   |

5 Play a movie.



- Non-supported files are displayed the preview image by icon only .
- Abnormal files are displayed in the form of bitmap (X).
- Control playback by using the following buttons.



| Button                 | Description   |
|------------------------|---|
|                        | Stops the playback.   |
| •                      | Plays a video.  |
| TI TI                  | Pauses or resumes the playback.   |
| •                      | Scans backward in a file.   |
| ••                     | Scans forward in a file.  |
| SETTINGS               | Show the <b>Option</b> menu.  |
| <b> BACK</b>           | Hide the menu on the full-sized screen.   |
| EXIT                   | Return to Movie List.   |
| <b>∢</b> or ▶          | Skips to specific points in a file during playback. The time of a specific point will appear on the status bar. In some files, this function may not work properly. |
| ENERGY<br>SAVING<br>eØ | Adjusts the screen brightness to save energy.   |

#### Tips for Using Playing Video Files

- Some user-created subtitles may not work properly.
- Some special characters are not supported in subtitles.
- HTML tags are not supported in subtitles.
- Subtitles in languages other than the supported languages are not available.
- The screen may suffer temporary interruptions (image stoppage, faster playback, etc.)
   when the audio language is changed.
- A damaged movie file may not be played correctly, or some player functions may not be usable.
- Movie files produced with some encoders may not be played correctly.
- If the video and audio structure of recorded file is not interleaved, either video or audio is outputted.
- Videos with resolutions higher than 1920X1080@25/30P may not work properly depending on the frame.
- Movie files other than the specified types and formats may not work properly.
- Max bitrate of playable movie file is 20 Mbps. (only, Motion JPEG: 10 Mbps)
- We do not guarantee smooth playback of profiles encoded level 4.1 or higher in H.264/ AVC.
- DTS Audio codec is not supported.
- A movie file more than 30 GB in file size is not supported for playback.
- A DivX movie file and its subtitle file must be located in the same folder.
- A video file name and its subtitle file name must be identical for it to be displayed.
- Playing a video via a USB connection that doesn't support high speed may not work properly.
- Files encoded with GMC(Global Motion Compensation) may not be played.

#### **Video Options**

- 1 Press **SETTINGS** to access the **Pop-Up** menus.
- 2 Press the navigation buttons to scroll to Set Video Play., Set Video. or Set Audio. and press OK.



- Option values changed in Movie List does not affect Photo List and Music List.
- Option value changed in Photo List and Music List are changed likewise in Photo List and Music List excluding Movie List.
- When replaying the video file after stopping, you can play from where it stopped previously.

When you select the Set Video Play,

- 1 Press the navigation buttons to scroll to show the Picture Size, Audio Language, Subtitle Language, or Repeat.
- 2 Press the navigation buttons to scroll to make appropriate adjustments.

| Menu         | Description                               |
|--------------|---|
| Picture Size | Selects your desired picture              |
|              | format during movie play.                 |
| Audio        | Changes the Language Group of the         |
| Language     | audio during movie play. Files            |
|              | with a single audio track cannot be       |
|              | selected.                                 |
| Subtitle     | Turn on/off the subtitle.                 |
| Language     |   |
| Language     | Activated for SMI subtitle and            |
|              | can select the language within the        |
|              | subtitle.                                 |
| Code Page    | Can select the font for subtitle.         |
|              | When set to default, same font as         |
|              | general menu will be used.                |
| Sync         | Adjusts the time synchronisation of       |
|              | the subtitle from -10 secs to +10 secs    |
|              | by steps of 0.5 secs during movie         |
|              | play.                                     |
| Position     | Changes the position of the               |
|              | subtitle either up or down during         |
|              | movie play.                               |
| Size         | Selects your desired Subtitle size        |
|              | during movie play.                        |
| Repeat       | Turn on/off repeat function of            |
|              | movie playback. When turned on, the       |
|              | file within the folder will be played     |
|              | back repeatedly. Even when the            |
|              | repeated playback                         |
|              | is turned off, it can run the playback if |
|              | the file name is similar to the previous  |
|              | file.                                     |

| Code Page | Support Language                  |
|-----------|-----------------------------------|
| Latin1    | English, Spanish, French,         |
|           | German, Italian, Portuguese,      |
|           | Danish, Romanian, Norwegian,      |
|           | Albanian, Gaelic, Welsh, Irish,   |
|           | Catalan, Valencian                |
| Latin2    | Bosnian, Polish, Croatian, Czech, |
|           | Slovak, Slovenian, Serbian,       |
|           | Hungarian                         |
| Latin4    | Estonian, Latvian, Lithuanian     |
| Cyrillic  | Bulgarian, Macedonian, Russian,   |
|           | Ukrainian, Kazakh                 |
| Greek     | Greek                             |
| Turkish   | Turkish                           |
| Korean    | Korean                            |

# 0

- Only 10,000 of sync blocks can be supported within the subtitle file.
- When playing a video, you can adjust the Picture Size by pressing the ARC button.
- Subtitles in your language are only supported when the OSD menu is also in this language.
- The code page options may be disabled depending on the language of the subtitle files.
- Select the appropriate code page for the subtitle files.

When you select the Set Video,

1 Press the navigation buttons to scroll to make appropriate adjustments.

When you select the Set Audio,

- 1 Press the navigation buttons to scroll to show the Sound Mode, Clear Voice II or Balance.
- 2 Press the navigation buttons to scroll to make appropriate adjustments.



View image files saved in a USB storage device. The displays on the screen may differ from the model.

- 1 Press the navigation buttons to scroll to My Media and press OK.
- 2 Press the navigation buttons to scroll to **Photo List** and press **OK**.
- 3 Press the navigation buttons to scroll to a folder you want and press OK.
- 4 Press the navigation buttons to scroll to a file you want and press **OK**.





| Menu           | Description                         |
|----------------|-------------------------------------|
| View Marked    | Display the selected photo file.    |
| Mark All       | Mark all photo files on the screen. |
| Unmark All     | Deselect all marked photo files.    |
| Exit Mark Mode | Exit the Mark Mode.                 |

5 View photos.



- Non-supported files are displayed the preview image by icon only .
- Abnormal files are displayed in the form of bitmap (X).

#### **Using Photo Options**

Use the following options while viewing photos.



| Options Number of selected photo |
|----------------------------------|
|----------------------------------|

| Option     | Description   |
|------------|---|
| Slideshow  | ·   |
| Sildesilow | Starts or stops a slideshow with selected   |
|            | photos.   |
|            | If there are no selected photos, all pho-   |
|            | tos saved in the current folder display   |
|            | during a slideshow.   |
|            | To set a slideshow speed, select <b>Op-</b>   |
|            | tion.   |
| BGM        | Turns the background music on or off.   |
|            | To set the background music folder,   |
|            | select Option.  |
|            | You can adjust Option by SETTINGS   |
|            | button on the remote control.   |
| υ          | Rotates photos clockwise (90°, 180°, 270°, 360°).   |
|            | 270 , 360 ).  |
|            | NOTE -  |
|            | The supported photo size is limited. You cannot rotate a photo if the resolution of the rotated width is larger than the supported resolution size. |
| Q          | View the photo by zoom in 2, 4 times.   |
|            | NOTE -  |
|            | Photos with a resolution of<br>960x540 or less cannot be  |

enlarged.

| Option        | Description   |
|---------------|---|
| <b>ENERGY</b> | Adjusts the screen brightness to save   |
| SAVING        | energy.   |
| eØ            |   |
| (SETTINGS)    | Slide Speed: Selects a slideshow  |
|               | speed (Fast, Medium, Slow).   |
|               | TransitionEffect: Set the view mode   |
|               | of the slideshow.   |
|               | BGM: Selects a music folder for the   |
|               | background music.   |
|               | NOTE  |
|               | You cannot change the music<br>folder while the background<br>music is playing. |
|               | You can only select the MP3   |
|               | folder saved on the device that   |
|               | currently displays the photo.   |
|               | Hides the option window.  |
| BACK          | To display the options, press <b>OK</b> .                                       |
| EXIT          | Return to Photo List.   |

#### **Photo options**

- 1 Press **SETTINGS** to show the **Option** menus.
- 2 Press the navigation buttons to scroll to Set Photo View, Set Video, or Set Audio and press OK.



- Option values changed in Movie List does not affect Photo List and Music List.
- Option value changed in Photo List and Music List are changed likewise in Photo List and Music List excluding Movie List.

When you select the **Set Photo View**,

- 1 Press the navigation buttons to scroll to select **Slide Speed,Transition Effect** or **BGM**.
- 2 Press the navigation buttons to scroll to make appropriate adjustments.

# **Transition Effect Option**

| Option              | Description  |
|---------------------|--|
| Sliding             | Pushes the current slide out of view as it plays to the next slide.                            |
| Stairs              | Pushes the current slide in a staircase shape as it plays to the next slide.                   |
| Door Open<br>/Close | Pushes the current slide like opening or closing the door as it plays to the next slide.       |
| Shutter             | Pushes the current slide like drawing or pulling down the blind as it plays to the next slide. |
| Fade In             | The current photo disappears and the next photo appears slowly.                                |

When you select the Set Video,

1 Press the navigation buttons to scroll to make appropriate adjustments.

When you select the Set Audio,

- 1 Press the navigation buttons to scroll to show the **Sound Mode, Clear Voice II** or **Balance**.
- 2 Press the navigation buttons to scroll to make appropriate adjustments.

# **Listening to Music**

- 1 Press the navigation buttons to scroll to **My Media** and press **OK**.
- 2 Press the navigation buttons to scroll to Music List and press OK.
- 3 Press the navigation buttons to scroll to a folder you want and press OK.
- 4 Press the navigation buttons to scroll to a file you want and press **OK**.





| Menu           | Description                         |
|----------------|-------------------------------------|
| Play Marked    | Display the selected music file.    |
| Mark All       | Mark all music files on the screen. |
| Unmark All     | Deselect all marked music files.    |
| Exit Mark Mode | Exit the Mark Mode.                 |

5 Play music.

6 Control playback by using the following buttons.



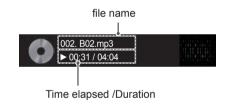
| Button                 | Description  |  |
|------------------------|--|--|
|                        | Stops playing back the file and moves back to the music list.  |  |
| · ·                    | Plays a music file.  |  |
| II                     | Pauses or resumes playback.  |  |
| 44                     | Skips to the previous file.  |  |
| ••                     | Skips to the next file.  |  |
| « or »                 | When playing, When you press the dutton, the previous music file will be played. When you press the button, the next music file will be played.  |  |
| Green<br>button        | Start playing the selected music files and then move to the <b>Photo List</b> .  |  |
| ENERGY<br>SAVING<br>eØ | Adjusts the screen brightness to save energy.  |  |
| (SETTINGS)             | Show the Option menu.  |  |
| BACK                   | Hides the option window. To display the options, press <b>OK</b> .   |  |
| EXIT                   | When you press the <b>EXIT</b> button while the Music player is displayed, only the music will be stopped and the player will not return to normal viewing.  When you press the <b>EXIT</b> button while the music is stopped or while the music player is hidden, the player will return to normal viewing. |  |
| <b>◄</b> or ▶          | Skips to specific points in a file during playback. The time of a specific point will appear on the status bar. In some files, this function may not work properly.  |  |

## Tips for playing music files

 This unit cannot support the ID3 Tag embedded MP3 files.



- Non-supported files are displayed the preview image by icon only .
- Abnormal files are displayed in the form of bitmap X.
- A damaged or corrupted music does not play but displays 00:00 in playtime.
- A music downloaded from a paid service with copyright protection does not start but displays inappropriate information in playtime.
- If you press OK, buttons, screen saver is stopped.
- The •, •, •, buttons on the remote control are also available in this mode.
- You can use the button to select the next music and the button to select the previous music.



## **Music Options**

- 1 Press SETTINGS to access the Pop-Up menus.
- 2 Press the navigation buttons to scroll to Set Audio Play or Set Audio and press OK.



## **NOTE**

- Option values changed in Movie List does not affect Photo List and Music List.
- Option value changed in Photo List and Music List are changed likewise in Photo List and Music List excluding Movie List.

When you select the Set Audio Play,

- 1 Press the navigation buttons to scroll to select the Repeat or Random.
- 2 Press the navigation buttons to scroll to make appropriate adjustments.

When you select the Set Audio,

- 1 Press the navigation buttons to scroll to select the Sound Mode, Clear Voice II or Balance.
- 2 Press the navigation buttons to scroll to make appropriate adjustments.

## **Viewing the Contents List**

Plays back the stored files using the Export option in SuperSign Manager.

- 1 Press the Navigation buttons to scroll to My Media and press OK.
- 2 Press the Navigation buttons to scroll to Contents List and press OK.
- 3 Press the Navigation buttons to scroll to a folder you want and press OK.
- 4 Press the Navigation buttons to scroll to a file you want and press **OK**.





- While playing media files from Contents List, only the BACK, EXIT or Volume button are available. Selecting the BACK or EXIT button stops playing media files and returns to the screen view mode.
- If there is the AutoPlay folder in the USB device and its files are in supported formats, they can be played back automatically when the USB device is connected to the monitor.
- The function of Contents List may not be supported depending on the model.

## DivX® VOD Guide

## DivX® VOD Registration

In order to play purchased or rented DivX® VOD contents, you should register your device with 10 digit DivX registration code from your device at www.divx.com/vod.

- 1 Press **SETTINGS** to access the main menus.
- 2 Press the navigation buttons to scroll to MY ME-DIA and press OK.
- 3 Press the Blue button.
- 4 Press the navigation buttons to scroll to DivX Reg. Code and press OK.
- 5 View the registration code of your display.
- 6 When you are finished, press EXIT.
  When you return to the previous menu, press BACK.



## NOTE

- While you are checking the registration code, some buttons may not work.
- If you use the DivX registration code of another device, you cannot play the rented or purchased DivX file. Make sure to use the DivX registration code assigned to your product.
- The video or audio files that are not converted by the standard DivX codec may be corrupted or not be played.
- The DivX VOD code allows you to activate up to 6 devices under one account.

## DivX® VOD Deregistration

You should deregister your device with 8 digit DivX deregistration code from your device at www.divx.com/vod

- 1 Press SETTINGS to access the main menus.
- Press the navigation buttons to scroll to MY ME-DIA and press OK.
- 3 Press the Blue button.
- 4 Press the navigation buttons to scroll to **Deactivation** and press **OK**.
- 5 Press the navigation buttons to select Yes to confirm.



6 When you are finished, press EXIT.
When you return to the previous menu, press BACK.

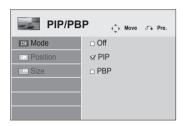


 Once the deregistration is executed, you must register your device again to see DivX<sup>®</sup> VOD contents.

## **Using PIP/PBP**

Displays videos or photos stored on a USB device on a single monitor by dividing it into the main and sub screens.

- 1 Press the SETTINGS button to move to **OPTION** and press **OK**.
- 2 Press PIP/PBP to select PIP or PBP and then press OK.



3 Select Movie List or Photo List from My Media. (With PIP/PBP selected, the Music List and Contents List are deactivated. The function of Contents List may not be supported depending on the model.)



4 Select a file you want and then press **OK**.



5 Select the PIP or PBP icon from the play list.



< Movie List >



< Photo List >

6 Select either Main or Sub for sound. You must to select the output sound before running the PIP or PBP function.



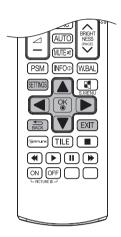
7 The sub screen is displayed on the main screen.

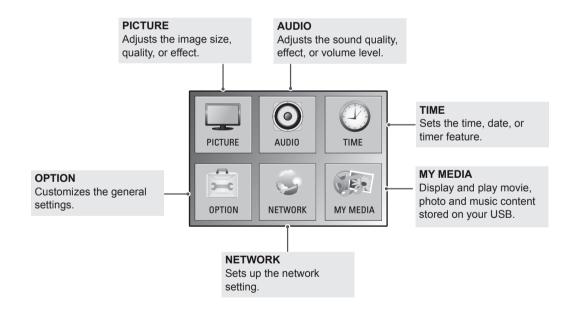


## **CUSTOMIZING SETTINGS**

## **Accessing the Main Menus**

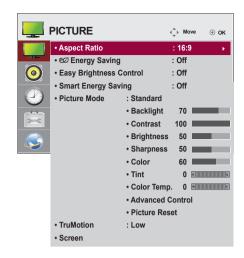
- 1 Press **SETTINGS** to access the main menus.
- 2 Press the navigation buttons to scroll to one of the following menus and press OK.
- 3 Press the navigation buttons to scroll to the setting or option you want and press **OK**.
- 4 When you are finished, press EXIT.
  When you return to the previous menu, press BACK.





## **PICTURE Settings**

- 1 Press SETTINGS to access the main menus.
- 2 Press the navigation buttons to scroll to PICTURE and press OK.
- 3 Press the navigation buttons to scroll to the setting or option you want and press OK.
  - To return to the previous level, press BACK.
- When you are finished, press EXIT.
  When you return to the previous menu, press BACK.



The available picture settings are described in the following:

| Setting               | Description  |  |  |  |
|-----------------------|--|--|--|--|
| Aspect Ratio          | Changes the image size to view images at its optimal size.   |  |  |  |
| eØ                    | Sets to automatically adjust the screen brightness corresponding to the surroundings.  |  |  |  |
| Energy Saving         | Level  |  |  |  |
|                       | Off  | Disables Energy Saving function.   |  |  |
|                       | Minimum/<br>Medium/<br>Maximum   | Selects the brightness level of the backlight.   |  |  |
|                       | Screen Off   | The screen turns off in 3 seconds.   |  |  |
| Easy                  | Adjusts the backlig  | tht according to the schedule you set.   |  |  |
| Brightness<br>Control | Mode   |  |  |  |
| Control               | Off  | Disables Easy Brightness Control.  |  |  |
|                       | On   | Enables Easy Brightness Control.   |  |  |
|                       | less Control is disabled if the current time is not set.  ling is set to Maximum, Easy Brightness Control is disabled.  p to six schedules and they will be sorted in time ascending order.  lix schedules are added, the latest schedule will be automatically deleted.  le a schedule by pressing the OK button.  ledules are not added, but the backlight value changes.  supported depending on the model. |  |  |  |
| Smart Energy          | Adjusts the backlig  | ht and contrast depending on the screen brightness.  |  |  |
| Saving                | Level  |  |  |  |
|                       | Off  | Disables the Smart Energy Saving function.   |  |  |
|                       | On   | Enables the Smart Energy Saving function to save power consumption as much as the value set in the smart energy saving rate. |  |  |
| Picture Mode          | Selects one of the preset image or customizes options in each mode for the best Monitor set screen performance. You are also able to customize advanced options of each mode. The available preset picture modes vary depending on the monitor set .   |  |  |  |

| Setting               | Description   |   |  |  |  |
|-----------------------|---|---|--|--|--|
| TruMotion             | Corrects images to display smoother motion sequences.  • Low : De-Judder / De-Blur value is set to 3.  • High : De-Judder / De-Blur value is set to 7.  • User : De-Judder / De-Blur can be set manually.  - De-Judder : This function adjusts juddering of the screen.  - De-Blur : This function adjusts and eliminates blurring of the screen. |   |  |  |  |
| SCREEN                | Customizes the PC display options in RGB mode.  |   |  |  |  |
| (In RGB<br>Mode Only) | Option  |   |  |  |  |
| Widde Offig)          | Resolution  | Selects a proper resolution. See "Customizing PC display options".  |  |  |  |
|                       | Auto Configure  | Sets to adjust the screen position, clock, and phase automatically.<br>The displayed image may be unstable for a few seconds while the configuration in progress. |  |  |  |
|                       | Position/Size/<br>Phase   | Adjusts the options when the picture is not clear, especially when characters are shaky, after the auto configuration.  |  |  |  |
|                       | Reset   | Restores the options to the default setting.  |  |  |  |

## **Basic Image Options**

| Setting          | Description   |  |
|------------------|---|--|
| Backlight        | Adjusts the brightness of the screen by controlling the LCD backlight. If you decrease the brightness level, the screen becomes darker and the power consumption will be reduced without any video signal loss. |  |
| Contrast         | Increases or decreases the gradient of the video signal. You may use Contrast when the bright part of the picture is saturated.   |  |
| Brightness       | Adjusts the base level of the signal in the picture. You may use Brightness when the dark part of the picture is saturated.   |  |
| Sharpness        | Adjusts the level of crispness in the edges between the light and dark areas of the picture. The lower the level, the softer the image.   |  |
| Color            | Adjusts intensity of all colors.  |  |
| Tint             | Adjusts the balance between red and green levels.   |  |
| Color Temp .     | Set to warm to enhance hotter Colors such as red, or set to cool to make picture bluish.  |  |
| Advanced Control | Customizes the advanced options. Refer to the Advanced image options.   |  |
| Picture Reset    | Restores the options to the default setting.  |  |



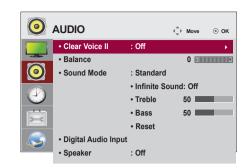
- If the 'Picture Mode' setting in the Picture menu is set to Vivid, Standard, Cinema, Sport, or Game the subsequent menus will be automatically set.
- You cannot adjust color and tint in the RGB-PC / HDMI-PC mode.
- When using the Smart Energy Saving function, the screen may look saturated in the white area of a still image.
- If Energy Saving is set to Minimum, Medium, or Maximum, the Smart Energy Saving function is disabled.
- In Vivid mode, the luminance of the backlight is calibrated, so the settings may be different depending on each product.

## **Advanced Control**

| Setting   | Description   |
|---|---|
| Dynamic<br>Contrast<br>(Off/High/<br>Medium/Low)        | Adjusts the contrast to keep it at the best level according to the brightness of the screen. The picture is improved by making bright parts brighter and dark parts darker. (This function can be used only under component.) |
| Dynamic Color<br>(Off/High/Low)                         | Adjusts screen Colors so that they look livelier, richer and clearer. This feature enhances hue, saturation and luminance so that red, blue, green and white look more vivid. (This function can be used only component.)     |
| Clear White<br>(Off/High/Low)                           | Make the white area of screen brighter and more white.  |
| Skin Color<br>(-5 to 5)                                 | It detects the skin area of video and adjusts it to express a natural skin color.   |
| Noise<br>Reduction<br>(Off/High/<br>Medium/Low)         | Reduces screen noise without compromising video quality. (This function can be used only under Component.)  |
| Digital Noise<br>Reduction<br>(Off/High/<br>Medium/Low) | This option reduces the noise produced while creating digital video signals.  |
| Gamma<br>(High/Medium/<br>Low)                          | Set your own gamma value. On the monitor, high gamma values display whitish images and low gamma values display high contrast images.   |
| Black Level<br>(High/Low)                               | Low: The picture of the screen gets darker.     High: The picture of the screen gets brighter. Set black level of the screen to proper level. (Function works in the following mode - Component, HDMI-DTV)                    |

## **AUDIO Settings**

- 1 Press **SETTINGS** to access the main menus.
- 2 Press the navigation buttons to scroll to AUDIO and press OK.
- 3 Press the navigation buttons to scroll to the setting or option you want and press OK.
  - To return to the previous level, press **BACK**.
- 4 When you are finished, press EXIT.
  When you return to the previous menu, press BACK.



The available audio options are described in the following:

| Setting                | Description  |  |  |  |
|------------------------|--|--|--|--|
| Clear Voice II         | By differentiating th  | By differentiating the human sound range from others, it helps users make dialog more clear. |  |  |
| Balance                | Adjusts balance be   | Adjusts balance between the left and right speakers according to your room environment.      |  |  |
| Sound Mode             | The best sound tone quality will be selected automatically depending on the video type tha currently watching.   |  |  |  |
|                        | Mode   |  |  |  |
|                        | Standard   | The most commanding and natural audio.   |  |  |
|                        | Music  | Select this option to enjoy the original sound when listening to the music.                  |  |  |
|                        | Cinema   | Select this option to enjoy sublime sound.   |  |  |
|                        | Sport  | Select this option to watch sports broadcasting.   |  |  |
|                        | Game   | To enjoy dynamic sound when playing a game.  |  |  |
|                        | Option   |  |  |  |
|                        | Infinite Sound   | LG's Infinity Sound option provides 5.1 channel stereo sound from two speakers.              |  |  |
|                        | Treble Controls the dominant sounds in the output. When you turn up the treble will increase the output to the higher frequency range.   |  |  |  |
|                        | Bass Makes the output sound softer. When you turn up the bass, it will increase the output to the lower Frequency.   |  |  |  |
|                        | Reset  | Resets the sound mode to the default setting.  |  |  |
| Digital Audio<br>Input | HDMI/DisplayPort: Outputs the sound of digital signal from HDMI and display ports through the monitor speaker.  Audio In: Outputs the sound through the monitor speaker by connecting HDMI and display ports to the Audio In port. |  |  |  |
| Speaker                | ON: Enables sound to the monitor speaker. (* The monitor speaker is sold separately.) OFF: Disables sound to the monitor speaker. Use this option when using an external sound device.   |  |  |  |

## **TIME Settings**

- 1 Press SETTINGS to access the main menus.
- 2 Press the navigation buttons to scroll to **TIME** and press **OK**.
- 3 Press the navigation buttons to scroll to the setting or option you want and press **OK**.
  - To return to the previous level, press BACK.
- 4 When you are finished, press EXIT.
  When you return to the previous menu, press BACK.



The available time settings are described in the following:

| Setting              | Description   |  |
|----------------------|---|--|
| Clock                | Sets the time feature.  |  |
| Daylight Saving      | Sets the current time one hour ahead of Standard Time in the summer season.   |  |
| On/Off Time          | Sets the time to turn on or off the monitor set.  |  |
| Screen Off Time      | Sets the time to turn off the screen.   |  |
| Sleep Timer          | Sets the length of time until the monitor set to turns off. When you turn the monitor set off and turn it on again, the Sleep Timer will be set to off. |  |
| Power on delay       | When connecting multiple monitors and turning the power on, the monitors are turned on individually to prevent overload.                                |  |
| Auto off             | If Auto off is active and there is no input signal, the set switches to off mode automatically after 15 minutes.  |  |
| Automatic<br>Standby | If you do not use the monitor for more than 4 hours, it will be in standby mode automatically.  |  |



- Once the on or off time is set, these functions operate daily at the preset time.
- · The scheduled power-off function works properly only when the device time is set correctly.
- When the scheduled power-on and power-off times are the same, the power-off time has priority over the power-on time if the set is turned on, and vice versa if the set is turned off.

## **OPTION Settings**

- 1 Press **SETTINGS** to access the main menus.
- 2 Press the navigation buttons to scroll to OPTION and press OK.
- 3 Press the navigation buttons to scroll to the setting or option you want and press **OK**.
  - To return to the previous level, press **BACK**.
- 4 When you are finished, press EXIT.
  When you return to the previous menu, press BACK.



The available option settings are described in the following:

| Setting    |   |  | Description                                 |                     |  |
|------------|---|--|---|---------------------|--|
| Language   | To choose the lan   | To choose the language in which the control names are displayed.   |   |                     |  |
| ISM Method | could result in a g   | A frozen or still picture from a PC/Video game displayed on the screen for prolonged periods could result in a ghost image remaining even when you change the image. Avoid allowing a fixed image to remain on the screen for a long period of time. |   |                     |  |
|            | Setting   |  |   |                     |  |
|            | Normal  | Leave on normal if   | you don't foresee im                        | age burn in being a | problem.                                 |
|            | Orbiter   |  | n the screen. To avo                        |                     | t to allow any fixed nage on the screen, |
|            | Inversion   |  | erts the panel cold<br>ted every 30 minutes |                     | The panel color is                       |
|            | White Wash  | White wash fills the screen with solid white. This helps removes permanent images burned into the screen. A permanent image may be impossible to clear entirely with white wash.   |   |                     |  |
| DPM Select | A user can choose   | e to turn the power sa   | aving mode on / off.                        |                     |  |
|            | <ul> <li>You can set Energy Saving to Off or set the length of time before entering Energy Samode to 5 sec./10 sec./15 sec./1 min./3 min./5 min./10 min.</li> <li>It makes a little difference according to your environment.</li> <li>It may not be supported depending on the model.</li> </ul> |  |   |                     | inergy Saving                            |
| Fail Over  | If there is no input  | t signal, it automatically switches to another input with signal.  |   |                     |  |
|            | Setting   |  |   |                     |  |
|            | Off   | Stops auto switch of the input source.   |   |                     |  |
|            | Auto  | Attempts to find another input source having video signal according to the defined input order if no video signal comes from the current input source. (Refer to the sequence of the table below.)   |   |                     |  |
|            | Current<br>Input Source   | Attempt 1  | Attempt 2                                   | Attempt 3           | Attempt 4                                |
|            | RGB   | HDMI   | DVI   | DP                  | If there is no                           |
|            | DVI   | HDMI   | DP  | RGB                 | available video                          |
|            | HDMI  | DVI  | DP  | RGB                 | signal to switch to, then the current    |
|            | DP  | HDMI   | DVI   | RGB                 | input source remains.                    |
|            | Manual  The input source changes according to the specified order.  If there is no video signal from the specified input source, then the input source remains.   |  |   |                     |  |

| Setting       | Description   |   |  |
|---------------|---|---|--|
| Factory Reset | Select this option to return to the default factory settings.   |   |  |
| Set ID        | You can assign a unique Set ID NO (name assignment) to each product when several products are connected for display. Specify the number (1 to 255) using the button and exit. Use the assigned Set ID to individually control each product using the Product Control Program. |   |  |
| Tile Mode     | Tile Mode   | To use this function  - Must be displayed with various other products.  - Select Tile Mode, set rows and columns, and then enter the tile ID to set the location.  - Tile Mode: row x column (row = 1-15, column = 1-15).  - 15 x 15 available. |  |
|               | Auto Config.  | Sets to adjust the screen position, clock, and phase automatically.  The displayed image may be unstable for a few seconds while the configuration is in progress.  |  |
|               | Position  | Moving the screen position horizontally and vertically.   |  |
|               | Size  | Adjust the horizontal and vertical size of the screen taking into account the size of the bezel.  |  |
|               | Natural   | The image is omitted by the distance between the screens to be naturally shown.   |  |
|               | Reset   | Function to initialize and release Tile.  All Tile setting are released when selecting Tile recall and the screen returns to Full screen.   |  |
| PIP/PBP       | Displays videos of and sub screens.   | r photos stored in the USB device on a single monitor by dividing it into the main  |  |
|               | Option  |   |  |
|               | Mode  | Sets the type of secondary screen.  *OFF: Disables the secondary screen.  *PIP (Picture In Picture): Displays the secondary screen in the main screen.  *PBP (Picture By Picture): Displays the secondary screen next to the main screen.       |  |
|               | Position  | Adjusts the position of the sub screen (top left, bottom left, top right, bottom right)  The default value is the bottom right.   |  |
|               | Size  | Adjusts the size of the sub screen (Size 0 to 10).  The default size of PIP (Size: 0) is 480x270; the maximum size 10 is 960x540.   |  |
|               | NOTE  • The Position  | and Size options are enabled only in PIP mode.  |  |

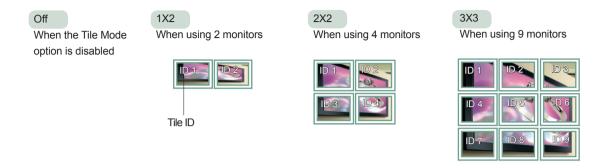
# **NOTE**

• If the interior temperature of the set exceeds 80°C, the set will be turned off automatically for safety reasons.

| Setting                         | Description  |  |  |
|---------------------------------|--|--|--|
| Fan                             | Setting  |  |  |
| (Only for<br>47WV50MS<br>model) | Mode   | This option indicates the monitor's internal temperature and controls the fan.  • Auto: Switches the fan on and off according to the set temperature.  • On: The fan is always switched on.  • Manual: Switches the fan on and off according to user settings. |  |
|                                 | Hysteresis   | The difference in temperature between when the fan is switched on and when it is off.  |  |
|                                 | Set Temperature Set the temperature at which the fan is switched on.   |  |  |
|                                 | Current Temperature Current temperature inside the set.  |  |  |
|                                 | incorrect fan settin   | erature of the set exceeds 80°C, the set will be turned off automatically  |  |
| USB Content<br>Recovery         | Replays the content in a USB when the power is back on if it is turned off during playing a content. (This function operates the same when a USB is disconnected and connected again.) |  |  |
| Product/Service                 | Displays the model name, software version, serial number, IP address, MAC address, and home  |  |  |
| Info.                           | page.  |  |  |

## Tile Mode

This monitor can be tiled with additional monitors to create a large tiled display.











## Tile Mode - Natural mode

When active, the part of the image that would normally be displayed in the gap between the monitors is omitted.



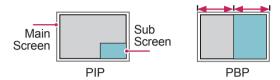


## PIP/PBP

Displays videos or photos stored in the USB device on a single monitor by dividing it into the main and sub screens.

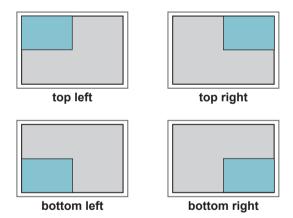
## Mode

- \*PIP (Picture In Picture): Displays the sub screen in the main screen.
- \*PBP (Picture By Picture): Displays the sub screen next to the main screen.



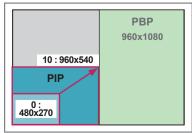
#### **Position**

Adjusts the position of the subscreen (top left, bottom left, top right, bottom right)



## Size

Adjusts the size of the subscreen (Size 0-10).



< 1920x1080 >



- The subscreen is only supported when using the USB device.
- 47WV50BS is not supporting composite(AV) signal & input.

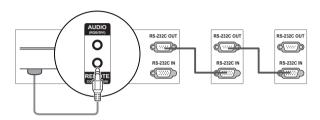
|      |                         | Sub |
|------|-------------------------|-----|
|      |                         | USB |
| Main | Component               | 0   |
|      | RGB                     | 0   |
|      | HDMI/DVI-D/Display Port | 0   |
|      | AV                      | Х   |

- You can only change the size and position in PIP mode.
- With PBP selected, the Aspect Ratio option in the PICTURE menu is disabled (Fixed as 16:9).
- While running the PBP function, the Tile Mode function does not work.
- You must select the output sound before running the PIP or PBP functions. (Select either main or sub.)
- If you fail to select main or sub from the sound selection box, and if the OSD disappears after either a period of time or when the Exit or Back key is pressed, the PIP/PBP subscreen is not activated.
- You cannot change the sound while running the PIP or PBP functions. If you want to change the sound, please restart PIP/PBP.
- The picture quality of the subscreen is set according to the values selected in the main menu, not the USB device.
- If you play videos you selected in PIP/PBP mode, the videos will play back repeately in succession.
- The buttons below work in PIP mode.

| Button | Photo | Movie |
|--------|-------|-------|
| <      | 0     | X     |
| >      | 0     | X     |
| •      | X     | 0     |
|        | X     | X     |
| ••     | X     | 0     |
| 4      | X     | 0     |
| Ш      | Х     | 0     |

## **Picture ID**

Picture ID is used to change the settings of a specific display using a single IR receiver for multi-vision. The set receiving the IR signal communicates with another set via an RS232C connection. Each set is identified by a Set ID. If you assign the Picture ID using the remote control, only displays with the same Picture ID and Set ID can be controlled remotely.



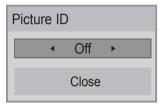


2X2 Multi-Vision (Total Set ID: 4) Set IDs are assigned as shown in the picture.

1 Press the red ON button on the remote control to assign the Picture ID.



2 To change the Picture ID, press the ON button, or the left and right arrow buttons continuously. Assign the ID you want.



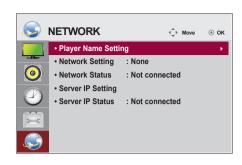
- If you assign the Set ID to each set with multi-vision, and then assign the Picture ID using the red button on the remote control, the key command is displayed for the set with the same Set ID and Picture ID. A set with different Set IDs and Picture IDs cannot be controlled by IR signals.
- The maximum value of the Picture ID can be set in the Total Set ID menu.
- Please refer to the Installation Manual for more information on Total Set ID assignment.

# 0

- For example, if the Picture ID is assigned to 2, the upper right display (Set ID: 2) can be controlled by IR signals.
- For each set, you can change the settings for the PICTURE, AUDIO, TIME, NETWORK and MY MEDIA menus or the hot keys on the remote control.
- If you press the green OFF button for Picture IDs, the Picture IDs for all sets are turned off.
   If you then press any button on the remote control, all sets will start working again.
- Picture ID will be disabled while using the MY MEDIA menu.
- If Picture ID is set to Off, holding buttons on the remote control will execute only one action at a time.

## **NETWORK Settings**

- 1 Press **SETTINGS** to access the main menus.
- 2 Press the navigation buttons to scroll to **NETWORK** and press **OK**.
- 3 Press the navigation buttons to scroll to the setting or option you want and press **OK**.
  - To return to the previous level, press BACK.
- 4 When you are finished, press EXIT.
  When you return to the previous menu, press BACK.



The available option settings are described in the following:

| Setting                | Description  |  |  |
|------------------------|--|--|--|
| Player Name<br>Setting | Sets the player name used in SuperSign Manager.(Up to 20 characters)   |  |  |
| Network Setting        | Configure the network settings.  |  |  |
| Network Status         | Display the network status Internet is connected : Extermally connected - Network is connected : Only internally connected - Not connected : When there is no network connection |  |  |
| Server IP Setting      | Sets the IP address of the computer (server) on which SuperSign Manager is installed.  |  |  |
| Server IP Status       |  |  |  |

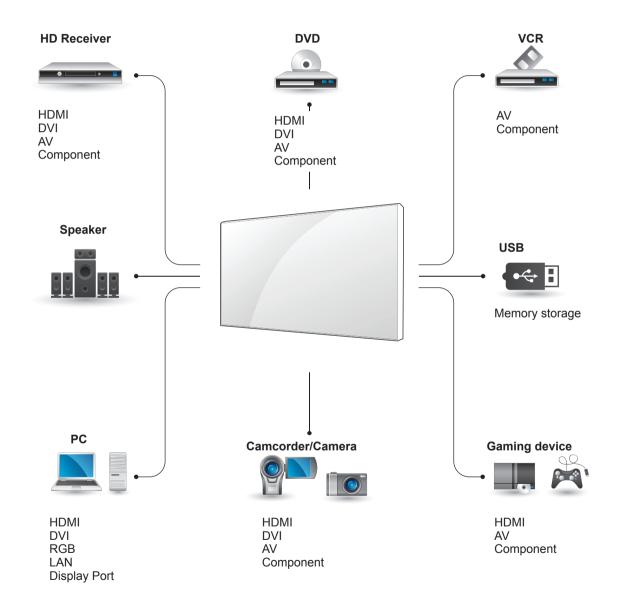


• When setting the Player Name, input delay may occur if you press the buttons on the remote control continuously.

## MAKING CONNECTIONS

Connect various external devices to the ports on the monitor set's back panel.

- 1 Find an external device you want to connect to your monitor set shown on the following illustration.
- 2 Check the connection type of the external device.
- 3 Go to the appropriate illustration and check the connection details.





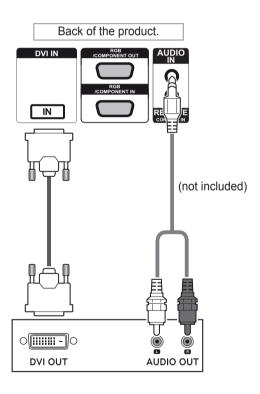
- If you connect a gaming device to the monitor set, use the cable supplied with the gaming device.
- 47WV50BS is not supporting composite(AV) signal & input.

## **External Device Connection**

Connect a HD receiver, DVD, or VCR player to the monitor set and select an appropriate input mode.

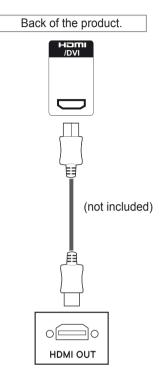
## **DVI Connection**

Transmits the digital video signal from an external device to the monitor set. Connect the external device and the monitor set with the DVI cable as shown in the following illustration. To transmit an audio signal, connect an optional audio cable.



## **HDMI Connection**

Transmits the digital video and audio signals from an external device to the monitor set. Connect the external device and the monitor set with the HDMI cable as shown on the following illustration.

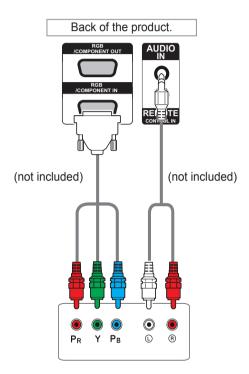




- Use a High Speed HDMI®<sub>/</sub>™ Cable.
- High Speed HDMI<sup>®</sup>/<sup>™</sup> Cables are tested to carry an HD signal up to 1080p and higher.
- Use a certified cable with the HDMI logo attached. If you do not use a certified HDMI cable, the screen may not display or a connection error may occur.
- Recommended HDMI cable types
  - High-Speed HDMI®/™ cable
  - High-Speed HDMI®/™ cable with Ethernet

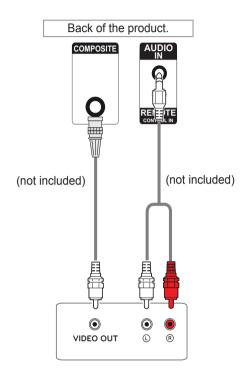
## **Component Connection**

Transmits the analog video and audio signals from an external device to the monitor set. Connect the external device and the monitor set with the RGB-Component cable as shown in the following illustration.



## **AV(CVBS)** Connection

Transmits the analog video and audio signals from an external device to the monitor set. Connect the external device and the monitor set with the composite cable as shown in the following illustration.





## **NOTE**

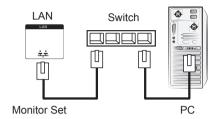
 When connecting to the component port using the shared interface, the port must match up to the input source. Otherwise, noise may occur.



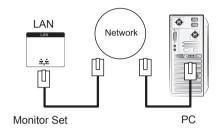
- If input signals are received through the AV cable, multiple monitors cannot be connected via the RGB OUT port.
- Input signal may be degraded or lost when multiple monitors are connected.
- For component, in general, up to 3 monitors can be connected via the Component Out port (RGB Shared) if the signal is stable and there is no cable loss.
- If you want to connect more than this number of monitors, we recommended that you use a distributor.
- 47WV50BS is not supporting composite(AV) signal & input.

# **Connecting to the LAN**

## A Using a router (Switch)

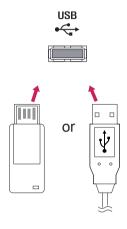


B Using the Internet.



# **Connecting to a USB**

Connect a USB storage device such as s USB flash memory, external hard drive, MP3 player, or a USB memory card reader to the monitor set and access the USB menu to use various multimedia files

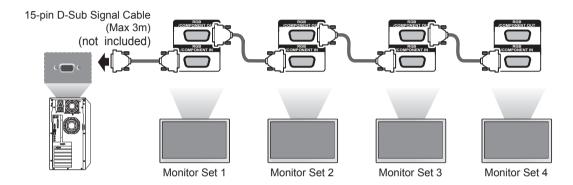


## **Daisy Chain Monitors**

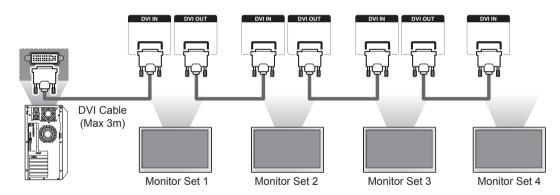
Use this function to share the RGB video signal with other monitors without having to use a separate signal splitter box.

• To use different products connected to each other Connect one end of the signal input cable (15-pin D-Sub Signal Cable) to the RGB OUT connector of product 1 and connect the other end to the RGB IN connector of other products.

## **RGB Cable**



## **DVI** Cable





- When multiple monitors are connected in RGB input, it is recommended to use a distributor to avoid signal degradation and cable loss.
- For DVI, in general, up to 12 monitors can be connected via the DVI Out port (at the recommended resolution) if the signal is stable and there is no cable loss. If you want to connect more than this number of monitors, we recommended that you use a distributor.
- When the tile mode is configured via DVI cables, only the monitor that receives first signals can play HDCP-encrypted content. (The DVI Out port does not support HDCP.)
- If the signal cable between the product and your PC is too long, make sure to use the DVI (RGB) booster or DVI (RGB) optical cable.
- If input signals are received through the HDMI/DP cable, multiple monitors cannot be connected via the DVI Out port.

# **TROUBLESHOOTING**

## No image is displayed

| Problem                                   | Resolution   |
|---|--|
| Is the product power cord connected?      | See if the power cord is properly connected to the outlet.   |
| Power is on, but the screen               | Adjust brightness and contrast again.  |
| appears extremely dark.                   | Backlight may need repair.   |
| Does the 'Invalid Format' message appear? | The signal from the PC (video card) is out of the vertical or horizontal frequency range of the product. Adjust the frequency range by referring to the Specifications in this manual.  Maximum resolution  RGB: 1920 x 1080 @ 60 Hz  HDMI/DVI/DP: 1920 x 1080 @ 60 Hz |
| Does the 'No signal' message appear?      | <ul> <li>The signal cable between PC and product is not connected. Check the signal cable.</li> <li>Press the 'INPUT' menu in the remote Control to check the input signal.</li> </ul>   |

## 'Unknown Product' message appears when the product is connected.

| Problem                     | Resolution   |  |
|-----------------------------|--|--|
| Did you install the driver? | See if the plug&play function is supported by referring to the video |  |
|                             | card user manual.  |  |

## The screen image looks abnormal.

| Problem  | Resolution  |  |
|--|---|--|
| Is the screen position wrong?                            | <ul> <li>D-Sub analog signal - Press the "AUTO" button in the remote control to automatically select the optimal screen status that fits into the current mode. If adjustment is not satisfactory, use the Position OSD menu.</li> <li>See if the video card resolution and frequency are supported by the product. If the frequency is out of range, set to the recommended resolution in the Control Panel "Display" Setting menu.</li> </ul> |  |
| Do thin lines appear on the background screen?           | D-Sub analog signal - Press the "AUTO" button in the remote control to automatically select an optimal screen status that fits into the current mode. If adjustment is not satisfactory, use the Clock OSD menu.  |  |
| Horizontal noise appears or the characters look blurred. | D-Sub analog signal - Press the "AUTO" button in the remote control to automatically select an optimal screen status that fits into the current mode. If adjustment is not satisfactory, use the Phase OSD menu.  |  |
| The screen is displayed abnormally.                      | <ul> <li>The proper input signal is not connected to the signal port. Connect<br/>the signal cable that matches with the source input signal.</li> </ul>  |  |

## After-image appears on the product.

| Problem                      | Resolution  |
|------------------------------|---|
| After-image appears when the | If you use a fixed image for a long time, the pixels may be damaged |
| product is turned off.       | quickly. Use the screen-saver function.                             |

## The audio function does not work.

| Problem            | Resolution                                    |  |
|--------------------|---|--|
| No sound?          | See if the audio cable is connected properly. |  |
|                    | Adjust the volume.                            |  |
|                    | See if the sound is set properly.             |  |
| Sound is too dull. | Select the appropriate equalize sound.        |  |
| Sound is too low.  | Adjust the volume.                            |  |

## Screen color is abnormal.

| Problem                                       | Resolution   |
|---|--|
| Screen has poor color resolution (16 colors). | Set the number of colors to more than 24 bits (true color) Select<br>Control Panel - Display - Settings - Color Table menu in Windows.   |
| Screen color is unstable or mono-colored.     | Check the connection status of the signal cable. Or, re-insert the PC video card.  |
| Do black spots appear on the screen?          | <ul> <li>Several pixels (red, green, white, or black color) may appear on the<br/>screen, which can be attributable to the unique characteristics of the<br/>LCD panel. It is not a malfunction of the LCD.</li> </ul> |

## The operation does not work normally.

| Problem                        | Resolution   |  |
|--------------------------------|--|--|
| The power suddenly turned off. | Is the sleep timer set?                              |  |
|                                | Check the power control settings. Power interrupted. |  |



## **NOTE**

The software version can be updated for improvement in performance. Customer needs to ensure
the compatibility of customer's equipment with LGE software. If needed, please consult with LGE and
upload revised software version to the product according to the guidance provided by LGE.



Image sticking does not occur when using constantly changing images but may occur when using
a fixed image for an extended period of time. Therefore, it is recommended that you use the
instructions below to decrease the likelihood of image sticking occurring when using a fixed image.
 It is recommended that you change the screen at least once every 12 hours at the very minimum; if
done more frequently, the prevention of image sticking is more effective.

## Recommended operating conditions

Change the background and the character colors using the same time interval.



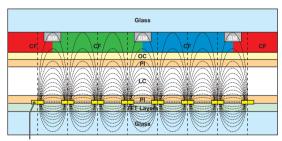
When changing colors, using complementary colors helps to prevent image sticking.

② Change the image using the same time interval.





Make sure that the characters or images before changing the image remain in the same location after changing the image.



ITO or MoTi Pixel Layer

## What is image sticking?

When the LCD panel displays a static image for an extended period of time, it can cause a voltage difference between the electrodes that operate the liquid crystals. When the voltage difference between the electrodes builds up over time, liquid crystals have a tendency to remain aligned in one direction. During this process, a previously displayed image remains visible. This phenomenon is referred to as image sticking.

# **SPECIFICATIONS**

| LCD Panel         | Screen Type            | 119 cm Wide TFT (Thin Film Transistor)  |  |
|-------------------|------------------------|---|--|
| LCD Fallel        | Scieen Type            | LCD (Liquid Crystal Display) Panel.   |  |
|                   |                        | Visible diagonal size : 119 cm  |  |
|                   | Pixel Pitch            | 0.5415 mm (H) x 0.5415 mm (V)   |  |
| Vista a Oissa al  |                        |   |  |
| Video Signal      | Max. Resolution        | RGB: 1920 x 1080 @ 60 Hz  |  |
|                   |                        | HDMI/DVI/DP: 1920 x 1080 @ 60 Hz  |  |
|                   | Recommended Resolution | - It may not be supported depending on the OS or video card type.  RGB: 1920 x 1080 @ 60 Hz |  |
|                   | Recommended Resolution | HDMI/DVI/DP: 1920 x 1080 @ 60 Hz  |  |
|                   |                        | - It may not be supported depending on the OS or video card type.                           |  |
|                   | Horizontal Frequency   | RGB: 30 kHz to 83 kHz   |  |
|                   | Tionzontari requestoy  | HDMI/DVI/DP: 30 kHz to 83 kHz   |  |
|                   | Vertical Frequency     | RGB: 50 Hz to 75 Hz   |  |
|                   | vertical Frequency     | HDMI/DVI/DP: 56 Hz to 60 Hz   |  |
|                   | Synchronization Type   | Separate Sync, Composite(AV) Sync, Digital, SOG   |  |
|                   | Synomical Edition Type | (*47WV50BS is not supporting Composite(AV) signal and input.)                               |  |
| Input Connector   |                        | 15-pin D-Sub type (RGB / Component ), HDMI/DVI/DP(digital),                                 |  |
| Imput Connector   |                        | Composite(AV), RS-232C, LAN, USB  |  |
|                   |                        | (*47WV50BS is not supporting Composite(AV) signal and input.)                               |  |
| Power             | Power Rating           | (,,,,,,,  |  |
|                   | 47WV50BR / 47WV50BS    | AC 100-240 V~, 50 / 60 Hz 1.5 A   |  |
|                   | 47WV50MS               | AC 100-240 V~, 50 / 60 Hz 1.8 A   |  |
|                   | Power Consumption      |   |  |
|                   | 47WV50BR               | On Mode : 150 W Typ. 190 W Max  |  |
|                   | 47WV50BS               | Smart Energy Saving Mode : 80 W Typ.  |  |
|                   |                        | Off Mode : ≤ 0.5 W  |  |
|                   |                        | Sleep Mode : ≤ 0.7 W  |  |
|                   | 47WV50MS               | On Mode: 160 W Typ. 200 W Max   |  |
|                   |                        | Smart Energy Saving Mode : 90 W Typ.  |  |
|                   |                        | Off Mode : ≤ 0.5 W  |  |
|                   |                        | Sleep Mode : ≤ 0.7 W  |  |
| Dimensions        |                        |   |  |
| (Width x Height x |                        | * Wall Bracket available VESA   |  |
| Depth) / Weight   | H                      | 600 x 400   |  |
|                   | <u> </u>               | J   |  |
|                   |                        | →<br>D  |  |
|                   | 47WV50BR / 47WV50BS    | 1044.9 mm X 590.0 mm X 89.9 mm / 18.5 Kg  |  |
|                   | 47WV50MS               | 1044.9 mm X 590.0 mm X 89.9 mm / 18.7 Kg  |  |
| Embedded battery  |                        | Applied   |  |
| Environmental     | Operating Temperature  | 0 °C to 40 °C   |  |
| conditions        | Operating Humidity     | 10 % to 80 %  |  |
|                   | Storage Temperature    | -20 °C to 60 °C   |  |
|                   | Storage Humidity       | 5 % to 95 %   |  |
|                   |                        |   |  |

## \* Applicable only for models that support the speakers

| Audio | RMS Audio Output  | 10 W + 10 W (R + L) |
|-------|-------------------|---------------------|
|       | Input Sensitivity | 0.7 Vrms            |
|       | Speaker Impedance | 8 Ω                 |

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

## RGB (PC) supported mode

| Resolution  | Horizontal<br>Frequency(kHz) | Vertical<br>Frequency(Hz) |
|-------------|------------------------------|---------------------------|
| 640 x 480   | 31.469                       | 59.94                     |
| 640 x 480   | 37.5                         | 75                        |
| 720 x 400   | 31.468                       | 70.8                      |
| 800 x 600   | 37.879                       | 60.317                    |
| 800 x 600   | 46.875                       | 75                        |
| 832 x 624   | 49.725                       | 74.55                     |
| 1024 x 768  | 48.363                       | 60                        |
| 1024 x 768  | 60.123                       | 75.029                    |
| 1280 x 720  | 44.772                       | 59.855                    |
| 1366 x 768  | 47.7                         | 60                        |
| 1280 x 1024 | 63.981                       | 60.02                     |
| 1280 x 1024 | 79.98                        | 75.02                     |
| 1680 x 1050 | 65.290                       | 59.954                    |
| 1920 x 1080 | 67.5                         | 60                        |

## **DTV Mode**

| Resolution | Component | HDMI/DVI (DTV) |
|------------|-----------|----------------|
| 480i       | 0         | х              |
| 576i       | 0         | x              |
| 480p       | 0         | О              |
| 576p       | О         | 0              |
| 720p       | 0         | О              |
| 1080i      | 0         | 0              |
| 1080p      | 0         | 0              |

## HDMI/DVI/Display Port(PC) supported mode

| Resolution  | Horizontal<br>Frequency(kHz) | Vertical<br>Frequency(Hz) |
|-------------|------------------------------|---------------------------|
| 640 x 480   | 31.469                       | 59.94                     |
| 800 x 600   | 37.879                       | 60.317                    |
| 1024 x 768  | 48.363                       | 60                        |
| 1280 x 720  | 44.772                       | 59.855                    |
| 1366 x 768  | 47.7                         | 60                        |
| 1280 x 1024 | 63.981                       | 60.02                     |
| 1680 x 1050 | 65.290                       | 59.954                    |
| 1920 x 1080 | 67.5                         | 60                        |



## NOTE

 When the cable is connected to the DVI, HDMI or the Display Port, you can select the PC/DTV mode optionally. It is recommended you to set to the PC mode when connecting to PC; the DTV mode when connecting to DTV.



- Vertical frequency: To enable the user to watch the product display, screen image should be changed tens of times every second like a fluorescent lamp. The vertical frequency or refresh rate is the times of image display per second. The unit is Hz.
- Horizontal frequency: The horizontal interval is the time to display one vertical line. When 1 is divided by the horizontal interval, the number of horizontal lines displayed every second can be tabulated as the horizontal frequency. The unit is kHz.

# **IR CODES**

- All models do not support the HDMI/USB function.
- Some key codes are not supported depending on the model.

| Code (Hexa) | Function                        | Note       |  |  |
|-------------|---------------------------------|------------|--|--|
| 08          | () Power                        | R/C BUTTON |  |  |
| 0B          | INPUT                           | R/C BUTTON |  |  |
| C4          | MONITOR ON                      | R/C BUTTON |  |  |
| C5          | MONITOR OFF                     | R/C BUTTON |  |  |
| 95          | ENERGY SAVING (e\overline{\pi}) | R/C BUTTON |  |  |
| DC          | 3D                              | R/C BUTTON |  |  |
| 10 to 19    | Number Key 0 to 9               | R/C BUTTON |  |  |
| 32          | 1/a/A                           | R/C BUTTON |  |  |
| 2F          | CLEAR                           | R/C BUTTON |  |  |
| 02          | Volume (+)                      | R/C BUTTON |  |  |
| 03          | Volume ( - )                    | R/C BUTTON |  |  |
| 79          | ARC                             | R/C BUTTON |  |  |
| 99          | AUTO                            | R/C BUTTON |  |  |
| 09          | MUTE                            | R/C BUTTON |  |  |
| E0          | BRIGHTNESS ^ (Page UP)          | R/C BUTTON |  |  |
| E1          | BRIGHTNESS > (Page Down)        | R/C BUTTON |  |  |
| 4D          | PSM                             | R/C BUTTON |  |  |
| AA          | INFO ①                          | R/C BUTTON |  |  |
| 5F          | W.BAL                           | R/C BUTTON |  |  |
| 43          | SETTINGS                        | R/C BUTTON |  |  |
| 40          | Up ▲                            | R/C BUTTON |  |  |
| 41          | Down ▼                          | R/C BUTTON |  |  |
| 07          | Left ◀                          | R/C BUTTON |  |  |
| 06          | Right ▶                         | R/C BUTTON |  |  |
| 3F          | S.MENU                          | R/C BUTTON |  |  |
| 44          | OK                              | R/C BUTTON |  |  |
| 28          | BACK                            | R/C BUTTON |  |  |
| 5B          | EXIT                            | R/C BUTTON |  |  |
| 7E          | SIMPLINK                        | R/C BUTTON |  |  |
| 7B          | TILE                            | R/C BUTTON |  |  |
| B1          |                                 | R/C BUTTON |  |  |
| В0          | <b>&gt;</b>                     | R/C BUTTON |  |  |
| BA          | II                              | R/C BUTTON |  |  |
| 8F          | 4                               | R/C BUTTON |  |  |
| 8E          | <b>&gt;</b>                     | R/C BUTTON |  |  |
| 72          | Red Key (PICTURE ID ON)         | R/C BUTTON |  |  |
| 71          | Green Key (PICTURE ID OFF)      | R/C BUTTON |  |  |
| 63          | Yellow Key                      | R/C BUTTON |  |  |
| 61          | Blue Key                        | R/C BUTTON |  |  |

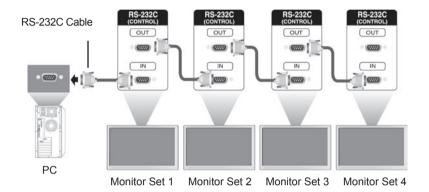
## CONTROLLING THE MULTIPLE PRODUCT

- Use this method to connect several products to a single PC. You can control several products at one time by connecting them to a single PC.
- In the Option menu, Set ID must be between 1 and 255 without being duplicated.

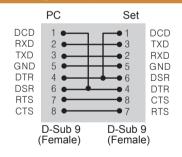
## Connecting the cable

Connect the RS-232C cable as shown in the picture.

 The RS-232C protocol is used for communication between the PC and product. You can turn the product on/off, select an input source or adjust the OSD menu from your PC.



## **RS-232C Configurations**





· When using 3-wire connections (nonstandard), an IR daisy chain cannot be used.

## **Communication Parameter**

· Baud Rate: 9600 BPS Data Length: 8 bit · Parity Bit: None · Stop Bit: 1 bit Flow Control: None

 Communication Code: ASCII code Use a crossed (reverse) cable

# **Command Reference List**

|                                    | COMMAND |   | DATA                               |
|------------------------------------|---------|---|------------------------------------|
|                                    | 1       | 2 | (Hexadecimal)                      |
| 01. Power                          | k       | а | 00 to 01                           |
| 02. Input Select                   | Х       | b | Refer to 'Input Select.'           |
| 03. Aspect Ratio                   | k       | С | Refer to 'Aspect Ratio.'           |
| 04. Energy Saving                  | j       | q | Refer to 'Energy Saving.'          |
| 05. Picture mode                   | d       | х | Refer to 'Picture mode.'           |
| 06. Contrast                       | k       | g | 00 to 64                           |
| 07. Brightness                     | k       | h | 00 to 64                           |
| 08. Sharpness                      | k       | k | 00 to 64                           |
| 09. Color                          | k       | i | 00 to 64                           |
| 10. Tint                           | k       | j | 00 to 64                           |
| 11. Color Temperature              | Х       | u | 00 to 64                           |
| 12. H Position                     | f       | q | 00 to 64                           |
| 13. V Position                     | f       | r | 00 to 64                           |
| 14. H Size                         | f       | s | 00 to 64                           |
| 15. Auto configuration             | j       | u | 01                                 |
| 16. Balance                        | k       | t | 00 to 64                           |
| 17. Sound mode                     | d       | у | Refer to 'Sound mode.'             |
| 18. Treble                         | k       | r | 00 to 64                           |
| 19. Bass                           | k       | S | 00 to 64                           |
| 20. Speaker                        | d       | V | 00 to 01                           |
| 21. Volume Mute                    | k       | е | 00 to 01                           |
| 22. Volume Control                 | k       | f | 00 to 64                           |
| 23. Time 1(Years/ Months/ Days)    | f       | а | Refer to 'Time 1.'                 |
| 24. Time 2(Hours/ Minutes/Seconds) | f       | х | Refer to 'Time 2.'                 |
| 25. Off Timer(Repeat mode/ Time)   | f       | е | Refer to 'Off Timer.'              |
| 26. On Timer(Repeat Mode/ Time)    | f       | d | Refer to 'On Timer.'               |
| 27. On Timer Input                 | f       | u | Refer to 'On Timer Input.'         |
| 28. Sleep Time                     | f       | f | 00 to 08                           |
| 29. Power On Delay                 | f       | h | 00 to 64                           |
| 30. Automatic Standby              | m       | n | 00 to 01                           |
| 31. Auto Off                       | f       | g | 00 to 01                           |
| 32. Language                       | f       | i | Refer to 'Language.'               |
| 33. Power Indicator(Standby Light) | f       | 0 | 00 to 01                           |
| 34. Power Indicator(Power Light)   | f       | р | 00 to 01                           |
| 35. ISM mode                       | j       | р | Refer to 'ISM Method.'             |
| 36. Fail Over Select               | m       | i | 00 to 02                           |
| 37. Fail Over Input Select         | m       | j | Refer to 'Fail Over Input Select.' |
| 38. Reset                          | f       | k | 00 to 02                           |

|                                      | COMMAND |   | DATA   |
|--------------------------------------|---------|---|--|
|                                      | 1       | 2 | (Hexadecimal)                                |
| 39. Tile Mode                        | d       | d | 00 to 01                                     |
| 40. Tile Mode Check                  | d       | Z | FF   |
| 41. Tile ID                          | d       | i | Refer to 'Tile ID.'                          |
| 42. Tile H Position                  | d       | е | 00 to 32                                     |
| 43. Tile V Position                  | d       | f | 00 to 32                                     |
| 44. Tile H Size                      | d       | g | 00 to 32                                     |
| 45. Tile V Size                      | d       | h | 00 to 32                                     |
| 46. Natural Mode (In Tile mode)      | d       | j | 00 to 01                                     |
| 47. DPM Select                       | f       | j | 00 to 01                                     |
| 48. FAN Control                      | d       | 0 | 00 to 03                                     |
| 49. FAN Fault Check                  | d       | W | FF   |
| 50. Temperature Value                | d       | n | FF   |
| 51. Remote Lock/ key Lock            | k       | m | 00 to 01                                     |
| 52. Key                              | m       | С | Refer to 'Key.'                              |
| 53. OSD Select                       | k       | I | 00 to 01                                     |
| 54. Elapsed time return              | d       | I | FF   |
| 55. Serial No. Check                 | f       | у | FF   |
| 56. S/W Version                      | f       | z | FF   |
| 57. White Balance Red Gain           | j       | m | 00 to FE                                     |
| 58. White Balance Green Gain         | j       | n | 00 to FE                                     |
| 59. White Balance Blue Gain          | j       | 0 | 00 to FE                                     |
| 60. Backlight                        | m       | g | 00 to 64                                     |
| 61. PC Power Control                 | d       | t | 00 to 01                                     |
| 62. PC Power                         | d       | S | 00 to 01                                     |
| 63. Easy Brightness Control Mode     | S       | m | 00 to 01                                     |
| 64. Easy Brightness Control Schedule | S       | s | Refer to 'Easy Brightness Control Schedule.' |
| 65. Status check                     | S       | V | Refer to 'Status check.'                     |
| 66. BLU Maintenance                  | m       | t | 00 to 01                                     |
| 67. Screen mute                      | k       | d | 00 to 01                                     |
| 68. Daylight Saving                  | s       | d | Refer to 'Daylight Saving.'                  |

- Note: During USB operations such as Dvix or EMF, all commands except Power (k a) and Key (m c) are not executed and treated as NG.
- Some commands are not supported depending on the model.
- The 'f f' command which shows the status of a certain command does not display the OSD as the result in order to be compatible with SuperSign program.

## **Transmission / Receiving Protocol**

## **Transmission**

[Command1][Command2][][Set ID][][Data][Cr]

- \* [Command1]: First command to control the set.
- \* [Command2]: Second command to control the set.
- \* [Set ID]: Set ID with which you want to communicate. Enter [Set ID] = '00(0x00' to communicate with all sets regardless of their Set ID numbers.
- \* [Data]: Information passed to the set.
- \* [Data1]: Information passed to the set.
- \* [Data2]: Information passed to the set.
- \* [Data3]: Information passed to the set.
- \* [Cr]: Carriage Return. ASCII code '0x0D'.
- \* []: ASCII code space '0x20'

## Acknowledgement

[Command2][ ][Set ID][ ][OK/NG][Data][x]

- \* When the product receives data normally, it sends an acknowledgement (ACK) in the format above. If data is in read mode, it indicates the data that shows the current status. If data is in read mode, it simply indicates the data that is sent from the PC.
- \* If a command is sent with Set ID '00' (=0x00), the data is reflected to all monitor sets and they do send any acknowledgement (ACK).
- \* If the data value 'FF' is sent in control mode via RS-232C, the current setting value of a function can be checked (only for some functions).
- \* Some commands are not supported depending on the model.

## 01. Power (Command: k a)

To control the Power On/Off the display.

#### Transmission

#### [k][a][ ][Set ID][ ][Data][Cr]

Data 00 : Off 01 : On

## Acknowledgement

#### [a][ ][Set ID][ ][OK/NG][Data][x]

- \* Only when the monitor set is fully powered on, the Acknowledgement signal is returned properly.
- \* There may be a certain time of delay between the Transmission and Acknowledgement signals.

## 02. Input Select (Command: x b)

To select the Input Source for display.

#### Transmission

## [x][b][ ][Set ID][ ][Data][Cr]

Data 20: Input (AV) 40: Component

60: RGB

70: DVI-D(PC) 80: DVI-D(DTV)

90: HDMI(HDMI1)(DTV)

A0: HDMI(HDMI1)(PC)

C0: Display Port(DTV)

D0: Display Port(PC)

91: HDMI2/SDI(DTV)

A1: HDMI2/SDI(PC)

B0: SuperSign

## Acknowledgement

## [b][ ][Set ID][ ][OK/NG][Data][x]

\* Some input signals may not be supported depending on the model.

## 03. Aspect Ratio (Command: k c)

To adjust the screen format.

## Transmission

#### [k][c][ ][Set ID][ ][Data][Cr]

Data 01: 4:3

02: 16:9

04: Zoom

(AV, Component, HDMI/ DVI-D/ Display Port DTV)

09: Just scan (720p or more)

(Component, HDMI/ DVI-D/ Display Port DTV)

\* RGB, DVI-D, HDMI/Display Port PC mode (1:1)

10 to 1F: Cinema Zoom 1 to 16

(AV, Component, HDMI/ DVI-D/ Display Port DTV)

- \* Available data types differ depending on the input signal. For more information, see the aspect ratio section of the owner's manual.
- \* The aspect ratio may differ depending on the model's input configuration.

## Acknowledgement

## [c][ ][Set ID][ ][OK/NG][Data][x]

## 04. Energy Saving (Command: j q)

To set the Energy Saving function.

#### Transmission

## [i][q][ ][Set ID][ ][Data][Cr]

Data 00: Off

01: Minimum

02: Medium

03. Maximum

04: Auto

05. Screen Off

# Acknowledgement [q][ ][Set ID][ ][OK/NG][Data][x]

\*\* It may not be supported depending on the model.

## 05. Picture Mode (Command: d x)

To select the Picture Mode.

#### Transmission

## [d][x][ ][Set ID][ ][Data][Cr]

Data 00: Vivid

01: Standard

02. Cinema

03. Sport

04: Game

#### Acknowledgement

[x][ ][Set ID][ ][OK/NG][Data][x]

## 06. Contrast (Command: k g)

To adjust the screen contrast.

#### Transmission

## [k][g][][Set ID][][Data][Cr]

Data 00 to 64: Contrast 0 to 100

#### Acknowledgement

## [g][ ][Set ID][ ][OK/NG][Data][x]

## 07. Brightness (Command: k h)

To adjust the screen brightness.

Transmission

[k][h][ ][Set ID][ ][Data][Cr]

Data 00 to 64: Brightness 0 to 100

Acknowledgement

[h][ ][Set ID][ ][OK/NG][Data][x]

## 10. Tint (Command: k j)

To adjust the screen tint.

\* This function is available only in AV/Component input.

Transmission

[k][j][ ][Set ID][ ][Data][Cr]

Data 00 to 64: Tint R50 to G50

Acknowledgement

[i][ ][Set ID][ ][OK/NG][Data][x]

#### 08. Sharpness (Command: k k)

To adjust the screen sharpness.

\* This function is available only in AV/Component input.

Transmission

[k][k][ ][Set ID][ ][Data][Cr]

Data 00 to 64: Sharpness 0 to 100

Acknowledgement

[k][][Set ID][][OK/NG][Data][x]

## 11. Color Temperature (Command: x u)

To adjust the screen Color Temperature.

Transmission

[x][u][ ][Set ID][ ][Data][Cr]

Data 00 to 64: Warm 50 to Cool 50

Acknowledgement

[u][][Set ID][][OK/NG][Data][x]

## 09. Color (Command: k i)

To adjust the screen color.

\* This function is available only in AV/Component input.

Transmission

[k][i][ ][Set ID][ ][Data][Cr]

Data 00 to 64. Color 0 to 100

Acknowledgement

[i][ ][Set ID][ ][OK/NG][Data][x]

## 12. H Position (Command: f q)

To adjust the screen Horizontal Position.

- \* This function is available only when the Tile Mode is set to Off.
- \* The operational range varies depending on the RGB input resolution.

(Only available for RGB-PC input.)

Transmission

[f][q][][Set ID][][Data][Cr]

Data 00 to 64: min. -50 (Left) to max. 50 (Right)

Acknowledgement

[q][][Set ID][][OK/NG][Data][x]

## 13. V Position (Command: fr)

To adjust the screen Vertical Position.

- \* This function is available only when the Tile Mode is set to Off.
- \* The operational range varies depending on the RGB input resolution.

(Only available for RGB-PC input.)

#### Transmission

## [f][r][ ][Set ID][ ][Data][Cr]

Data 00 to 64: min. -50 (Bottom) to max. 50 (Top)

Acknowledgement

[r][][Set ID][][OK/NG][Data][x]

## 16. Balance (Command: k t)

To adjust the sound balance.

## Transmission

#### [k][t][ ][Set ID][ ][Data][Cr]

Data 00 to 64: Left 50 to Right 50

Acknowledgement

[t][ ][Set ID][ ][OK/NG][Data][x]

## 14. H Size (Command: f s)

To adjust the screen Horizontal Size.

- \* This function is available only when the Tile Mode is set to Off.
- \* The operational range varies depending on the RGB input resolution.

(Only available for RGB-PC input.)

#### Transmission

#### [f][s][][Set ID][][Data][Cr]

Data 00 - 64: Min. -50 (Reduce) - Max. 50 (Expand)

## Acknowledgement

## [s][ ][Set ID][ ][OK/NG][Data][x]

## 17. Sound Mode (Command: d y)

To select the Sound Mode.

## Transmission

## [d][y][][Set ID][][Data][Cr]

Data 01: Standard

02: Music

03: Cinema

04: Sport

05. Game

## Acknowledgement

[y][ ][Set ID][ ][OK/NG][Data][x]

## 15. Auto Configuration (Command: j u)

To adjust the picture position and minimize image shaking automatically.

(Only available for RGB-PC input.)

## Transmission

#### [j][u][ ][Set ID][ ][Data][Cr]

Data 01: Set

#### Acknowledgement

[u][][Set ID][][OK/NG][Data][x]

#### 18. Treble (Command: k r)

To adjust the Treble values.

#### Transmission

[k][r][ ][Set ID][ ][Data][Cr]

Data 00 to 64: Treble 0 to 100

Acknowledgement

[r][ ][Set ID][ ][OK/NG][Data][x]

## 19. Bass (Command: k s)

To adjust the Bass values.

Transmission

[k][s][][Set ID][][Data][Cr]

Data 00 to 64: Bass 0 to 100

Acknowledgement

[s][ ][Set ID][ ][OK/NG][Data][x]

## 22. Volume Control (Command: k f)

To set the playback volume.

Transmission

[k][f][ ][Set ID][ ][Data][Cr]

Data 00 to 64: Volume 0 to 100

Acknowledgement

[f][ ][Set ID][ ][OK/NG][Data][x]

## 20. Speaker (Command: d v)

To select the speaker on/off.

Transmission

[d][v][][Set ID][][Data][Cr]

Data 00: Off

01: On

Acknowledgement

[v][ ][Set ID][ ][OK/NG][Data][x]

## 23. Time 1(Year/ Month/ Day) (Command: f a)

To set the Time 1(Year/ Month/ Day) values.

Transmission

## [f][a][ ][Set ID][ ][Data1][ ][Data2][ ][Data3][Cr]

Data 1 00 to 14: 2010 to 2030

Data 2 01 to 0C: January to December

Data 3 01 to 1F: 1 to 31

\* Enter "fa [Set ID] ff" for checking Time 1(Year/ Month/ Day) values.

Acknowledgement

[a][ ][Set ID][ ][OK/NG][Data1][Data2][Data3][x]

## 21. Volume Mute (Command: k e)

To control the Volume Mute on/off.

Transmission

## [k][e][ ][Set ID][ ][Data][Cr]

Data 00 : Mute (Volume Off)

01: Current volume (Volume On)

Acknowledgement

[e][ ][Set ID][ ][OK/NG][Data][x]

## 24. Time 2(Hour/ Minute/ Second) (Command: f x)

To set the Time 2(Hour/ Minute/ Second) values.

Transmission

## [f][x][ ][Set ID][ ][Data1][ ][Data2][ ][Data3][Cr]

Data1 00 to 17: 00 to 23 hours Data2 00 to 3B: 00 to 59 minutes

Data3 00 to 3B: 00 to 59 seconds

Day) has not been set in advance.

\* Enter "fx [Set ID] ff" for checking Time 2(Hour/ Minute/ Second) values.

\*\* This command won't work if Time 1(Year/ Month/

Acknowledgement

[x][ ][Set ID][ ][OK/NG][Data1][Data2][Data3][x]

## 25. Off Timer(Repeat Mode/ Time) (Command: f e)

To set the Off Timer(Repeat Mode/ Time) function.

#### Transmission

#### [f][e][ ][Set ID][ ][Data1][ ][Data2][ ][Data3][Cr]

Data1

1. F1 to F7 (Read data)

F1: Read the 1st Off Time data

F2: Read the 2nd Off Time data

F3: Read the 3rd Off Time data

F4: Read the 4th Off Time data

F5: Read the 5th Off Time data

F6: Read the 6th Off Time data

F7: Read the 7th Off Time data

2. E1-E7 (Delete one index), E0 (Delete all indexes)

E0: Delete all Off Time data

E1: Delete the 1st Off Time data

E2: Delete the 2nd Off Time data

E3: Delete the 3rd Off Time data

E4: Delete the 4th Off Time data

E5: Delete the 5th Off Time data

E6: Delete the 6th Off Time data E7: Delete the 7th Off Time data

3. 01 to 0C (Set the day of week for Off Time)

00: Off

01: Once

02. Daily

03: Monday to Friday

04: Monday to Saturday

05: Saturday to Sunday

06. Sunday

07. Monday

08. Tuesday

09. Wednesday

0A. Thursday

0B. Friday

0C. Saturday

Data2 00 to 17: 00 to 23 Hours

Data3 00 to 3B: 00 to 59 Minutes

\* To read or delete the Off Time list, set FFH for [Data2] and [Data3].

(Example 1: fe 01 f1 ff ff - Read the 1st Off Time data.)

(Example 2: fe 01 e1 ff ff - Delete the 1st Off Time data.)

(Example 3: fe 01 04 02 03 - Set the Off Time to "Monday to Saturday, 02:03".)

\* This function is supported only when 1 (Year/Month/ Day) and 2 (Hour/Minute/Second) are set.

## Acknowledgement

## [e][ ][Set ID][ ][OK/NG][Data1][Data2][Data3][x]

## 26. On Timer(Repeat Mode/ Time) (Command: f d)

To set the On Timer(Repeat mode/ Time) function.

#### Transmission

#### [f][d][ ][Set ID][ ][Data1][ ][Data2][ ][Data3][Cr]

Data1

1. F1 to F7 (Read data)

F1: Read the 1st On Time data

F2: Read the 2nd On Time data

F3: Read the 3rd On Time data

F4: Read the 4th On Time data

F5: Read the 5th On Time data

F6: Read the 6th On Time data

F7: Read the 7th On Time data

2. E1-E7 (Delete one index), E0 (Delete all indexes)

E0: Delete all On Time data

E1: Delete the 1st On Time data

E2: Delete the 2nd On Time data

E3: Delete the 3rd On Time data

E4: Delete the 4th On Time data

E5: Delete the 5th On Time data

E6: Delete the 6th On Time data E7: Delete the 7th On Time data

3. 01 to 0C (Set the day of week for On Time)

00: Off

01: Once

02. Daily

03: Monday to Friday

04: Monday to Saturday

05: Saturday to Sunday

06. Sunday

07. Monday

08. Tuesday

09. Wednesday

0A. Thursday

0B. Friday

0C. Saturday

Data2 00 to 17: 00 to 23 Hours

Data3 00 to 3B: 00 to 59 Minutes

\* To read or delete the Off Time list, set FFH for [Data2] and [Data3].

(Example 1: fd 01 f1 ff ff - Read the 1st On Time data.)

(Example 2: fd 01 e1 ff ff - Delete the 1st On Time data.)

(Example 3: fd 01 04 02 03 - Set the On Time to "Monday to Saturday, 02:03".)

\* This function is supported only when 1 (Year/Month/ Day) and 2 (Hour/Minute/Second) are set.

## Acknowledgement

## [d][ ][Set ID][ ][OK/NG][Data1][Data2][Data3][x]

## 27. On Timer Input (Command: f u)

To select an external input for the current On Time setting and add a new schedule or change the existing schedule.

#### Transmission

## [f][u][ ][Set ID][ ][Data1][Cr]

## [f][u][ ][Set ID][ ][Data1][Data2][Cr]

Data (Add schedule)

20: Input (AV)

40: Component

60. RGB

70: DVI-D

90: HDMI (HDMI1)

C0: Display Port

91: HDMI2/SDI

B0:SuperSign

Data1 (Change schedule)

1. F1 to F7 (Read data)

F1: Select the 1st schedule input

F2: Select the 2nd schedule input

F3: Select the 3rd schedule input

F4: Select the 4th schedule input

F5: Select the 5th schedule input

F6: Select the 6th schedule input

F7: Select the 7th schedule input

Data2

20: Input (AV)

40: Component

60: RGB

70: DVI-D

90: HDMI (HDMI1)

C0: Display Port

91: HDMI2/SDI

B0:SuperSign

\* To read the schedule input, enter FFH for [Data2]. If no schedule is available for [Data1] when attempting to read or change the schedule data, the text NG will be displayed and the operation fails. (Example 1: fu 01 60 - Move each schedule input down one row and save the 1st schedule input in RGB mode.)

(Example 2: fu 01 f1 ff - Read the 1st schedule input.)

(Example 3: fu 01 f3 20 - Change the 3rd data schedule input to the current On Time and AV input. If there is no third schedule, the text NG will be displayed and the operation fails.)

\* This function is supported only when 1 (Year/ Month/Day), 2 (Hour/Minute/Second), On Time (Repeat Mode/Time) are set.

\*\* It may not be supported depending on the model.

#### Acknowledgement

#### [u][][Set ID][][OK/NG][Data][x]

## [u][ ][Set ID][ ][OK/NG][Data1][Data2][x]

#### 28. Sleep Time (Command: f f)

To set the Sleep Time.

#### Transmission

#### [f][f][ ][Set ID][ ][Data][Cr]

Data 00: Off (Sleep Timer off)

01: 10 min.

02: 20 min.

03: 30 min.

04: 60 min.

05: 90 min.

06: 120 min. 07: 180 min.

08: 240 min.

#### Acknowledgement

## [f][ ][Set ID][ ][OK/NG][Data][x]

#### 29. Power On Delay (Command: f h)

To set the schedule delay when the power is turned on. (Unit: Second)

#### Transmission

#### [f][h][ ][Set ID][ ][Data][Cr]

Data 00 to 64: min. 0 to max. 100 (sec.)

#### Acknowledgement

## [h][][Set ID][][OK/NG][Data][x]

## 30. Automatic Standby (Command: m n)

To set the Automatic Standby function.

Transmission

#### [m][n][ ][Set ID][ ][Data][Cr]

Data 00: Off (No off after 4 hours)

01: 4 Hours (Off after 4 hours)

## Acknowledgement

[n][ ][Set ID][ ][OK/NG][Data][x]

## 31. Auto Off (Command: f g)

To set the Auto Off function.

Transmission

#### [f][g][][Set ID][][Data][Cr]

Data 00: Off (No off after 15 minutes)

01: 15 min.(Off after 15 minutes)

#### Acknowledgement

#### [g][ ][Set ID][ ][OK/NG][Data][x]

## 32. Language (Command: fi)

To set the language for OSD.

Transmission

## [f][i][ ][Set ID][ ][Data][Cr]

Data 00: Czech

01: Danish

02: German

03: English

04: Spanish (EU)

05: Greek

06: French

07: Italian

08: Dutch

09: Norwegian

0A: Portuguese

0B: Portuguese (BR)

0C: Russian

0D: Finnish

0E: Swedish

0F: Korean 10: Chinese (Mandarin)

11: Japanese

12: Yue Chinese (Cantonese)

## Acknowledgement

## [i][][Set ID][][OK/NG][Data][x]

## 34. Power Indicator (Power Light) (Command: f p)

To set the Power Indicator (Power Light) function.

#### Transmission

#### [f][p][][Set ID][][Data][Cr]

Data 00: Off

01: On

\*\* It may not be supported depending on the model.

## Acknowledgement

## [p][ ][Set ID][ ][OK/NG][Data][x]

## 35. ISM mode (Command: j p)

To select ISM method for avoiding having a fixed image remain on screen.

#### Transmission

#### [j][p][ ][Set ID][ ][Data][Cr]

Data 01: Inversion

02: Orbiter

04: White Wash

08. Normal

## Acknowledgement

## [p][ ][Set ID][ ][OK/NG][Data][x]

## 33. Power Indicator (Standby Light) (Command: f o)

To set the Power Indicator (Standby Light) function.

#### Transmission

## [f][o][ ][Set ID][ ][Data][Cr]

Data 00: Off

01: On

\*\* It may not be supported depending on the model.

## Acknowledgement

## [o][][Set ID][][OK/NG][Data][x]

## 36. Fail Over Select (Command: m i)

To set the Fail Over function.

## Transmission

## [m][i][ ][Set ID][ ][Data][Cr]

Data 00: Off

01: Auto

02: Manual

## Acknowledgement

## [i][ ][Set ID][ ][OK/NG][Data][x]

## 37. Fail Over Input Select (Command: m j)

To select the input source for auto switch.

\* This command is only available when the fail over (auto) mode is set to Custom.

#### Transmission

## [m][j][ ][Set ID][ ][Data1][ ][Data2][ ][Data3][Cr]

#### [ ][Data4][ ][Data5][Cr]

Data 1 to 5 (Priority 1 to 5)

60: RGB 70: DVI-D 90: HDMI(HDMI1) C0: Display Port 91: HDMI2/SDI

\* The number of data items differs depending on the model.

## Acknowledgement

## [j][ ][SetID][ ][OK/NG][Data1][Data2][Data3][Data4]

## [ ][Data5][x]

## 38. Reset (Command: fk)

To execute the Picture, Screen, Audio and Factory reset function.

(Screen Reset can only be performed in RGB input mode.)

#### Transmission

## [f][k][ ][Set ID][ ][Data][Cr]

Data 00: Picture Reset

01: Screen Reset

02: Factory Reset 03: Audio Reset

#### Acknowledgement

#### [k][ ][Set ID][ ][OK/NG][Data][x]

## 39. Tile Mode (Command: d d)

To set a Tile Mode and Tile Column/ Row values.

## Transmission

#### [d][d][ ][Set ID][ ][Data][Cr]

Data 00 to FF: 1st byte - Tile Row 2nd byte - Tile Column

\*00, 01, 10, 11 means Tile Mode Off

\*\* It may not be supported depending on the model.

## Acknowledgement

## [d][][Set ID][][OK/NG][Data][x]

## 40. Tile Mode Check (Command: d z)

To check Tile Mode status.

#### Transmission

#### [d][z][ ][Set ID][ ][Data][Cr]

Data FF: Check Tile Mode status.

\*\* It may not be supported depending on the model.

#### Acknowledgement

## [z][ ][Set ID][ ][OK/NG][Data1][Data2][Data3][x]

Data1 00: Tile Mode Off

01: Tile Mode On

Data2 00 to 0F: Tile Row Data3 00 to 0F: Tile Column

#### 41. Tile ID (Command: di)

To set Tile ID

## Transmission

#### [d][i][ ][Set ID][ ][Data][Cr]

Data 01 to E1: Tile ID 01 to 225\*\*

FF: Check Tile ID

\*\* Data could not be set over (Tile Column) x (Tile Row).

\*\* It may not be supported depending on the model.

## Acknowledgement

## [i][ ][Set ID][ ][OK/NG][Data][x]

\*NG will be return if data is over (Tile Column) x (Tile Row), except 0xFF.

#### 42. Tile H Position (Command: d e)

To adjust the Tile Horizontal position.

\* This function is available only when the Natural option of the Tile Mode is set to Off while the Tile Mode set to On.

#### Transmission

## [d][e][ ][Set ID][ ][Data][Cr]

Data 00 to 32: -50 (Left) to 0 (Right)

\*Left/Right values depend on Tile H size.

\*\* It may not be supported depending on the model.

## Acknowledgement

#### [e][ ][Set ID][ ][OK/NG][Data][x]

## 43. Tile V Position (Command: d f)

To adjust the Tile Vertical position.

\* This function is available only when the Natural option of the Tile Mode is set to Off while the Tile Mode set to On.

#### Transmission

#### [d][f][ ][Set ID][ ][Data][Cr]

Data 0 to 32: 0 (Bottom) to 50 (Top)

- \* Bottom/Top values depend on Tile Vertical size.
- \*\* It may not be supported depending on the model.

#### Acknowledgement

## [f][][Set ID][][OK/NG][Data][x]

## 46. Natural Mode (In Tile Mode) (Command : d j)

To display the image naturally, the part of the image that would normally be displayed in the gap between the monitors is omitted.

#### Transmission

## [d][j][ ][Set ID][ ][Data][Cr]

Data 00: Off

01: On

#### Acknowledgement

## [i][ ][Set ID][ ][OK/NG][Data][x]

## 44. Tile H Size (Command: d g)

To adjust the Tile Horizontal Size.

- \*Set Tile H Position to 0x32 before setting Tile H Size.
- \* This function is available only when the Natural option of the Tile Mode is set to Off while the Tile Mode set to On.

#### Transmission

#### [d][g][ ][Set ID][ ][Data][Cr]

Data 00 to 32: 0 to 50

\*\* It may not be supported depending on the model.

## Acknowledgement

## [g][ ][Set ID][ ][OK/NG][Data][x]

## 47. DPM Select (Command: f j)

To set the DPM (Display Power Management) function.

## Transmission

## [f][j][ ][Set ID][ ][Data][Cr]

Data 00: Off

01: On

\* Data settings may vary depending on your model as below.

Data 00: Off

01: 5 sec.

02: 10 sec.

03: 15 sec.

04: 1 min.

05: 3 min.

06: 5 min. 07: 10 min.

Acknowledgement

## [j][ ][Set ID][ ][OK/NG][Data][x]

## 45. Tile V Size (Command: d h)

To adjust the Tile Vertical size.

- \*Set Tile V Position to 0x00 before setting Tile V Size.
- \* This function is available only when the Natural option of the Tile Mode is set to Off while the Tile Mode set to On.

#### Transmission

## [d][h][ ][Set ID][ ][Data][Cr]

Data 00 to 32: 0 to 50

\*\* It may not be supported depending on the model.

## Acknowledgement

## [h][ ][Set ID][ ][OK/NG][Data][x]

#### 48. FAN Control (Command: do)

To set the Fan mode.

#### Transmission

## [d][o][ ][Set ID][ ][Data][Cr]

Data 00: Auto

01: On

02: Manual

03: Off

\*\* It may not be supported depending on the model.

## Acknowledgement

## [o][ ][Set ID][ ][OK/NG][Data][x]

## 49. FAN Fault Check (Command: d w)

To check the fan errors.

Transmission

[d][w][][Set ID][][Data][Cr]

Data FF: Read the status

Acknowledgement

[w][ ][Set ID][ ][OK/NG][Data][x]

Data 00: Fan fault

01: Fan OK

02: Model without a Fan

## 52. Key (Command: m c)

To send a key code of the IR remote control.

Transmission

[m][c][ ][Set ID][ ][Data][Cr]

Data IR\_KEY\_CODE

Acknowledgement

[c][ ][Set ID][ ][OK/NG][Data][x]

For a key code, see the IR Code.

\* Some key codes are not supported depending on the model.

## 50. Temperature Value (Command: d n)

To check the inside temperature value.

Transmission

[d][n][ ][Set ID][ ][Data][Cr]

Data FF: Check the status

Acknowledgement

[n][ ][Set ID][ ][OK/NG][Data][x]

[n][ ][Set ID][ ][OK/NG][Data1][Data2][Data3][x]

## 53. OSD Select (Command: k I)

To select OSD(On Screen Display) on/off.

Transmission

[k][l][ ][Set ID][ ][Data][Cr]

Data 00: Off 01: On

Acknowledgement

[I][ ][Set ID][ ][OK/NG][Data][x]

## 51. Remote Controller Lock/ Key Lock

(Command: k m)

When the remote control and front keys are locked in standby mode, the power cannot be turned on using the remote control or front power button.

Transmission

[k][m][ ][Set ID][ ][Data][Cr]

Data 00: Off (Lock Off)

01: On (Lock On)

\* Display will not be turned on by power on key of remote controller and front panel control keys, if key is locked on in standby mode.

Acknowledgement

[m][ ][Set ID][ ][OK/NG][Data][x]

\*\* It may not be supported depending on the model.

## 54. Elapsed time return (Command: d I)

To check the panel used time.

Transmission

[d][l][ ][Set ID][ ][Data][Cr]

Data FF: Read the status

Acknowledgement

[I][ ][Set ID][ ][OK/NG][Data][x]

\* Returned data means used hours in hexadecimal.

<sup>\*</sup> Temperature is displayed in hexadecimal.

## 55. Serial No.Check (Command: f y)

To check the Serial Numbers.

Transmission

[f][y][][Set ID][][Data][Cr]

Data FF: Check the product Serial Number

Acknowledgement

[y][ ][Set ID][ ][OK/NG][Data][x]

\* Data is ASCII code.

## 58. White Balance Green Gain (Command: j n)

To set the White Balance Green Gain.

Transmission

[j][n][ ][Set ID][ ][Data][Cr]

Data 00 to FE: Green Gain 0 to 254

Acknowledgement

[n][ ][Set ID][ ][OK/NG][Data][x]

\* Using the remote control, you can adjust the value from 0 to 255. With RS-232C, you can adjust the value from 0 to 254.

## 56. S/W Version (Command: f z)

To check the Software Version.

Transmission

[f][z][][Set ID][][Data][Cr]

Data FF: Check the Software version

Acknowledgement

[z][][Set ID][][OK/NG][Data][x]

## 59. White Balance Blue Gain (Command: j o)

To set the White Balance Blue Gain.

Transmission

[j][o][ ][Set ID][ ][Data][Cr]

Data 00 to FE: Blue Gain 0 to 254

Acknowledgement

[o][ ][Set ID][ ][OK/NG][Data][x]

\* Using the remote control, you can adjust the value from 0 to 255. With RS-232C, you can adjust the value from 0 to 254.

## 57. White Balance Red Gain (Command: j m)

To set the White Balance Red Gain.

Transmission

[j][m][][Set ID][][Data][Cr]

Data 00 to FE: Red Gain 0 to 254

Acknowledgement

[m][ ][Set ID][ ][OK/NG][Data][x]

\* Using the remote control, you can adjust the value from 0 to 255. With RS-232C, you can adjust the value from 0 to 254.

## 60. Backlight (Command: m g)

To adjust the screen backlight.

Transmission

[m][g][ ][Set ID][ ][Data][Cr]

Data 00 to 64: Backlight 0 to 100

Acknowledgement

[g][][set ID][][OK/NG][Data][x]

\*\* It may not be supported depending on the model.

#### 61. PC Power Control (Command: dt)

To control the PC power if the PC and the monitor are synchronized.

#### Transmission

#### [d][t][ ][Set ID][ ][Data][Cr]

Data

- 00: Synchronized (When the monitor is off, the PC is also turned off.)
- 01: Not synchronized (The monitor is off but the PC is on.)
- 02: Maintain the power-on state of the PC. (When you turn on the monitor while the Media Player is turned off, the Media Player is turned on.)
- \*\* It may not be supported depending on the model.

#### Acknowledgement

## [t][][Set ID][][OK][Data][x]

#### 62. PC Power (Command: d s)

Control the PC power.

#### Transmission

#### [d][s][ ][Set ID][ ][Data][Cr]

Data 00: PC is turned off.

01: PC is turned on.

\*\* It may not be supported depending on the model.

#### Acknowledgement

#### [s][ ][Set ID][ ][OK][Data][x]

## 63. Easy Brightness Control Mode (Command: s m)

Selects ON/OFF of Easy Brightness Control Mode.

#### Transmission

## [s][m][ ][Set ID][ ][Data][Cr]

Data 00: Easy Brightness Control OFF

01: Easy Brightness Control ON

- \* It does not work if the current time is not set up.
- \*\* It may not be supported, depending on the model.

#### Acknowledgement

## [m][ ][Set ID][ ][OK/NG][Data][x]

# 64. Easy Brightness Control Schedule (Command: s s)

Sets the Easy Brightness Control Schedule.

#### Transmission

## [s][s][][Set ID][][Data1][][Data2][][Data3][Cr]

Data 1

- 1. F1 F6 (Data Reading Functions)
- F1: Reads the data of the 1st Easy Brightness Control
- F2: Reads the data of the 2nd Easy Brightness Control
- F3: Reads the data of the 3rd Easy Brightness Control
- F4: Reads the data of the 4th Easy Brightness Control
- F5: Reads the data of the 5th Easy Brightness Control
- F6: Reads the data of the 6th Easy Brightness Control
- 2. E1-E6 (Deletes One Index), E0 (Delete All Indexes)
- E0: Deletes all Easy Brightness Controls
- E1: Deletes the 1st Easy Brightness Control
- E2: Deletes the 2nd Easy Brightness Control
- E3: Deletes the 3rd Easy Brightness Control
- E4: Deletes the 4th Easy Brightness Control
- E5: Deletes the 5th Easy Brightness Control
- E6: Deletes the 6th Easy Brightness Control
- Eb: Deletes the oth Easy Brightness Contro
- 3. 00-17: 00 23:00

Data2 00-3B: 00 - 59 minutes

Data3 00-64: backlight 0 - 100

\* To read or delete the configured Easy Brightness Control list, set [Data2][Data3] to FF.

(ex1: ss 01 f1 ff ff - Reads the 1st index data from the Easy Brightness Control.

ex2: ss 01 e1 ff ff - Deletes the 1st index data from the Easy Brightness Control.

ex3: ss 01 07 1E 46 - Adds a schedule to the backlight 70 at 07:30.)

#### Acknowledgement

## [s][ ][Set ID][ ][OK/NG][Data1][Data2][Data3][x]

\*\* It may not be supported, depending on the model.

#### 65. Status check (Command: s v)

Check various statuses.

#### Transmission

#### [s][v][ ][Set ID][ ][Data][ ][FF][Cr]

Data 05: Check the normal operation of No.1 and No.2 luminance sensors.

06: luminance sensor being used:

07: Check the normal operation of top, bottom, or main temperature sensors.

## Acknowledgement

#### [v][ ][Set ID][ ][OK/NG][Data][Data1][x]

When the Data is 05

Data100: All normal

01: BLU sensor 1 normal, BLU sensor 2 fail

02: BLU sensor 1 fail, BLU sensor 2 normal

03: All fail

When the Data is 06

Data100: No.1 luminance sensor is being used

01: No.2 luminance sensor is being used

#### When the Data is 07

Data100: All temperature sensors fail

01: Top normal, Bottom fail, Main fail

02: Top fail, Bottom normal, Main fail

03: Top normal, Bottom normal, Main fail

04: Top fail, Bottom fail, Main normal

05: Top normal, Bottom fail, Main fail

06: Top fail, Bottom normal, Main fail

07: All temperature sensors normal

#### When the Data is 08

#### Acknowledgement

## [v][ ][SetID][ ][OK/NG][Data][Data1][Data2][Data3][x]

Data1: Temperature of the top sensor area when the set is powered off.

Data2: Temperature of the bottom sensor area when the set is powered off.

Data3: Temperature of the main sensor area when the set is powered off.

#### When the Data is 09

#### Acknowledgement

## [v][ ][SetID][ ][OK/NG][Data][Data1][Data2][x]

Data1 00-ff: Upper 2-byte of Fan Speed Data2 00-ff: Lower 2-byte of Fan Speed Fan Speed: Hex 0-20D0, Decimal 0-8400

\*\* It may not be supported, depending on the model.

#### 66. BLU Maintenance (Command: m t)

Select ON/OFF of BLU Maintenance

#### Transmission

#### [m][t][ ][Set ID][ ][Data][Cr]

Data 00: BLU Maintenance OFF 01: BLU Maintenance ON

\*\* It may not be supported, depending on the model.

#### Acknowledgement

## [t][ ][Set ID][ ][OK/NG][Data][x]

#### 67. Screen mute (Command: k d)

Turns the screen on or off.

#### Transmission

## [k][d][][Set ID][][Data][Cr]

Data 00: Turns the screen on. 01: Turns the screen off.

#### Acknowledgement

## [d][][Set ID][][OK/NG][Data][x]

## 68. Daylight Saving (Command: s d)

To set the Daylight saving function.

#### Transmission

## [s][d][ ][Set ID][ ][Data1][ ][Data2][ ][Data3][ ][Data4] [ ][Data5][Cr]

Data 00: Off (Data2~5: FFH)

01: Start Time

02: End Time

Data2 01~0C: January to December

Data3 01~06: 1 ~ 6th week

 \* The maximum number of [Data3] differs depending on Date.

Data4 00~06 ( Sun. ~ Sat. )

Data5 00~17: 00 ~ 23 hours

\* To read the Start Time/End Time, enter FFH for [Data2]~[Data5].

(ex1: sd 01 01 ff ff ff ff - To check the Start Time ex2: sd 01 02 ff ff ff ff - To check the End Time)

\* This function is supported only when 1 (Year/Month/Day) and 2 (Hour/Minute/Second) are set.

## Acknowledgement

# [d][ ][Set ID][ ][OK/NG][Data1][Data2][Data3][Data4] [Data5][x]

<sup>\*\*</sup> It may not be supported depending on the model.



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 three (3) years from the date on which you purchased the product. Make sure to read the Safety Precautions before using the product. ENERGY STAR® is a set of power-saving guidelines issued by Keep the Owner's Manual (CD) in an the U.S.Environmental Protection Agency (EPA). accessible place for future reference. As an ENERGY STAR® Partner LGE U. S. A., The model and serial number of the SET is

MODEL SERIAL

located on the back and one side of the SET.

Record it below should you ever need service.

To obtain the source code under GPL, LGPL, MPL, and other open source licenses, that is

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

contained in this product, please visit

http://opensource.lge.com.



Inc. has determined that this product meets the ENERGY STAR® quidelines for energy efficiency. Refer to ENERGYSTAR.gov for more information on the ENERGY STAR® program.

Temporary noise is normal when powering ON or OFF this device.