



APPENDIX G
: USER'S MANUAL



LG

Life's Good

ENGLISH

OWNER'S MANUAL

MONITOR SIGNAGE

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

MONITOR SIGNAGE MODELS

47VX30MF

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LICENSES

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



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ABOUT DIVX VIDEO: DivX® is a digital video format created by DivX, LLC, a subsidiary of Rovi Corporation. This is an official DivX Certified® device that plays DivX video. Visit divx.com for more information and software tools to convert your files into DivX videos.

ABOUT DIVX VIDEO-ON-DEMAND: This DivX Certified® device must be registered in order to play purchased DivX Video-on-Demand (VOD) movies. To obtain your registration code, locate the DivX VOD section in your device setup menu. Go to vod.divx.com for more information on how to complete your registration.

DivX Certified® to play DivX® video, including premium content.

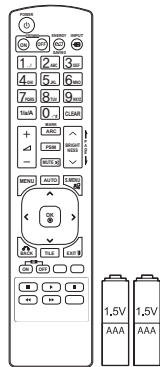
DivX®, DivX Certified® and associated logos are trademarks of Rovi Corporation or its subsidiaries and are used under license.

Covered by one or more of the following U.S. patents: 7,295,673; 7,460,668; 7,515,710; 7,519,274

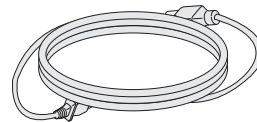
ASSEMBLING AND PREPARING

Unpacking

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



Remote control and Batteries



Power Cord



CD (Owner's Manual) / Card



D-Sub Signal Cable



CAUTION

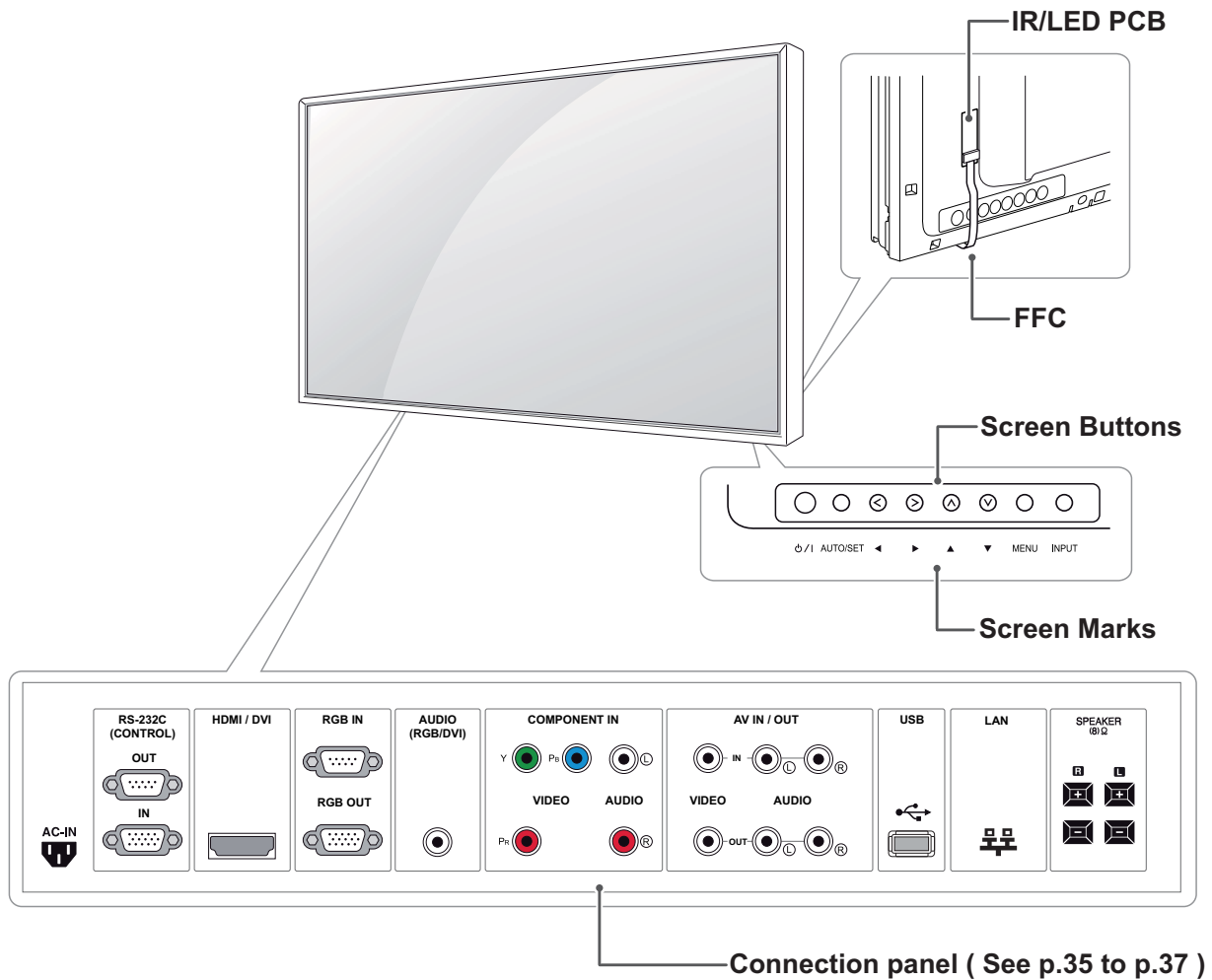
- Do not use any pirated items to ensure the safety and product life span.
- Any damages or injuries by using pirated items are not covered by the warranty.



NOTE

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

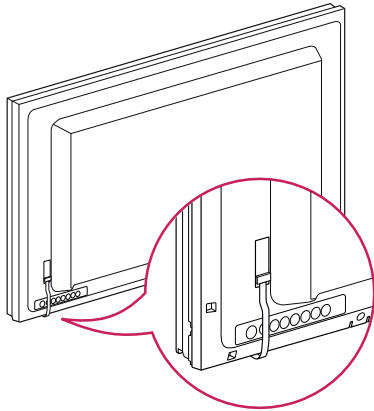
Parts and buttons



Screen Marks	Description
INPUT	Changes the input source.
MENU	Accesses the main menus, or saves your input and exits the menus.
▼ ▲	Adjust the up and down.
◀ ▶	Adjusts the volume level.
AUTO/SET	Auto setup when using RGB input. It is also the Set or enter button to make changes in the on-screen menus.
⏻ / I	Turns the power on or off.
IR Receiver	This is where the unit receives signals from the remote control.
Power Indicator	This Indicator lights up blue when the display operates normally (on mode). If the display is in sleep (Energy Saving) mode, this indicator color changes to amber.

NOTE

- You can set the Power indicator to on or off by selecting **OPTION** in the main menu.

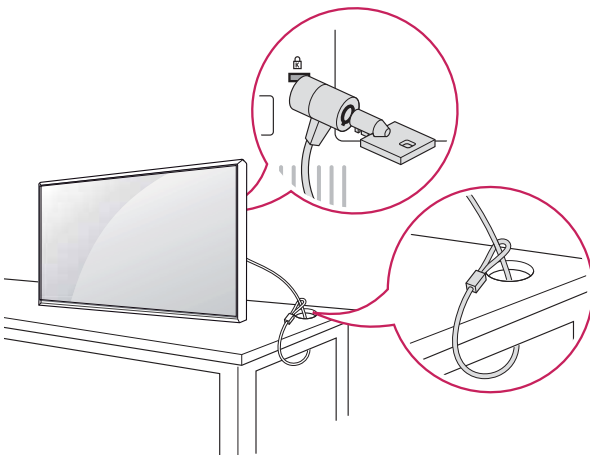
Using the FFC/IR PCB

- 1 Remove the securing tape first.
- 2 Do not pull out the FFC, as this may cause damage.
- 3 Be careful not to damage the product during installation.

Using the Kensington security system

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

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

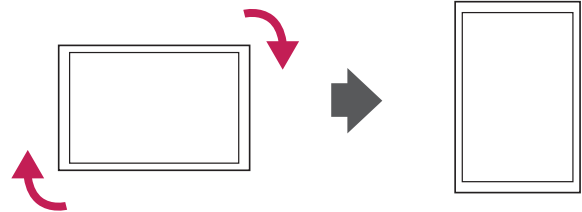
**NOTE**

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

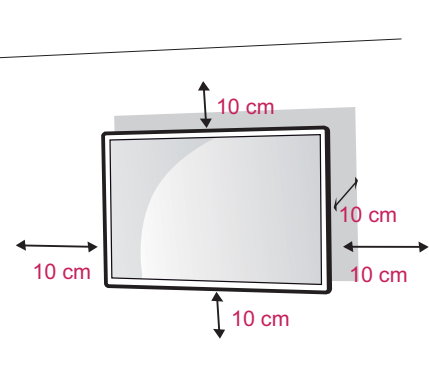
Portrait Layout

- Only on some models.

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

**Installing on a wall**

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. Detailed installation instructions can be obtained from your local retail store. Please refer to the manual to install and set up a tilting wall mounting bracket.



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

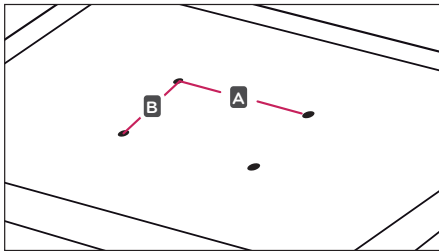
When you install the monitor using the wall mounting interface (optional parts), attach it carefully so it will not drop.

- 1 Please, Use the screw and wall mount interface in accordance with VESA Standards.
- 2 If you use screw longer than standard, the monitor might be damaged internally.

- 3 If you use improper screw, the product might be damaged and drop from mounted position. In this case, LG Electronics is not responsible for it.
- 4 VESA compatible.
- 5 Please use VESA standard as below.
 - 785mm(31 inch) or greater
 - * Fastening screw: Diameter 6.0 mm x Pitch 1.0 mm x Length 10 mm
(32 inch is Diameter 4.0 mm x Pitch 0.7 mm x Length 10 mm)

Model	47VX30MF
VESA (A x B)	800 x 600
Standard screw	M6
Number of screws	4

- VESA (A x B)

**CAUTION**

- Disconnect the power cord first, and then move or install the TV. Otherwise electric shock may occur.
- If you install the TV on a ceiling or slanted wall, it may fall and result in severe injury.
- Use an authorized LG wall mount and contact the local dealer or qualified personnel.
- Do not over tighten the screws as this may cause damage to the TV 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.

**NOTE**

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

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.

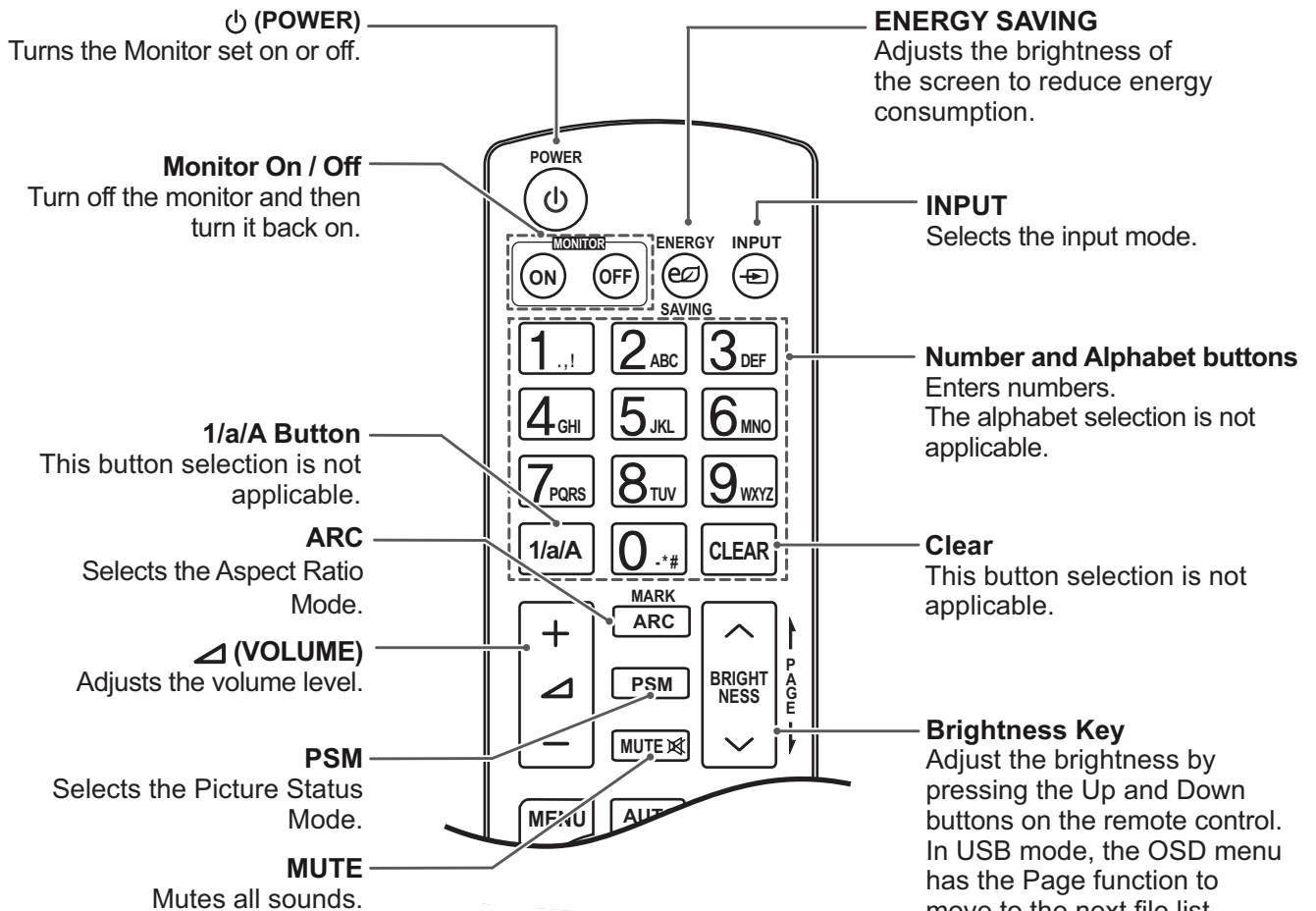
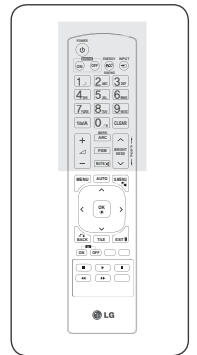
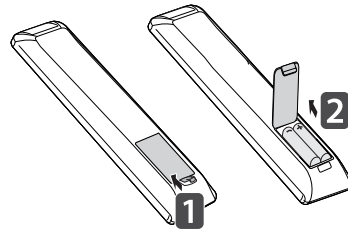
To replace batteries, open the battery cover, replace batteries (1.5 V AAA) matching ⊕ and ⊖ ends to the label inside the compartment, and close the battery cover.

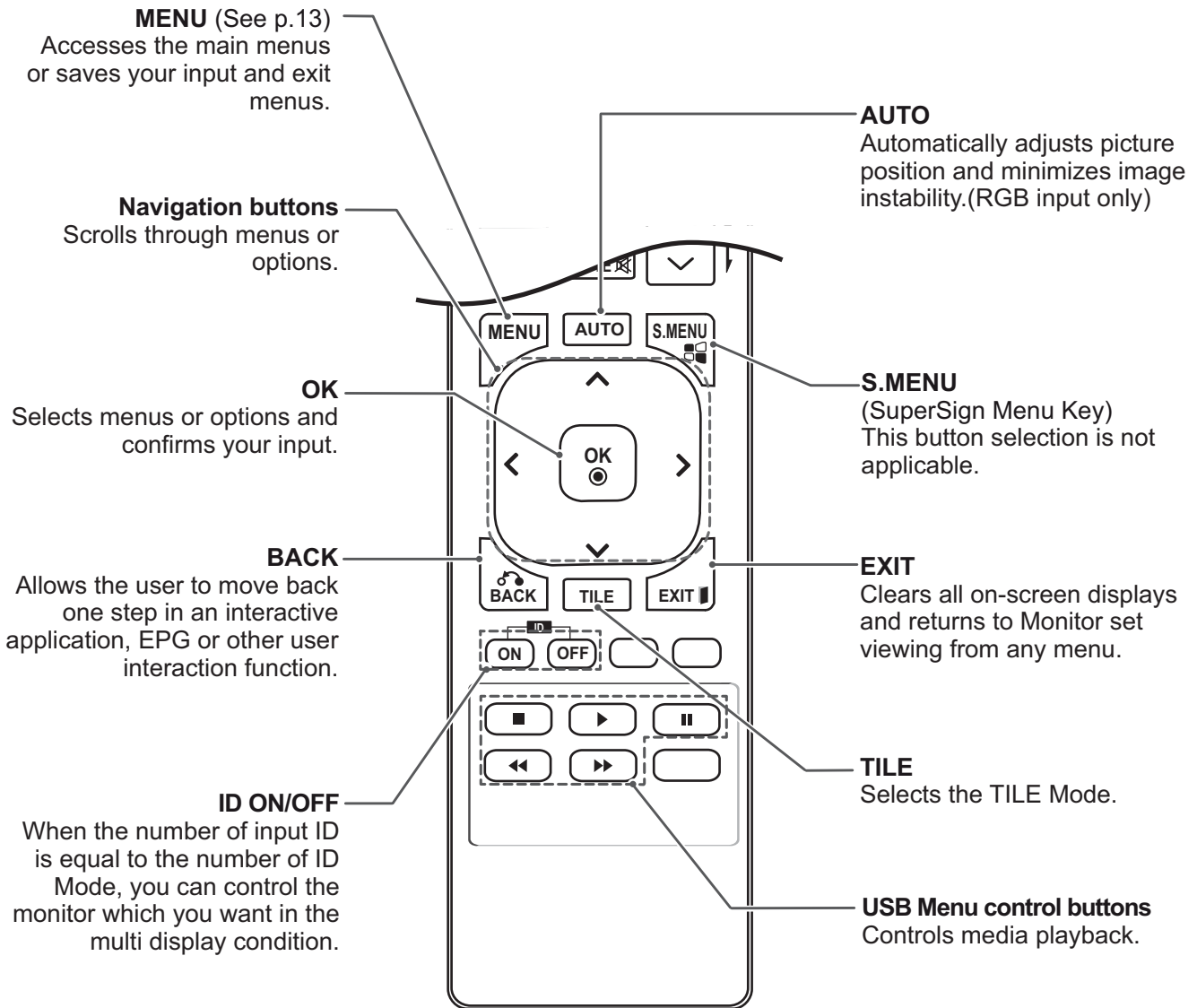
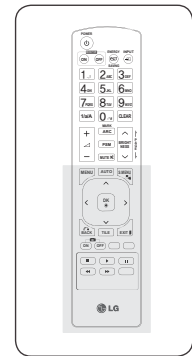
To remove the batteries, perform the installation actions in reverse.



CAUTION

- 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.





USING THE MONITOR SET

Connecting to a PC

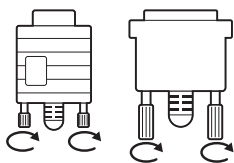
Your Monitor set supports the Plug & Play* feature.

* Plug & Play: The function when a PC recognizes a connected device that users connect to a PC and turn on, without device configuration or user intervention.

NOTE

- It is recommended to use the Monitor set with an HDMI connection for the best image quality.
- If you turn the Monitor set on when 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.

Using the input list

Selecting an input source

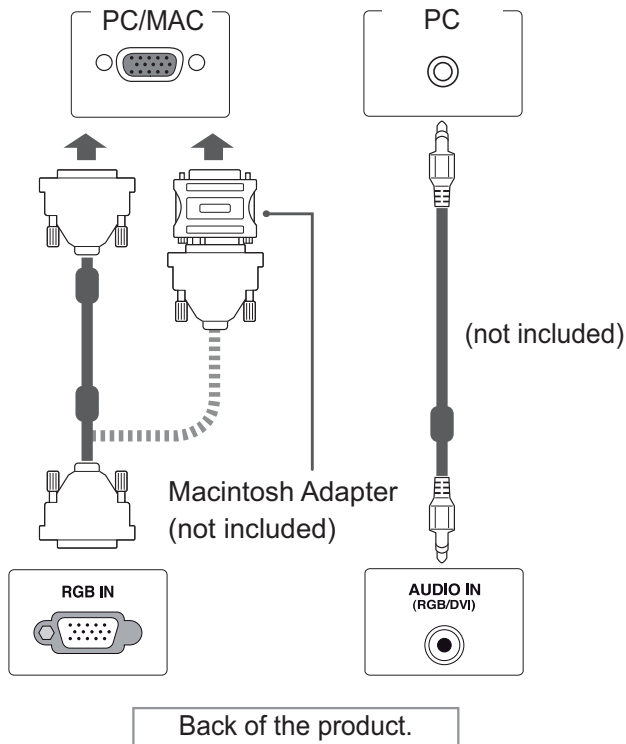
- 1 Press **INPUT** to access the input source list.
 - The connected device displays on each input source.
- 2 Press the Navigation buttons to scroll to one of the input sources and press **OK**.

Input source	Description
AV(CVBS)	A VCR or other external devices
Component	Older devices that do not have HDMI.
RGB	Computer input.
HDMI/DVI	Preferred connection type. Supports high resolution inputs.

RGB connection

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

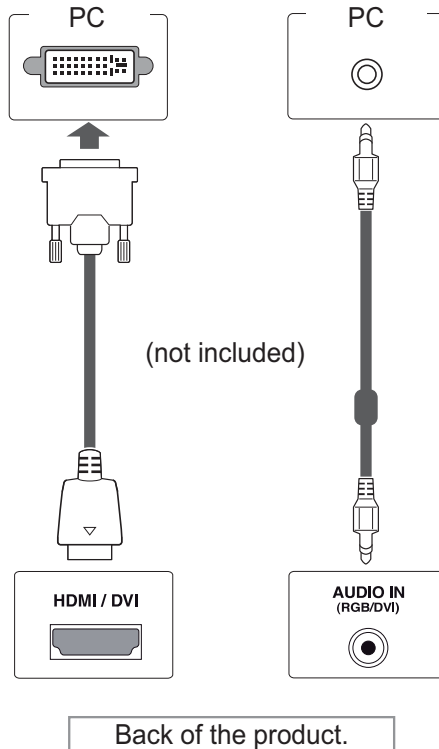
Select RGB input source.



HDM/DVI connection

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

Select HDMI/DVI input source.



NOTE



- Apple computers may require an adapter to connect to this monitor. Call or visit their web site for more information.

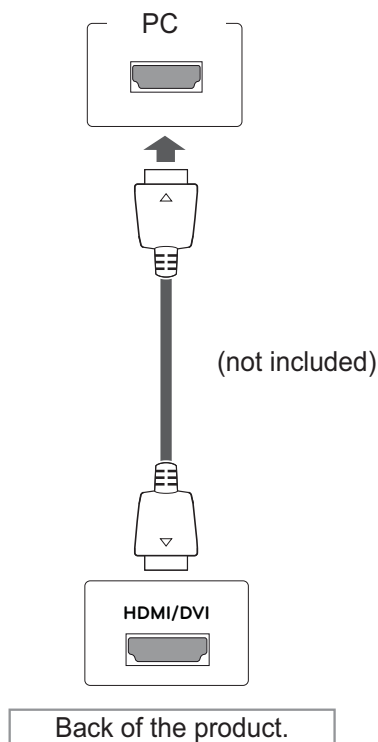
NOTE

- When using computer input with HDMI, you must set the label of that HDMI input to PC.
- Use a shielded signal interface cable, such as D-sub 15 pin signal cable and DVI to HDMI cable, with a ferrite core to maintain standard compliance for the product.

HDMI connection

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

Select HDMI/DVI input source.



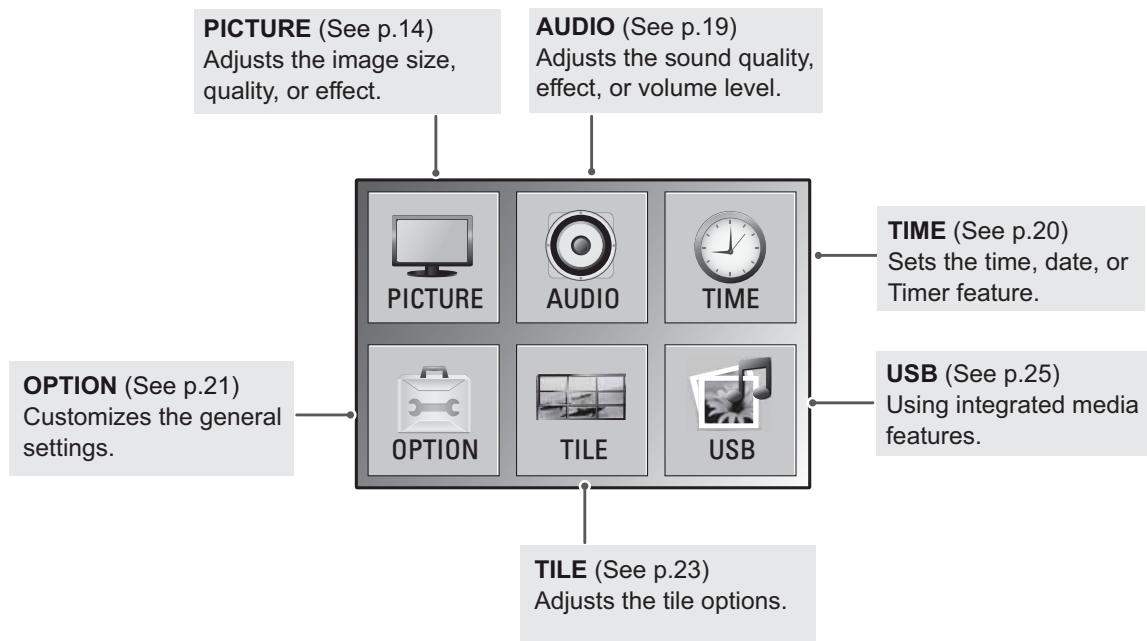
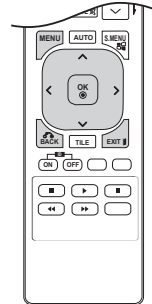
! NOTE

- Use a High Speed HDMI™ Cable.
- Please check the PC environment if you cannot hear the sound 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.

CUSTOMIZING SETTINGS

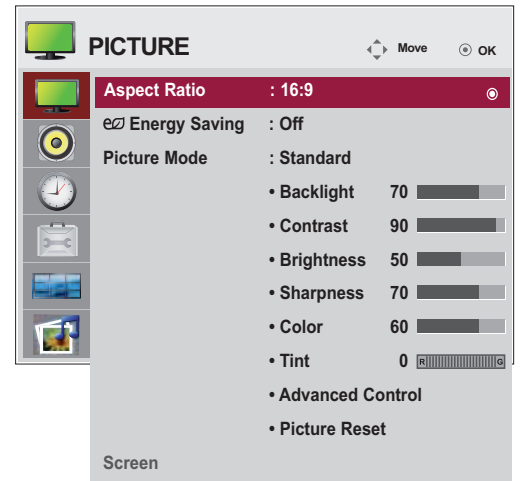
Accessing main menus

- 1 Press **MENU** 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 **MENU** 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**.
- 4 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 (See p.17 to p.18).
Energy Saving	Sets to automatically adjust the screen brightness corresponding to the surroundings.
	Level
	Off 100% light
	Level 1 80% light
	Level 2 60% light
	Level 3 40% light
	<div style="border: 1px solid black; padding: 5px;"> <p>NOTE</p> <ul style="list-style-type: none"> If the 'Picture Mode' is set to 'Cinema', the 'Energy saving' mode is disabled. </div>
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 .
	Mode
	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.
	Expert1/2 Adjusts the detailed video image settings for video experts as well as general viewers. Refer to the Basic image options. (See p.15).

SCREEN (In RGB Mode Only)	Customizes the PC display options in RGB mode.	
	Option	
	Resolution	Selects a proper resolution. See "Customizing PC display options".
	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/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.

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.
Advanced Control	Customizes the advanced options. Refer to the Advanced image options. (See p.16).
Picture Reset	Restores the options to the default setting.

! NOTE

- 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 the Expert 1,2 is selected, you can select **Backlight, Contrast, Brightness, H Sharpness, V Sharpness, Color** or **Tint** .

Advanced image options

Setting	Description
Colour Temperature	Set to warm to enhance hotter Colors such as red, or set to cool to make picture bluish.
	Option
	Cool Sets the screen color to a bluish tone.
	Medium Sets the screen to the standard color.
Warm Sets the screen color to a reddish tone.	
Dynamic Contrast	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 AV(CVBS) and Component.)
Dynamic Color	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 under AV(CVBS) and Component.)
Noise Reduction	Reduces screen noise without compromising video quality. (This function can be used only under AV(CVBS) and Component.)
Gamma	Set your own gamma value. On the monitor, high gamma values display whitish images and low gamma values display high contrast images.
Black Level	<ul style="list-style-type: none"> » 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 - AV(CVBS), Component, HDMI-DTV)
Film Mode	You can watch a cinema-like video by eliminating judder effect. Use this function when you watch movies.
White Balance	This is the function to adjust the overall Color of the image to the feeling you want. (Function works in the following mode - Expert 1, Expert 2 Picture mode)
Color Management System	As the tool used by the experts to make adjustments by using the test patterns, this does not affect other Colors but can be used to selectively adjust the 6 Color areas (Red/Green/Blue/Cyan/ Magenta/Yellow). Color difference may not be distinctive even when you make the adjustments for the general video. Adjusts Red/Green/Blue/Yellow/Cyan/Magenta. <ul style="list-style-type: none"> » Red/Green/Blue/Yellow/Cyan/Magenta Color: The adjustment range is -30 to +30. » Red/Green/Blue/Yellow/Cyan/Magenta Tint: The adjustment range is -30 to +30. (Function works in the following mode - Expert 1, Expert 2 Picture mode)

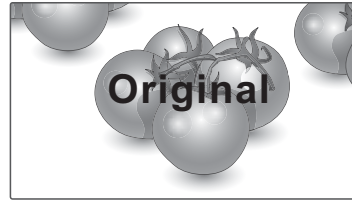
Aspect Ratio

Resize the image to view the image at its optimal size by pressing **ARC** button.

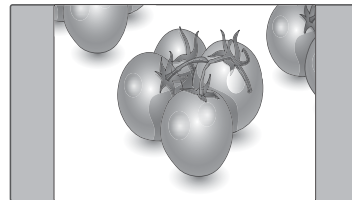
CAUTION

- If a fixed image displays on the screen for a long period of time, it will 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.

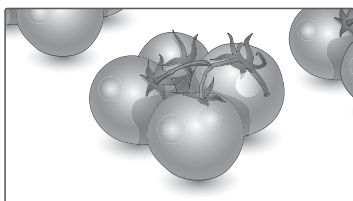
- **Original** : The aspect ratio is not adjusted from the original. It is set by the program being watched.



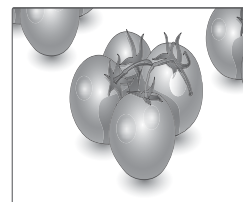
- **4:3** : The following selection will allow you to view a picture with an original 4:3 aspect ratio, gray bars will appear on both the left and right of the screen.



- **16:9** : The following selection will allow you to adjust the picture horizontally, in linear proportion, to fill the entire screen (useful for viewing 4:3 formatted DVDs).



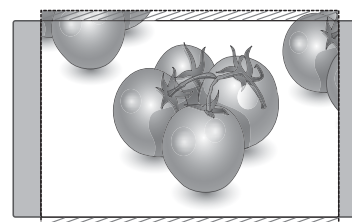
- **1:1** : The aspect ratio is not adjusted from the original. (Only HDMI/DVI PC, RGB PC)



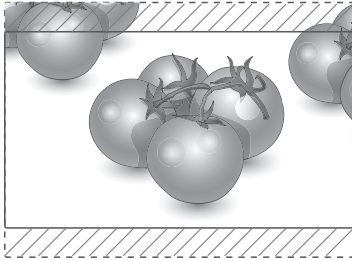
- **Just Scan** : Following Selection will lead to you view the picture of best quality without loss of original picture in high resolution image. Note: If there is noise in original Picture, You can see the noise at the edge.



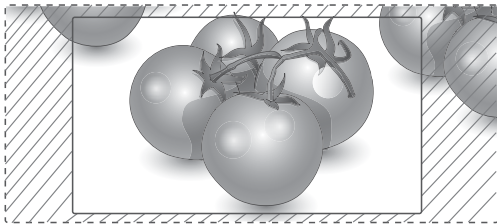
- **14:9** : You can view a picture format of 14:9 or a general Monitor set program in the 14:9 mode. The 14:9 screen is viewed in the same way as in 4:3, but is magnified to the left and right.



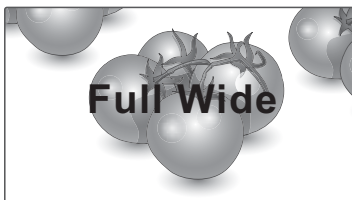
- **Zoom** : The following selection will allow you to view the picture without any alteration, while filling the entire screen. However, the top and bottom of the picture will be cropped.



- **Cinema Zoom 1** : Choose Cinema Zoom when you want to enlarge the picture in correct proportion. Note: When enlarging or reducing the picture, the image may become distorted.



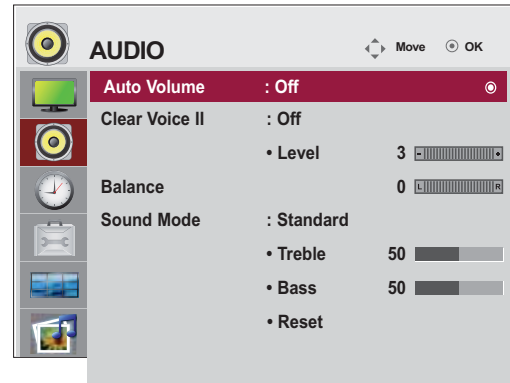
- **Full Wide** : When Monitor set receives the wide screen signal, it will lead you to adjust the picture horizontally or vertically, in a linear proportion, to fill the entire screen fully.



MODE	AV	Component	HDMI/DVI		RGB
			DTV	PC	PC
16:9	o	o	o	o	o
Just Scan	x	o	o	x	x
Original	o	x	x	x	x
4:3	o	o	o	o	o
1:1	x	x	x	o	o
14:9	o	o	o	x	x
Zoom	o	o	o	x	x
Cinema Zoom 1	o	o	o	x	x
Full Wide	o	x	x	x	x

AUDIO settings

- 1 Press **MENU** 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**.

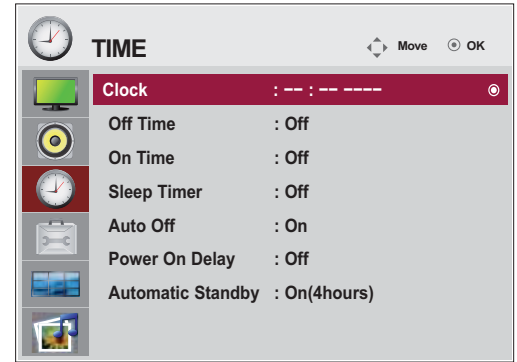


The available audio options are described in the following:

Setting	Description	
Auto Volume	To adjust uneven sound volumes across all channels or signals automatically to the most appropriate level. To use this feature, select On.	
Clear Voice II	By differentiating the human sound range from others, it helps users listen to human voices better.	
Balance	Adjusts balance between the left and right speakers according to your room environment.	
Sound Mode	Selects one of the preset sound modes or customize each option in each mode.	
	Mode	
	Standard	Select when you want standard-quality sound.
	Music	Select when you listen to music.
	Cinema	Select when you watch movies.
	Sport	Select when you watch sports events.
Game	Select when you watch sports events.	

TIME settings

- 1 Press **MENU** 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:

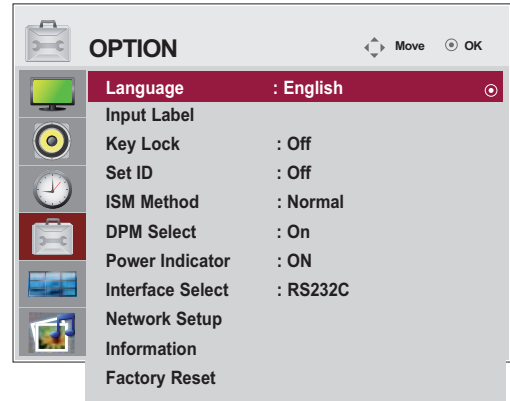
Setting	Description
Clock	Sets the time feature.
On/Off Time	Sets the time to turn on or off the Monitor set.
Sleep Timer	Sets the length of time until the Monitor set to turns off. When you turn the Monitor set off and turn it on again, the Sleep Timer will be set to off.
Auto off	If Auto off is active and there is no input signal, the set switches to off mode automatically after 10 minutes.
Power on delay	When connecting multiple monitors and turning the power on, the monitors are turned on individually to prevent overload.
Automatic Standby	If you do not use the monitor for more than 4 hours, it will be in standby mode automatically.

! NOTE

- 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.
- The '**Automatic Standby**' function may not be available depending on the country.

OPTION settings

- 1 Press **MENU** 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**.



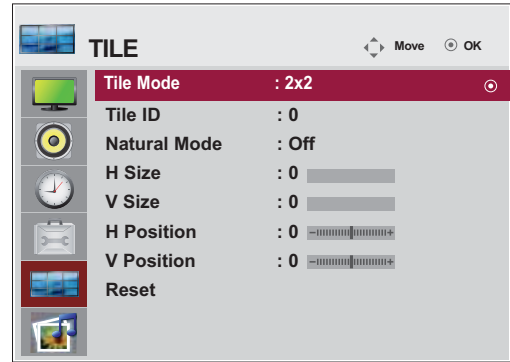
The available option settings are described in the following:

Setting	Description										
Language	To choose the language in which the control names are displayed.										
Input Label	<p>Selects a label for an input source to identify a device connected to each input source.</p> <div style="border: 1px solid black; padding: 5px;"> <p>NOTE</p> <ul style="list-style-type: none"> If you want to use HDMI-PC mode, you must set the input label to PC mode. </div>										
Key Lock	<p>Use the buttons to select On or Off. The monitor can be set up so that it can only be used with the remote control. This feature can prevent unauthorized viewing.</p> <p>In order to lock the OSD screen adjustment, set the Key Lock tab to the 'On' position.</p> <p>In order to unlock it, do the following :</p> <p>Push the MENU button on the remote control and set Key Lock to the 'Off' position.</p>										
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 99) using the button and exit. Use the assigned Set ID to individually control each product using the Product Control Program.										
ISM Method	<p>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.</p> <table border="1" style="width: 100%;"> <thead> <tr> <th colspan="2">Setting</th> </tr> </thead> <tbody> <tr> <td>Normal</td> <td>Leave on normal if you don't foresee image burn in being a problem.</td> </tr> <tr> <td>Orbiter</td> <td>May help prevent ghost images. However, it is best not to allow any fixed image to remain on the screen. To avoid a permanent image on the screen, the screen will move every 2 minutes.</td> </tr> <tr> <td>Inversion</td> <td>This function inverts the panel color of the screen. The panel color is automatically inverted every 30 minutes.</td> </tr> <tr> <td>White wash</td> <td>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.</td> </tr> </tbody> </table>	Setting		Normal	Leave on normal if you don't foresee image burn in being a problem.	Orbiter	May help prevent ghost images. However, it is best not to allow any fixed image to remain on the screen. To avoid a permanent image on the screen, the screen will move every 2 minutes.	Inversion	This function inverts the panel color of the screen. The panel color is automatically inverted every 30 minutes.	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.
Setting											
Normal	Leave on normal if you don't foresee image burn in being a problem.										
Orbiter	May help prevent ghost images. However, it is best not to allow any fixed image to remain on the screen. To avoid a permanent image on the screen, the screen will move every 2 minutes.										
Inversion	This function inverts the panel color of the screen. The panel color is automatically inverted every 30 minutes.										
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 to turn the power saving mode on / off.										
Power Indicator	Use this function to set the power indicator on the front side of the product to On or Off.										

Setting	Description	
Interface Select	Sets up network connections.	
	Option	
	RS-232C	Enables communication via Serial.
	Network	LAN - Enables communication via Ethernet.
Network Setup	Option	
	DHCP	Allocates and sets up IP automatically.
	Manual	Sets up IP address, Gateway, Subnet Mask, Primary DNS and Secondary DNS. The setup process is complete when you select Execute, and "IP Setup Completed" is displayed at the bottom of the screen. While "Wait for IP Setup" is displayed, you cannot use the local keys and remote control. "Wait for IP Setup" is displayed for up to 40 seconds. * If Network select is set to RS232C.DHCP and Manual are disabled.
Information	You can find informations about Serial No, F/W version, IP Address and MAC Address.	
Factory Reset	Select this option to return to the default factory settings.	

TILE settings

- 1 Press **MENU** to access the main menus.
- 2 Press the Navigation buttons to scroll to **TILE** 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 lock settings are described in the following:

Setting	Description
Tile Mode	To use this function - Must be displayed with various other products. - Must be in a function that can be connected to RGB Cable by distributor and RS-232C. Tile mode and choose Tile alignment and set the ID of the current product to set location. * Only after pressing the SET button the adjustments made to the settings will be saved. - Tile mode : column x row (c = 1, 2, 3, 4, 5 r = 1, 2, 3, 4, 5) - 5 x 5 available. - Configuration of an integration screen is also available as well as configuration of One by one Display.
Tile ID	Select the location of the Tile by setting an ID.
Natural	The image is omitted by the distance between the screens to be naturally shown.
H-Size	Adjust the horizontal size of the screen taking into account the size of the bezel.
V-Size	Adjust the vertical size of the screen taking into account the size of the bezel.
H-Position	Moving the screen position horizontally.
V-Position	Moving the screen position vertically.
Reset	Function to initialize and release Tile. All Tile setting are released when selecting Tile recall and the screen returns to Full screen.

Tile Mode

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

• **Off:**
When the Tile Mode option is disabled

• **2X1:**
When using 2 monitors

• **2X2:**
When using 4 monitors

• **3X3:**
When using 9 monitors



• **4X4:**
When using 16 monitors

• **5X5:**
When using 25 monitors



Tile Mode - Natural mode

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

Before



After



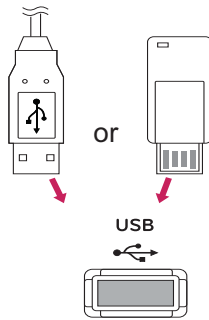
ENTERTAINMENT

Using integrated media features

Connecting USB storage devices

Connect USB storage devices such as a USB flash memory, external hard drive, or MP3 player to the Monitor set and use multimedia features (“**Browsing files**” See p.27).

Connect a USB flash memory or USB memory card reader to the Monitor set as shown on the following illustration. The USB screen appears.



To disconnect a USB storage device, make sure to end the connection properly to prevent damages to the Monitor set or files.



CAUTION

- Do not turn the Monitor set off or remove a USB storage device while the USB storage device is connected to the Monitor set, 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.

Precautions when using the USB device

- 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 program 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 Set 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 or image files.
- Please use only a USB storage device which was formatted as a FAT16, FAT32, 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. Data in a USB storage device cannot be deleted in the NTFS file system.
- Please connect power to a USB storage device which requires an external power supply. If not, the device may not be recognized.
- Please connect a USB storage device with cable is offered by USB maker. If connected with cable is not offered by USB maker or an excessively long cable, the device may not be recognized.
- Some USB storage devices may not be supported or operated smoothly.
- Maximum of 999 files and folders can be recognized.
- Data in a USB storage device cannot be aligned. Up to 128 English characters can be

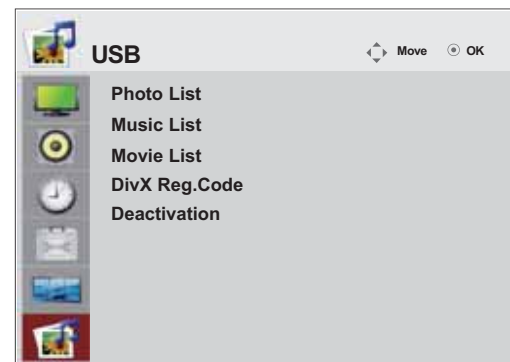
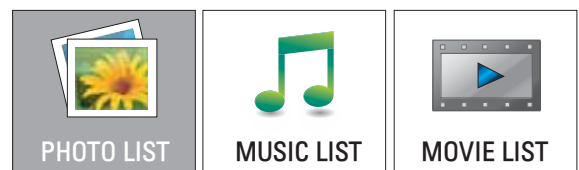
recognized as a file name.

- Please back up the important file because a data of USB device may be damaged. Data management is consumer's responsibility and in consequence the manufactures does not cover the product bearing data damage.
- If the USB is connected in Standby Mode, specific hard disk will automatically be loaded when the Set is turned on.
- The recommended capacity is 1TB or less for a USB external hard disk and 32GB 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 "Power Saving" function does not work, turn the hard disk off and on again to make it work properly.
- Names and subtitles of some language files may not display properly.(Korean, Chinese, Japanese)
- When using Korean or Chinese subtitles or file names, it is recommended to set the language to the corresponding one.

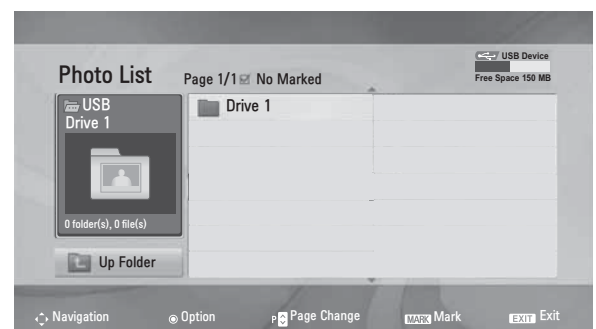
Browsing files

Access the **Photo**, **Music** or **Movie** lists and browse files.

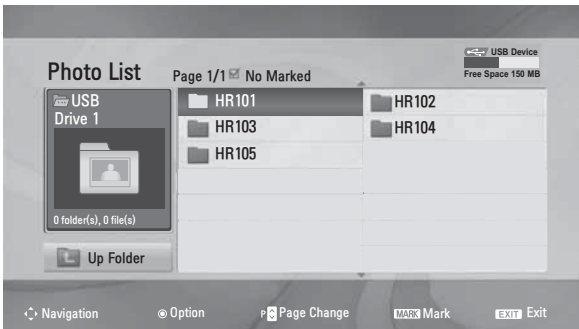
- 1 Connect a **USB** storage device.
- 2 Press **MENU** to access the main menus.
- 3 Press the Navigation buttons to scroll to **USB** and press **OK**.
- 4 Press the Navigation buttons to scroll to **PHOTO LIST**, **MUSIC LIST** or **MOVIE LIST** and press **OK**.



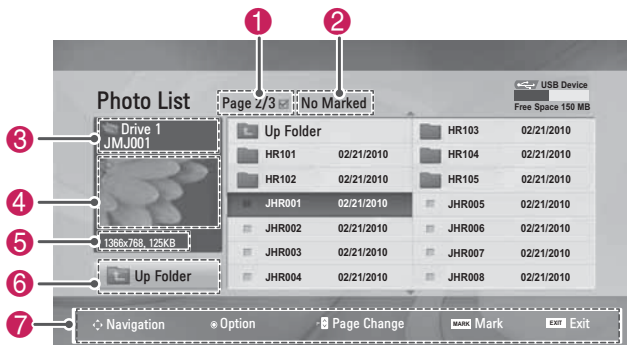
- 5 Select **Drive1** to access the connected USB storage device



- 6 Select a folder you want.
 - To return to the previous level, select **Up Folder**.



- 7 Press the Navigation buttons to browse files.
 The highlighted file will display in the preview window.



No.	Description
1	Current page number/total number of pages
2	The number of selected files
3	File and Folder name
4	Preview window
5	File size, information.
6	Return to the previous level
7	Available buttons on the remote control

Supported file format

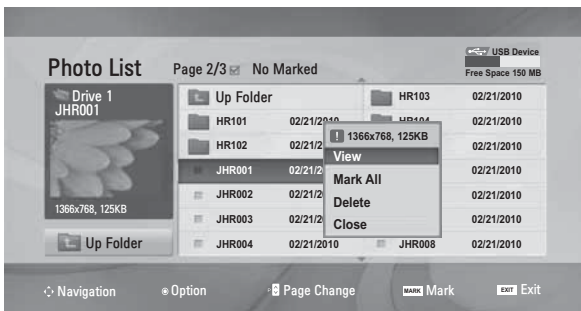
Type	Supported file format
Photo	<ul style="list-style-type: none"> JPG Available size Baseline: 64 pixel (W) x 64 pixel (H) - 15360 pixel (W) x 8640 pixel (H) Progressive: 64 pixel (W) x 64 pixel (H) - 1024 pixel (W) x 768 pixel (H)
Music	<ul style="list-style-type: none"> MP3 Bit rate range 32 Kbps to 320 Kbps Sampling rate (Sampling Frequency) MPEG1 layer 3: 32 kHz, 44.1 kHz, 48 kHz * A copy-protected file will not play.
Video	<ul style="list-style-type: none"> MPEG1, MPEG2, MPEG4 (Doesn't support Microsoft MPEG 4-V2, V3), DivX 3.xx, DivX 4.xx, DivX 5.xx, DivX VOD(DRM), XviD, DivX 6.xx(Playback) Audio format: Mpeg, Mp3, PCM Sampling frequency: within 32k to 48khz Bit rate of audio format: within 32k to 320kbps Supported subtitle format: *.smi, *.srt, *.sub (MicroDVD, SubViewer 2.0), *.ass, *.ssa, *.txt (DVD Subtitle System)

Viewing Photos

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 **USB** and press **OK**.
- 2 Press the Navigation buttons to scroll to **Photo List** and press **OK**.
- 3 Press the Navigation buttons to select **Drive1** to access the connected USB storage device.
- 4 Press the Navigation buttons to scroll to a folder you want and press **OK**.
- 5 Press the Navigation buttons to scroll to a file you want and press **OK**.

A pop-up window will appear.

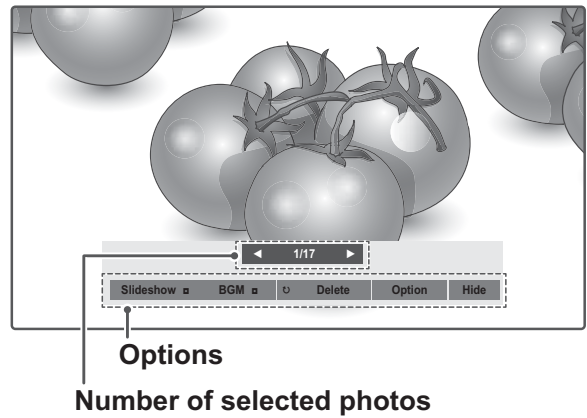


- 6 View photos by using the following menus.

Menu	Description
View	Displays the selected photo in a full-screen view. <ul style="list-style-type: none"> • Drive: Views photos saved in a USB storage drive.
Mark All or Unmark All	Selects all files or clears all of your selections
Delete	Deletes a file saved in a USB storage device. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>NOTE</p> <p>You cannot delete the files saved in a shared folder of a PC.</p> </div>
Close	Closes the pop-up menu.

Using photo options

Use the following options while viewing photos.

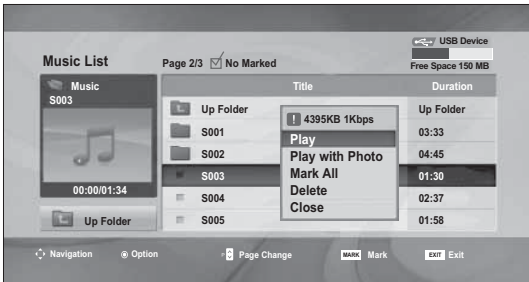


Option	Description
Slideshow	Starts or stops a slideshow with selected photos. If there are no selected photos, all photos saved in the current folder display during a slideshow. To set a slideshow speed, select Option .
BGM	Turns the background music on or off. To set the background music folder, select Option .
⤵ (Rotate)	Rotates photos clockwise (90°, 180°, 270°, 360°). <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>NOTE</p> <p>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.</p> </div>
Delete	Deletes a photo.
Option	<ul style="list-style-type: none"> • Slide Speed: Selects a slideshow speed (Fast, Medium, Slow). • Music Album: Selects a music folder for the background music. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>NOTE</p> <p>You cannot change the music folder while the background music is playing.</p> </div>
Hide	Hides the option window. To display the options, press OK .

Listening to Music

- 1 Press the Navigation buttons to scroll to **USB** and press **OK**.
- 2 Press the Navigation buttons to scroll to **Music List** and press **OK**.
- 3 Select **Drive1** to access the connected USB storage device.
- 4 Press the Navigation buttons to scroll to a folder you want and press **OK**.
- 5 Press the Navigation buttons to scroll to a file you want and press **OK**.

A pop-up window will appear.



- 6 Play music by using the following menus.

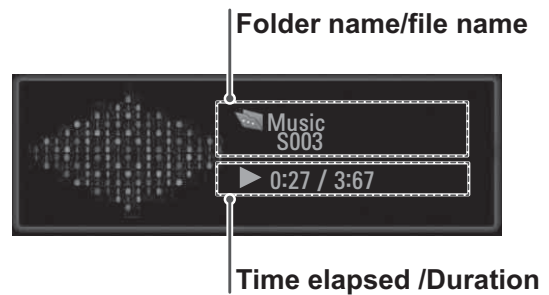
Menu	Description
Play, Stop Play, or Play Marked	Plays music, stops playback, or plays the selected music file. If you play music without selecting music files, all of the music files saved in the current folder will play. The icon will appear in front of the duration on the currently playing file. <ul style="list-style-type: none"> • Drive: Listen to music files saved in a USB storage drive.
Play with Photo	Displays photos during playback.
Mark All or Unmark All	Selects all files or clears all of your selections
Delete	Deletes a file saved in a USB storage device.
Close	Closes the pop-up menu.

- 7 Control playback by using the following buttons.

Button	Description
	Stops playback
	Plays a music file
	Pauses or resumes playback
	Skips to the next file
	Skips to the previous file

NOTE

- A damaged or corrupted file will not play and the duration of the file display as 00:00.
- A copy-protected file will not play.
- If the Monitor set is not in use for some time during playback, the information box as a screensaver will appear to prevent image burn.
- To return to the Music list screen, press **OK**, (stop) or **BACK**.



Viewing Movies

Play video files on the Monitor set. Your Monitor set displays all of the video files saved in a USB storage device.

- Movie (*.dat / *.mpg / *.mpeg / *.vob/ *.m4v / *.avi / *.divx) supporting file.
- Video format: MPEG1, MPEG2, MPEG4(Doesn't support Microsoft MPEG 4-V2, V3), DivX 3.xx, DivX 4.xx, DivX 5.xx, DivX VOD(DRM), XviD, DivX 6.xx(Playback)
- Audio format: Mpeg, Mp3, PCM
- Bit rate: within 32 kbps to 320 kbps (MP3)
- Subtitle format: *.smi / *.srt / *.sub (Micro DVD, SubViewer 2.0) / *.ass / *.ssa / *.txt (DVD Subtitle System).
- 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.
- Time information in an external subtitle file should be arranged in ascending order to be played.
- 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.
- HD videos with a maximum of 1920 x 1080 @ 25/30P or 1280 x 720 @ 50/60P are supported, depending on the frame.
- Videos with resolutions higher than 1920 x 1080 @ 25/30P or 1280 x 720 @ 50/60P may not work properly depending on the frame.
- Movie files other than the specified types and formats may not work properly.
- **Max bit rate of playable movie file is 20 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 30GB 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.
- When you are watching the movie by Movie List function, you can adjust an image by **Energy Saving** key on the remote control. User setup for each image mode does not operate.

Video Decoder

- **mpg, mpeg, vob, dat:** MPEG1, MPEG2
- **avi, divx, m4v:** MPEG4 SP, MPEG4 ASP, DivX 3.xx, DivX 4.xx, DivX 5.xx, DivX 6.xx (Playback), XviD

Audio Codec

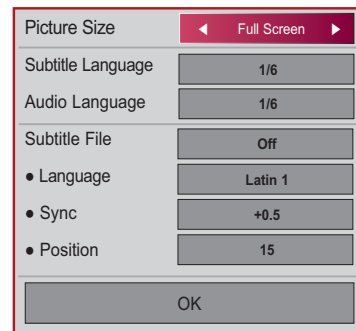
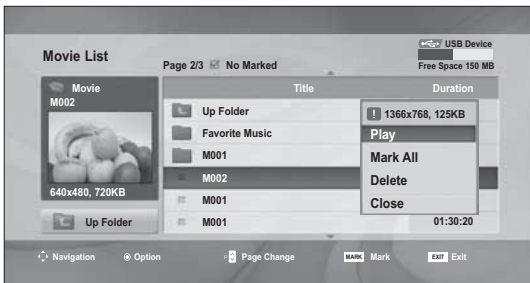
- **mpg, mpeg, vob, dat, avi, divx, m4v:** AC3, MPEG, MP3, PCM

Max Resolution

- **720 x 576 @ 25p**
- **720 x 480 @ 30p**

- 1 Press the Navigation buttons to scroll to **USB** and press **OK**.
- 2 Press the Navigation buttons to scroll to **Movie List** and press **OK**.
- 3 Select **Drive1** to access the connected USB storage device.
- 4 Press the Navigation buttons to scroll to a folder you want and press **OK**.
- 5 Press the Navigation buttons to scroll to a file you want and press **OK**.

A pop-up window will appear.



When you select the **Set Video Play**.

- 6 Play video by using the following menus.

Menu	Description
Play or Play Marked	Plays a movie or plays the selected movie. • Drive: Views videos saved in a USB storage drive.
Mark All or Unmark All	Selects all files or clears all of your selections.
Delete or Delete marked	Deletes a file formatted on the FAT32 file system and saved in a USB storage device.
Close	Closes the pop-up menu.

Menu	Description
Picture Size	Selects your desired picture format during movie play
Subtitle Language or Audio Language	Changes the Language Group of the subtitle/audio during movie play.
Language	Selects your desired Language.
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.

- 1 Press the Navigation button to show the **Picture Size, Audio Language** or **Subtitle Language**.
- 2 Press the Navigation button to make appropriate adjustments.

Subtitle Language	Support Language
Latin1	English, Spanish, French, German, Italian, Swedish, Finnish, Dutch, 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
Hebrew	Hebrew
Chinese	Chinese
Japanese	Japanese
Korean	Korean

NOTE

- Only the files saved in ASCII CODE is supported for the external subtitles of the movie.
- Only 500 alphabets and 500 numbers are supported for each line of the subtitle.
- Only 10,000 of sync blocks can be supported within the subtitle file.

When you select the **Set Video**.

- 1 Press the Navigation button to make appropriate adjustments. See p.8

When you select the **Set Audio**,

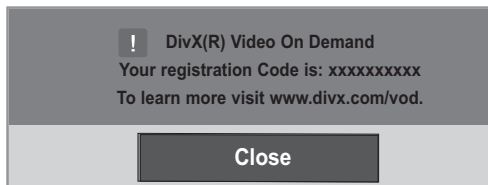
- 1 Press the Navigation button to show the **Sound Mode, Auto Volume, Clear Voice II, Balance**.
- 2 Press the Navigation button to make appropriate adjustments.
Using the remote control.

Button	Description
◀▶	When playing, repeatedly, press the REW(◀) button to speed up ◀◀(x2) ◀◀◀ (x4) ◀◀◀◀(x8) ◀◀◀◀◀(x16) ◀◀◀◀◀◀(x32) . repeatedly, press the FF(▶) button to speed up ▶▶(x2) ▶▶▶ (x4) ▶▶▶▶ (x8) ▶▶▶▶▶(x16) ▶▶▶▶▶▶(x32).
⏸ (II)	During playback, press the Pause (II) button. <ul style="list-style-type: none"> • Still screen is displayed. • If no buttons are pressed on the remote control for 10 minutes after pausing, the Monitor set returns to the playback state. • Press the Pause (II) button and then use the FF (▶▶) button for slow motion.
■	During playback, stops the screen.
▶ (Play)	Press the Play (▶) button to return to normal playback.

DivX registration code

Check and register the DivX registration code of your Monitor set so that you can rent or purchase the latest movies at www.divx.com/vod. To play a rented or purchased DivX file, the file's registration code should be same with your Monitor set's DivX registration code.

- 1 Press **MENU** to access the **USB** menus.
- 2 Press the Navigation button to scroll to **DivX Reg. Code** and press **OK**.
- 3 View the registration code of your Monitor set.



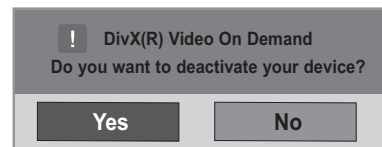
NOTE

- 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 Monitor set.
- 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.

Deactivating the DivX feature

Deactivate all of the devices through the web server and block devices from activating. Delete the existing authentication information to receive a new DivX user authentication for the Monitor set. Once this function is executed, a DivX user authentication is required again to see DivX DRM files.

- 1 Press **MENU** to access the **USB** menus.
- 2 Press the Navigation button to scroll to **Deactivation** and press **OK**.
- 3 Select **Yes** to confirm.



- 4 Select **Close**.

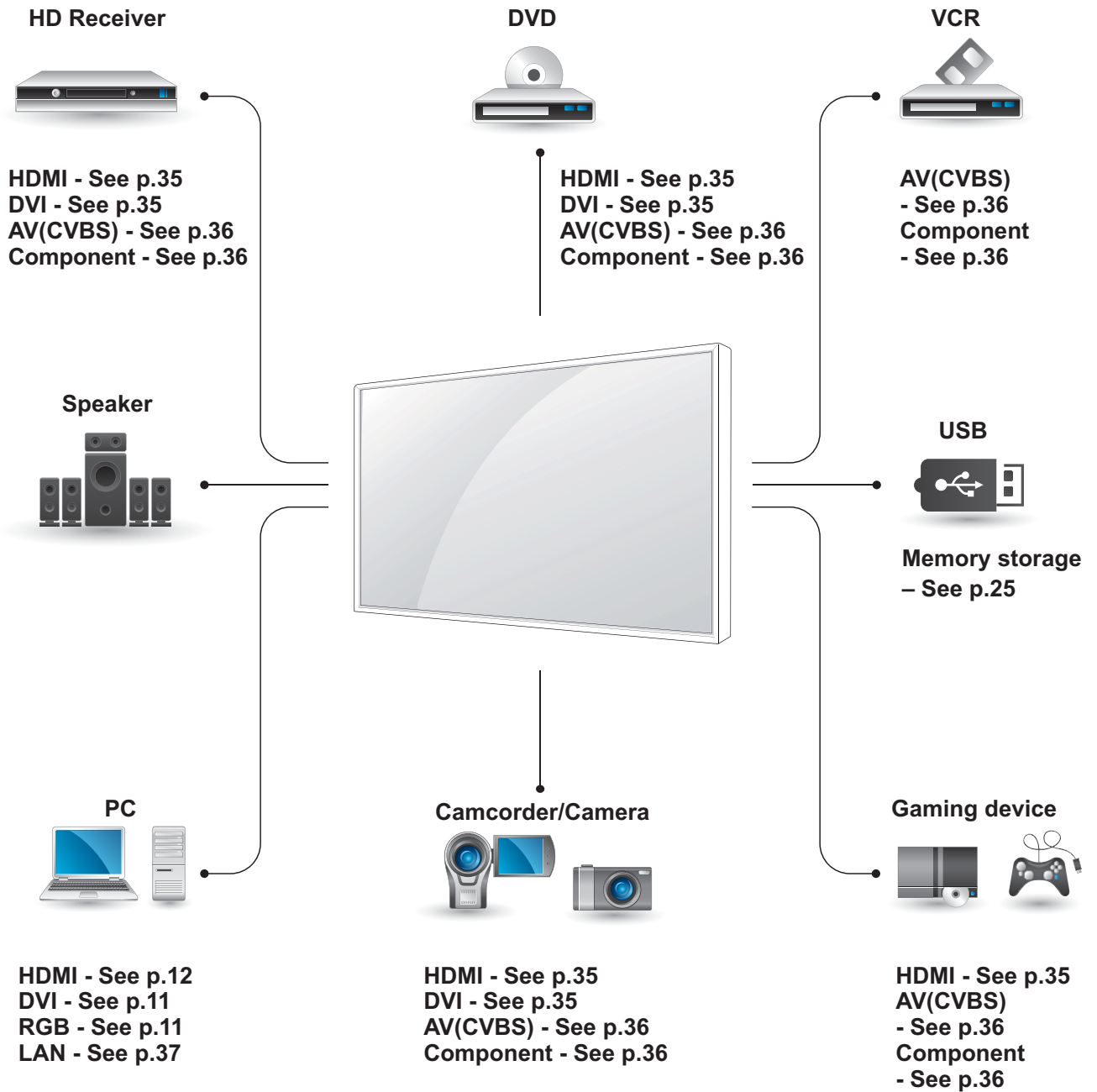


- 5 When you are finished, press **EXIT**. When you return to the previous menu, press **BACK**.

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.



NOTE

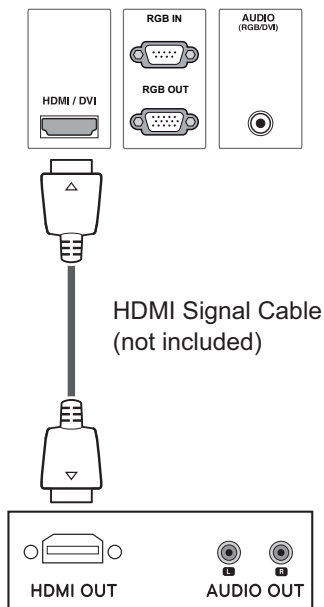
- If you connect a gaming device to the Monitor set, use the cable supplied with the gaming device.

Connecting to a HD receiver, DVD, Camcorder, Camera, Gaming Device or VCR player

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

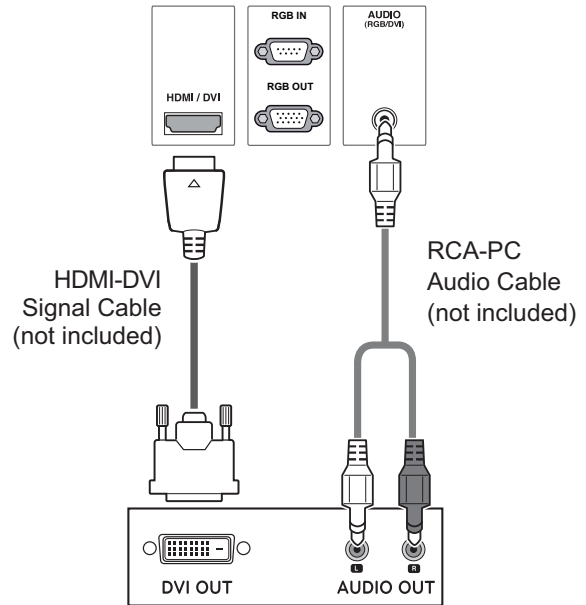
HDMI connection

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.



HDMI/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 HDMI/DVI cable as shown in the following illustration. To transmit an audio signal, connect an optional audio cable.

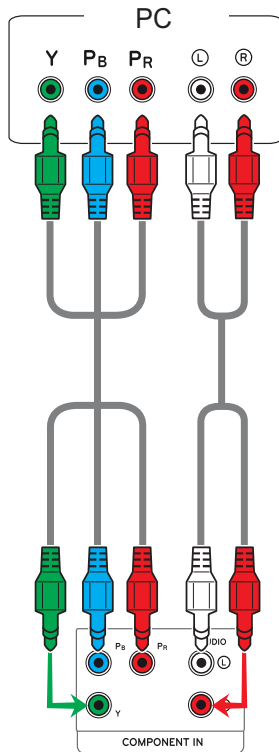


NOTE

- Use a High Speed HDMI™ Cable.
- High Speed HDMI™ Cables are tested to carry an HD signal up to 1080p and higher.

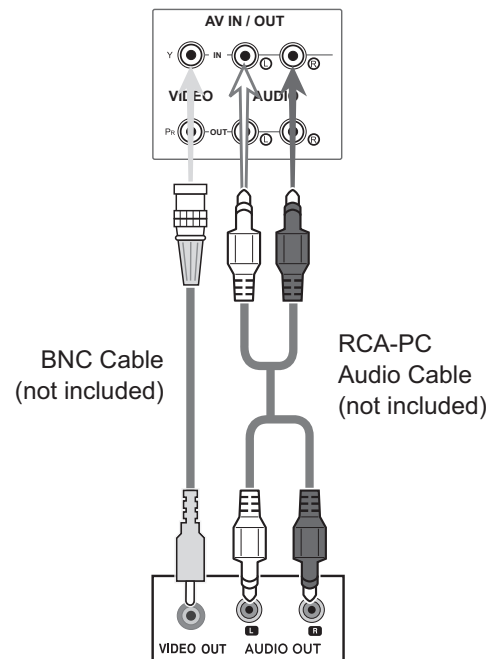
Component connection

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 component cable as shown on the following illustration. To display images by using progressive scan, make sure to use the component cable.



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 BNC cable as shown on the following illustration.



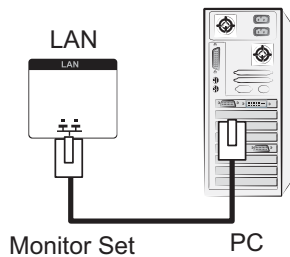
Connecting to the LAN

LAN connection

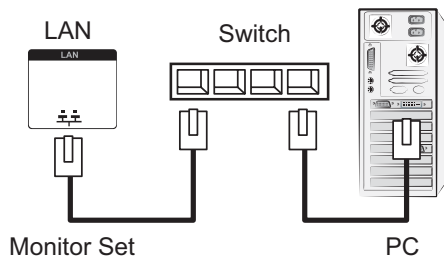
Connect the LAN cable and install the eZ-Net Manager program on the CD-ROM.

For more information about the program, please refer to eZ-Net Guide in the enclosed CD-ROM.

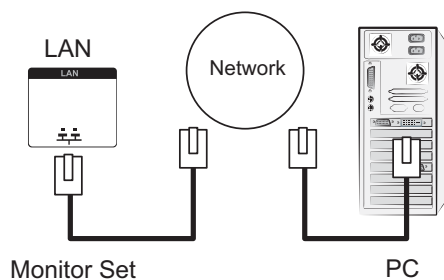
A Connect PC to Monitor directly.



B Using a router(Switch)



C Using the Internet.



! NOTE

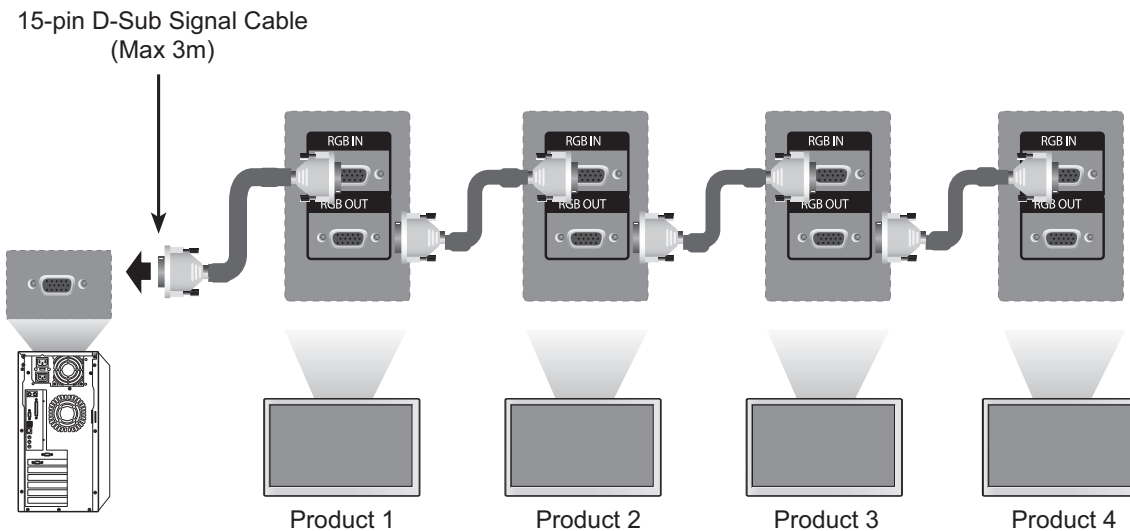
- Using LAN establishes communication between your PC and the monitor and enables to use the OSD menus on the PC as well as on the monitor.

Daisy Chain Monitors

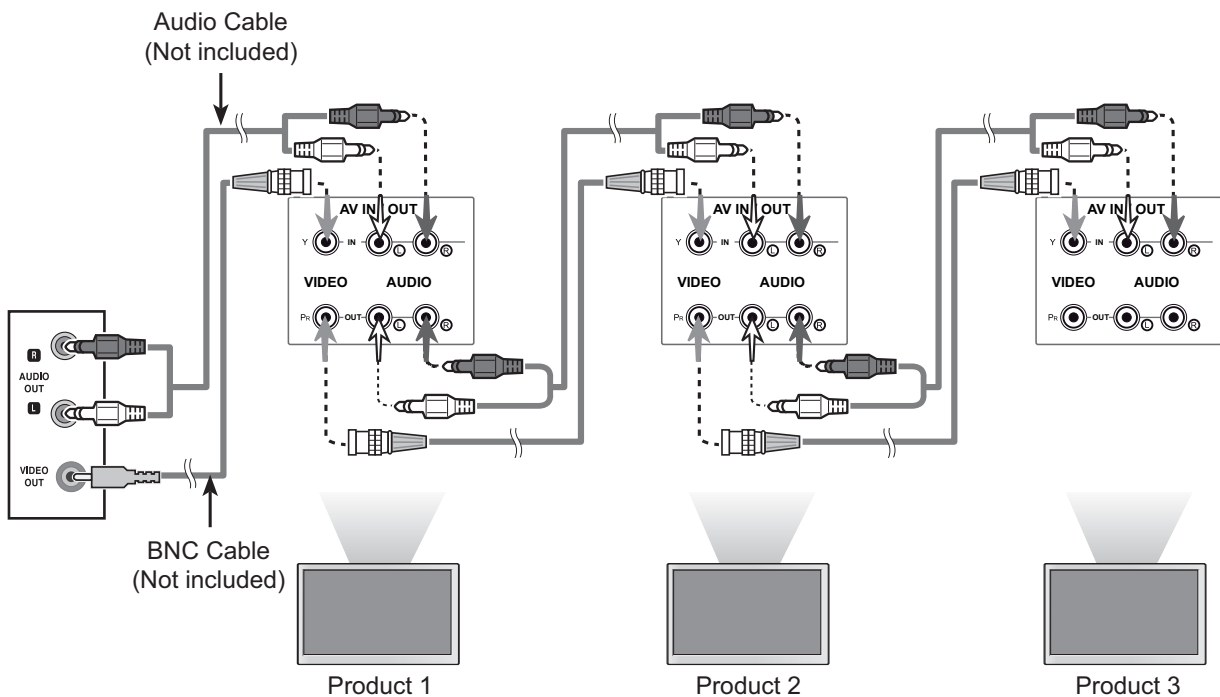
Use this function to share the RGB video signal with other monitors without having to use a separate signal splitter box.

- 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 Mode



AV(CVBS) Mode



! NOTE

- When multi-connecting in/out cascade format, no loss cables are recommended.
- We recommend that you should use cable distributor.

TROUBLESHOOTING

No image is displayed

Problem	Resolution
Is the product power cord connected?	<ul style="list-style-type: none"> • See if the power cord is properly connected to the outlet.
Is the power indicator light on?	<ul style="list-style-type: none"> • See if the power switch is turned on. • May need service.
Power is on, power indicator is blue but the screen appears extremely dark.	<ul style="list-style-type: none"> • Adjust brightness and contrast again. • Backlight may need repair.
The power indicator amber?	<ul style="list-style-type: none"> • If the product is in power saving mode, move the mouse or press any key. • Turn both devices off and then back on.
Does the 'Out of range' message appear?	<ul style="list-style-type: none"> • 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. <p>* Maximum resolution RGB : 1920 x 1080 @ 60 Hz HDMI/DVI : 1920 x 1080 @ 60 Hz</p>
Does the 'Check signal cable' message appear?	<ul style="list-style-type: none"> • The signal cable between PC and product is not connected. Check the signal cable. • Press the 'INPUT' menu in the remote Control to check the input signal.

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

Problem	Resolution
Did you install the driver?	<ul style="list-style-type: none"> • Install the product driver, which is provided with the product, or download it from the web site. (http://www.lg.com) • See if the plug&play function is supported by referring to the video card user manual.

'Key Lock On' message appears.

Problem	Resolution
The 'Key Lock On' message appears when pressing the Menu button.	<ul style="list-style-type: none"> The Lock function prevents the OSD settings from being changed inadvertently. To release the lock, go to Menu and Option and disable the Key Lock option.

The screen image looks abnormal.

Problem	Resolution
Is the screen position wrong?	<ul style="list-style-type: none"> 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. 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.
Do thin lines appear on the background screen?	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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 style="list-style-type: none"> The proper input signal is not connected to the signal port. Connect the signal cable that matches with the source input signal.

After-image appears on the product.

Problem	Resolution
After-image appears when the product is turned off.	<ul style="list-style-type: none"> If you use a fixed image for a long time, the pixels may be damaged quickly. Use the screen-saver function.

The audio function does not work.

Problem	Resolution
No sound?	<ul style="list-style-type: none"> • See if the audio cable is connected properly. • Adjust the volume. • See if the sound is set properly.
Sound is too dull.	<ul style="list-style-type: none"> • Select the appropriate equalize sound.
Sound is too low.	<ul style="list-style-type: none"> • Adjust the volume.

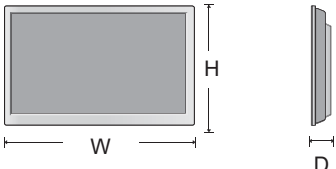
Screen color is abnormal.

Problem	Resolution
Screen has poor color resolution (16 colors).	<ul style="list-style-type: none"> • Set the number of colors to more than 24 bits (true color) Select Control Panel - Display - Settings - Color Table menu in Windows.
Screen color is unstable or mono-colored.	<ul style="list-style-type: none"> • Check the connection status of the signal cable. Or, re-insert the PC video card.
Do black spots appear on the screen?	<ul style="list-style-type: none"> • Several pixels (red, green, white or black color) may appear on the screen, which can be attributable to the unique characteristics of the LCD panel. It is not a malfunction of the LCD.

The operation does not work normally.

Problem	Resolution
The power suddenly turned off.	<ul style="list-style-type: none"> • Is the sleep timer set? • Check the power control settings. Power interrupted. • "CAUTION! FAN STOP!" If the power is turned off after this message appears, it means that the fan is out of order. In this case, contact your local service center.

SPECIFICATIONS

LCD Panel	Screen Type	1192.8 mm Wide (46.96 inch) TFT (Thin Film Transistor) LCD (Liquid Crystal Display) Panel. Visible diagonal size : 1192.8 mm
	Pixel Pitch	0.5415 mm (H) x 0.5415 mm (V)
Video Signal	Max. Resolution	RGB : 1920 X 1080 @ 60 Hz HDMI/DVI : 1920 X 1080 @ 60 Hz - It may not be supported depending on the OS or video card type.
	Recommended Resolution	RGB : 1920 X 1080 @ 60 Hz HDMI/DVI : 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 HDMI/DVI : 30 kHz to 83 kHz
	Vertical Frequency	RGB : 56 Hz to 75 Hz HDMI/DVI : 56 Hz to 60 Hz
	Synchronization Type	Separate Sync, Composite Sync, Digital
Input Connector	15-pin D-Sub type, HDMI/DVI (digital), AV(CVBS), Composite Video, RS-232C, LAN, USB	
Power	Rated Voltage	AC 100-240 V~ 50/60 Hz 3.0 A
	Power Consumption	On Mode : 260 W Typ. Sleep Mode : ≤ 1 W (RGB) / 2 W (HDMI/DVI) (LAN OFF) Off Mode : ≤ 0.5 W
Environmental conditions	Operating Temperature Operating Humidity	0 °C to 40 °C 10 % to 80 %
	Storage Temperature Storage Humidity	-20 °C to 60 °C 5 % to 95 %
/ Dimensions (Width x Height x Depth) / Weight		
	1079.5 mm x 624.6 mm x 116.3 mm / 21.5 kg	

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

RGB (PC) supported mode

Resolution	Horizontal Frequency(kHz)	Vertical Frequency(Hz)
640 x 350	31.469	70.8
720 x 400	31.468	70.8
640 x 480	31.469	59.94
640 x 480	37.5	75
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
1280 x 768	47.7	60
1360 x 768	47.72	59.799
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

HDMI/DVI(PC) supported mode

Resolution	Horizontal Frequency(kHz)	Vertical 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
1280 x 768	47.7	60
1360 x 768	47.72	59.799
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

DTV Mode

Resolution	Component	HDMI/DVI (DTV)
480i	o	x
576i	o	x
480p	o	o
576p	o	o
720p	o	o
1080i	o	o
1080p	o	o

Power Indicator

Mode	Product
On Mode	Blue
Sleep Mode	Amber
Off Mode	-

NOTE

- DTV/PC selection on RGB and HDMI/DVI inputs is available for PC resolutions : 640 x 480 / 60 Hz, 1280 x 720 / 60 Hz, 1920 x 1080 / 60 Hz and DTV resolutions : 480p, 720p, 1080p.

NOTE

- 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 horizontal 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

- This feature is not available for all models.

Code (Hexa)	Function	Note
95	Energy Saving (e \mathcal{O})	R/C BUTTON
08	 (POWER)	R/C BUTTON (POWER ON/OFF)
0B	INPUT	R/C BUTTON
C4	Monitor On	R/C BUTTON (Discrete IR Code)
C5	Monitor Off	R/C BUTTON (Discrete IR Code)
79	ARC (MARK)	R/C BUTTON (Discrete IR Code)
43	MENU	R/C BUTTON
40	Up (^)	R/C BUTTON
41	Down (v)	R/C BUTTON
07	Left (<)	R/C BUTTON
06	Right (>)	R/C BUTTON
44	OK()	R/C BUTTON
28	BACK()	R/C BUTTON
5B	EXIT	R/C BUTTON
4D	PSM	R/C BUTTON
02	 (+)	R/C BUTTON
03	 (-)	R/C BUTTON
09	MUTE	R/C BUTTON
E0	Brightness ^ (Page UP)	R/C BUTTON
E1	Brightness v (Page Down)	R/C BUTTON
10 to 19	Number Key 0 to 9	R/C BUTTON
72	Red Key	R/C BUTTON
71	Green Key	R/C BUTTON
63	Yellow Key	R/C BUTTON
61	Blue Key	R/C BUTTON
7B	TILE	R/C BUTTON
5A	AV(CVBS)	Discrete IR Code (Input AV Selection)
BF	Component	Discrete IR Code (Input Component Selection)
D5	RGB PC	Discrete IR Code (Input RGB PC Selection)
C6	HDMI/DVI	Discrete IR Code (Input HDMI/DVI Selection)
76	ARC (4:3)	Discrete IR Code (Only 4 : 3 mode)
77	ARC (16:9)	Discrete IR Code (Only 16 : 9 mode)
AF	ARC (ZOOM)	Discrete IR Code (Only ZOOM, Cinena ZOOM 1 mode)
99	Auto Config.	R/C BUTTON (Discrete IR Code)
B1		R/C BUTTON
B0		R/C BUTTON
BA		R/C BUTTON
8F		R/C BUTTON
8E		R/C BUTTON

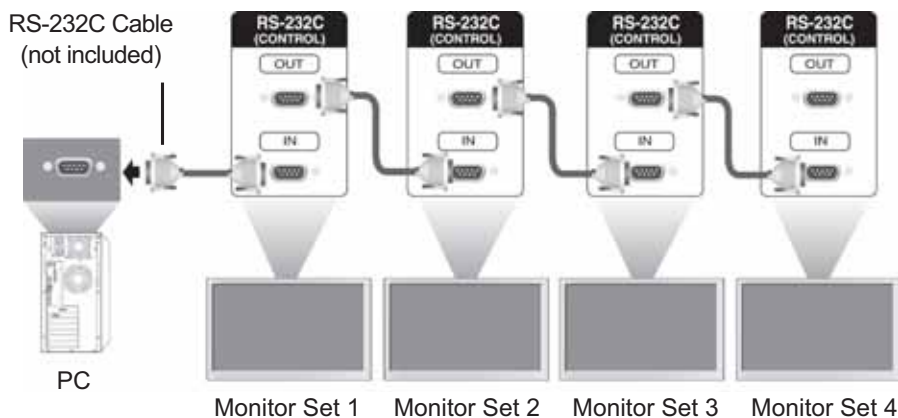
CONTROLLING THE MULTIPLE PRODUCT

- Use this method to connect several products to a single PC. You can control several products at a time by connecting them to a single PC.
- In the Option menu, Set ID must be between 1 and 99 without being duplicated.

Connecting the cable

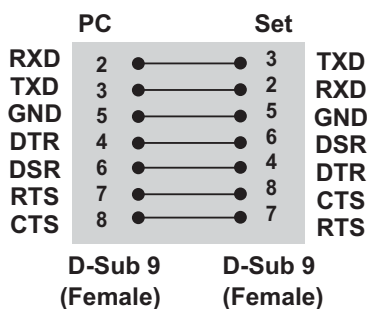
Connect the RS-232C cable as shown in the picture.

- 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.

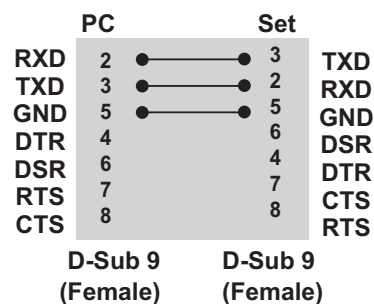


RS-232C Configurations

7-Wire Configurations (Standard RS-232C cable)



3-Wire Configurations (Not Standard)



Communication Parameter

- Baud Rate : 9600 buad Rate (UART)
- Data Length : 8 bit
- Parity Bit : None
- Stop Bit : 1bit
- Flow Control : None
- Communication Code : ASCII code
- Use a crossed (reverse) cable

Command reference list

	COMMAND		DATA		
	1	2	1	2	3
01. Power	k	a	00H to 01H		
02. Input Select	k	b	02H to 09H		
03. Aspect Ratio	k	c	01H to 1FH		
04. Screen Mute	k	d	00H to 01H		
05. Volume Mute	k	e	00H to 01H		
06. Volume Control	k	f	00H to 64H		
07. Contrast	k	g	00H to 64H		
08. Brightness	k	h	00H to 64H		
09. Color	k	i	00H to 64H		
10. Tint	k	j	00H to 64H		
11. Sharpness	k	k	00H to 64H		
12. OSD Select	k	l	00H to 01H		
13. Remote Lock/ key Lock	k	m	00H to 01H		
14. Balance	k	t	00H to 64H		
15. Color Temperature	k	u	00H to 02H		
16. Abnomal state	k	z	FFH		
17. ISM mode	j	p	01H to 08H		
18. Auto configuration	j	u	01H		
19. Key	m	c	Key Code		
20. Tile Mode	d	d	00H to 55H		
21. Tile H Position	d	e	00H to 14H		
22. Tile V Position	d	f	00H to 14H		
23. Tile H Size	d	g	00H to 64H		
24. Tile V Size	d	h	00H to 64H		
25. Tile ID Set	d	i	00H to 19H		
26. Natural Mode (In Tile mode)	d	j	00H to 01H		
27. Picture mode (PSM)	d	x	00H to 06H		
28. Sound mode	d	y	00H to 05H		
29. Fan Fault check	d	w	FFH		
30. Elapsed time return	d	l	FFH		
31. Temperature value	d	n	FFH		
32. Lamp fault check	d	p	FFH		
33. Auto Volume	d	u	00H to 01H		
34. Speaker	d	v	00H to 01H		
35. Time	f	a	00H to 06H	00H to 17H	00H to 3BH
36. On Timer (On/Off Timer) Time	f	d	F1H to F4H E0H to E4H 01H to 80H	00H to 17H	00H to 3BH
37. Off Timer (On/Off Timer) Time	f	e	F1H to F4H E0H to E4H 01H to 80H	00H to 17H	00H to 3BH
38. Scheduling input select	f	u	F1H to F4H	02H to 09H	

	COMMAND		DATA		
	1	2	1	2	3
39. Sleep Time	f	f	00H to 08H		
40. Auto Sleep	f	g	00H to 01H		
41. Power On Delay	f	h	00H to 64H		
42. Language	f	i	00H to 09H		
43. DPM Select	f	j	00H to 01H		
44. Reset	f	k	00H to 02H		
45. Power Saving	f	l	00H to 03H		
46. Power Indicator	f	o	00H to 01H		
47. Serial no.	f	y	FFH		
48. S / W Version	f	z	FFH		
49. Input Select	x	b	20H to A0H		

- Note : During USB operations such as Dvix or EMF, all commands except Power(ka) and Key(mc) are not executed and treated as NG.

Transmission / Receiving protocol

Transmission

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

* [Command 1]: First command. (k, j, m, d, f, x)

* [Command 2]: Second command.(a to u)

* [Set ID]: Set up the Set ID number of product.

range : 01H to 63H. by setting '0', server can control all products.

* In case of operating with more than 2 sets using set ID as '0' at the same time, it should not be checked the ack message. Because all sets will send the ack message, so it's impossible the check the whole ack messages.

* [DATA]: To transmit command data.

Transmit 'FF' data to read status of command.

* [Cr]: Carriage Return (ASCII code '0 x 0 D')

* []: ASCII code Space (0 x 20)

OK Acknowledgement

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

* The Product transmits ACK (acknowledgement) based on this format when receiving normal data. At this time, if the data is data read mode, it indicates present status data. If the data is data write mode, it returns the data of the PC computer.

Error Acknowledgement

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

* If there is error, it returns NG

01. Power (Command: k a)

To control Power On/Off of the set.

Transmission

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

Data 00 : Power Off Data 01 : Power On

Acknowledgement

[a][][Set ID][][OK][Data][x]

To show the status of Power On/Off.

Transmission

[k][a][][Set ID][][FF][Cr]

Acknowledgement

[a][][Set ID][][OK][Data][x]

Data 00 : Power Off Data 01 : Power On

02. Input Select (Command: k b) (Main Picture Input)

To select input source for the Set.

You can also select an input source using the INPUT button on the remote control.

Transmission

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

Data 02 : AV(CVBS)
04 : Component
07 : RGB (PC)
08 : HDMI (DTV)
09 : HDMI (PC)

Acknowledgement

[b][][Set ID][][OK][Data][x]

Data 02 : AV(CVBS)
04 : Component
07 : RGB (PC)
08 : HDMI (DTV)
09 : HDMI (PC)

03. Aspect Ratio (Command: k c)

To adjust the screen format.

You can also adjust the screen format using the ARC (Aspect Ratio Control) button on remote control or in the Screen menu.

Transmission

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

Data 01 : Normal Screen (4 : 3)
02 : Wide Scran (16 : 9)
04 : Zoom (AV(CVBS))
06 : Original (AV(CVBS))
07 : 14 : 9 (AV(CVBS))
09 : Just Scan (HD DTV)
* When the RGB, HDMI / DVI PC mode(1:1)
10 to 1F : Cinema Zoom 1 to 16
B : Full Wide

Acknowledgement

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

04. Screen Mute (Command: k d)

To select screen mute on / off.

Transmission

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

Data 00 : Screen mute off (Picture on)
01 : Screen mute on (Picture off)

Acknowledgement

[d][][Set ID][][OK][Data][x]

05. Volume Mute (Command: k e)

To control On/Off of the Volume Mute.

Transmission

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

Data 00 : Volume Mute On (Volume Off)
01 : Volume Mute Off (Volume On)

Acknowledgement

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

Data 00 : Volume Mute On (Volume Off)
01 : Volume Mute Off (Volume On)

06. Volume Control (Command: k f)

To adjust Volume.

Transmission

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

Data Min : 00H to Max : 64H
(Hexadecimal code)

Acknowledgement

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

Data Min : 00H to Max : 64H

* Real data mapping

0 : STEP 0
:
A : STEP 10
:
F : STEP 15
10 : STEP 16
:
64 : STEP 100

07. Contrast (Command: k g)

To adjust screen contrast.

You can also adjust the contrast in the Picture menu.

Transmission

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

Data Min : 00H to Max : 64H

Acknowledgement

[g][][Set ID][][OK][Data][x]

Data Min : 00H to Max : 64H

* Refer to 'Real data mapping '. See p.50

08. Brightness (Command: k h)

To adjust screen brightness.

You can also adjust the brightness in the Picture menu.

Transmission

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

Data Min : 00H to Max : 64H
(Hexadecimal code)

* Refer to 'Real data mapping '. See p.50

Acknowledgement

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

* Refer to 'Real data mapping '. See p.50

09. Color (Command: k i) (Video Timing only)

To adjust the screen color.

You can also adjust the color in the Picture menu.

Transmission

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

Data Min : 00H to Max : 64H
(Hexadecimal code)

* Refer to 'Real data mapping '. See p.50

Acknowledgement

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

Data Min : 00H to Max : 64H

10. Tint (Command: k j)

To adjust the screen tint.

You can also adjust the tint in the Picture menu.

Transmission

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

Data Min : 00H to Max : 64H
(Hexadecimal code)

00H : Step R50

64H : Step G50

Acknowledgement

[j][][Set ID][][OK][Data][x]

Data Min : 00H to Max : 64H

* Tint Real data mapping

0 : Step 0 to Red

:

64 : Step 100 to Green

11. Sharpness (Command: k k) (Video input only)

To adjust the screen Sharpness.
You can also adjust the sharpness in the Picture menu.

Transmission

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

Data Min : 00H to Max : 64H
(Hexadecimal code)

* Refer to 'Real data mapping '. See p.50

Acknowledgement

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

Data Min : 00H to Max : 64H

12. OSD Select (Command: k l)

To control OSD on/off to the set.

Transmission

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

Data 00: OSD Off Data 01: OSD On

Acknowledgement

[l][][Set ID][][OK][Data][x]

Data 00: OSD Off Data 01: OSD On

13. Remote Lock /Key Lock (Command: k m)

To control Remote Lock on/off to the set.
This function, when controlling RS-232C, locks the remote control and the local keys.

Transmission

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

Data 00: Off Data 01: On

Acknowledgement

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

Data 00: Off Data 01: On

14. Balance (Command: k t)

To adjust the sound balance.

Transmission

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

Data Min : 00H to Max : 64H
(Hexadecimal code)

00H : Step L50

64H : Step R50

Acknowledgement

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

Data Min : 00H to Max : 64H
(Hexadecimal code)

00H : Step 0 to L50

64H : Step 100 to R50

* Balance : L50 to R50

15. Color Temperature (Command: k u)

To adjust the screen color temperature.

Transmission

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

Data 00 : Medium
01 : Cool
02 : Warm

Acknowledgement

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

Data 00 : Medium
01 : Cool
02 : Warm

16. Abnormal state (Command: k z)

Used to Read the power off status when Stand-by mode.

Transmission

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

Data FF : Read

Acknowledgement

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

Data 00 : Normal (Power on and signal exist)
01 : No signal (Power on)
02 : Turn the monitor off by remote control
03 : Turn the monitor off by sleep time function
04 : Turn the monitor off by RS-232C function
08 : Turn the monitor off by off time function
09 : Turn the monitor off by auto off function

17. ISM mode (Command: j p)

Used to select the afterimage preventing function.

Transmission

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

Data 01 : Inversion
02 : Orbiter
04 : White Wash
08 : Normal

Acknowledgement

[p][][Set ID][][OK][Data][x]

18. Auto Configure (Command: j u)

To adjust picture position and minimize image shaking.

Automatically. NB : Only applies to RGB(PC) mode.

Transmission

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

Data 01 : To set

Acknowledgement

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

19. Key (Command: m c)

To send IR remote key code.

Transmission

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

Data Key code : Refer to 'IR CODES'. See p.44

Acknowledgement

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

20. Tile Mode (Command: d d)

Change a Tile Mode.

Transmission

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

Data	Description
00 or 11	Tile mode is off.
12	1 x 2 mode (column x row)
13	1 x 3 mode
14	1 x 4 mode
...	...
55	1 x 2 mode

* The data can not be set to 0X or X0 except 00.

Acknowledgement

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

21. Tile H Position (Command: d e)

To set the Horizontal position.

Transmission

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

Data Min : 00H to Max : 14H

00H : Step -10(Left)
14H : Step 10(Right)

Acknowledgement

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

22. Tile V Position (Command: d f)

To set the Vertical position.

Transmission

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

Data Min : 00H to Max : 14H

00H : Step -10(Down)
14H : Step 10(Up)

Acknowledgement

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

23. Tile H Size (Command: d g)

To set the Horizontal size.

Transmission

[d][g][][Set ID][][Data][x]

Data Min : 00H to Max : 64H

* Refer to 'Real data mapping'. See p.50

Acknowledgement

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

24. Tile V Size (Command: d h)

To set the Vertical size.

Transmission

[d][h][][Set ID][][Data][x]

Data Min : 00H to Max : 64H

* Refer to 'Real data mapping'. See p.50

Acknowledgement

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

25. Tile ID Set (Command: d i)

To assign the Tile ID for Tiling function.

Transmission

[d][i][][Set ID][][Data][x]

Data Min : 00H to Max : 19H

(Hexadecimal code)

Acknowledgement

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

26. Natural Mode (Command: d j)

To assign the Tile Natural mode for Tiling function.

Transmission

[d][j][][Set ID][][Data][x]

Data 00 : Natural Off

01 : Natural On

ff : Read Status

Acknowledgement

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

27. Picture Mode (Command: d x)

To adjust the picture mode.

Transmission

[d][x][][Set ID][][Data][x]

Data Structure

Data(Hex)	Mode
00	Vivid
01	Standard
02	Cinema
03	Sport
04	Game
05	Export 1
06	Export 2

Acknowledgement

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

28. Sound Mode (Command: d y)

To adjust the Sound mode.

Transmission

[d][y][][Set ID][][Data][x]

Data Structure

Data(Hex)	Mode
01	Standard
02	Music
03	Cinema
04	Sport
05	Game

Acknowledgement

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

29. Fan Fault check (Command: d w)

To check the Fan fault of the Set.

Transmission

[d][w][][Set ID][][Data][x]

* The data is always FF (in Hex).

Data ff : Read Status

Acknowledgement

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

* Data is the status value of the Fan fault.

Data 00 : Fan fault

01 : Fan Ok

02 : N/A (Not Available)

32. Lamp fault Check (Command: d p)

To check lamp fault.

Transmission

[d][p][][Set ID][][Data][x]

* The data is always FF(in Hex).

Acknowledgement

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

* The data is 1 byte long in Hexadecimal.

Data 00 : Lamp Fault

01 : Lamp Ok

02 : N/A (DPM/Power Off)

30. Elapsed time return (Command: d l)

To read the elapsed time.

Transmission

[d][l][][Set ID][][Data][x]

* The data is always FF(in Hex).

Acknowledgement

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

* The data is always FF(in Hex).

(Hexadecimal code)

33. Auto volume (Command: d u)

Automatically adjust the volume level.

Transmission

[d][u][][Set ID][][Data][x]

Data 00: Off Data 01: On

Acknowledgement

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

31. Temperature value (Command: d n)

To read the inside temperature value.

Transmission

[d][n][][Set ID][][Data][x]

* The data is always FF(in Hex).

Acknowledgement

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

* The data is 1 byte long in Hexadecimal.

34. Speaker (Command: d v)

Turn the speaker on or off.

Transmission

[d][v][][Set ID][][Data][x]

Data 00: Off Data 01: On

Acknowledgement

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

35. Time (Command: f a)

Set the current time.

Transmission

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

[Data1]

00 : Monday

01 : Tuesday

02 : Wednesday

03 : Thursday

04 : Friday

05 : Saturday

06 : Sunday

[Data2]

0H to 17H (Hours)

[Data3]

00H to 3BH (Minutes)

Acknowledgement

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

*When reading data, FFH is inputted for [Data1], [Data2] and [Data3]. In other cases, all are treated as NG.

36. On Timer (On/Off Timer) Time (Command: f d)

Set On Timer.

Transmission

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

[Data1]

1. f1h to f4h(read one index)

f1: read 1st index of On Time List

f2: read 2nd index of On Time List

f3: read 3rd index of On Time List

f4: read 4th index of On Time List

2. e1h~e4h(delete one index), e0h(delete all indexes)

e0: delete all indexes of On Time List

e1: delete 1st index of On Time List

e2: delete 2nd index of On Time List

e3: delete 3rd index of On Time List

e4: delete 4th index of On Time List

3. 01h to 80h (write) (Day of Week)

bit0 (01h) : Monday

bit1 (02h) : Tuesday

bit2 (04h) : Wednesday

bit3 (08h) : Thursday

bit4 (10h) : Friday

bit5 (20h) : Saturday

bit6 (40h) : Sunday

bit7 (80h) : Everyday

(1fh) : Monday to Friday

(3fh) : Monday to Saturday

(60h) : Saturday to Sunday

[Data 2]

00h to 17h (Hours)

[Data 3]

00h to 3bh (Minutes)

*When you read/delete the current on time list, all of [Data2][Data3] are have to be FFH.

(ex1: fd 01 f1 ff ff - when you read 1st index of On Time List

ex2: fd 01 e1 ff ff - when you delete 1st index of On Time List

ex3: fd 01 3f 02 03 - when you write one On Time Data, "Monday to Saturday, 02:03"

Acknowledgement

[d][][Set ID][][OK][Data1][Data2][Data3][x]

37. Off Timer (On/Off Timer) Time (Command: f e)

Set Off Timer.

Transmission`[f][e][][Set ID][][Data1][][Data2][][Data3][Cr]`

[Data 1]

1. f1h to f4h(read one index)

f1: read 1st index of Off Time List,

f2: read 2nd index of Off Time List

f3: read 3rd index of Off Time List

f4: read 4th index of Off Time List

2. e1h to e4h(delete one index), e0h(delete all indexes)

e0: delete all indexes of Off Time List

e1: delete 1st index of Off Time List

e2: delete 2nd index of Off Time List

e3: delete 3rd index of Off Time List

e4: delete 4th index of Off Time List

3. 01h to 80h (write) (Day of Week)

bit0 (01h) : Monday

bit1 (02h) : Tuesday

bit2 (04h) : Wednesday

bit3 (08h) : Thursday

bit4 (10h) : Friday

bit5 (20h) : Saturday

bit6 (40h) : Sunday

bit7 (80h) : Everyday

(1fh) : Monday to Friday

(3fh) : Monday to Saturday

(60h) : Saturday to Sunday

[Data 2]

00h to 17h (Hours)

[Data 3]

00h to 3bh (Minutes)

*When you read/delete the current on time list, all of [Data2][Data3] are have to be FFH.

(ex1: fd 01 f1 ff ff - when you read 1st index of Off Time List

ex2: fd 01 e1 ff ff - when you delete 1st index of Off Time List

ex3: fd 01 3f 02 03 - when you write one Off Time Data, "Monday to Saturday, 02:03")

Acknowledgement`[e][][Set ID][][OK][Data1][Data2][Data3][x]`**38. Scheduling Input select (Command: f u) (Main Picture Input)**

To select input source for Set depending on day.

Transmission`[f][u][][Set ID][][Data1][][Data2][Cr]`

[Data 1]

1. f1h to f4h(write/read one index)

f1: read 1st index of Scheduling Input

f2: read 2nd index of Scheduling Input

f3: read 3rd index of Scheduling Input

f4: read 4th index of Scheduling Input

[Data 2]

Input

Data(Hex)	Input
02	AV(CVBS)
04	Component
07	RGB - PC
08	HDMI/DVI - HD - DVD
09	HDMI/DVI - PC

*When you read/delete the current Scheduling Input, [Data2] needs to be FFH.

(ex1: fu 01 f1 ff - when you read 1st index of Scheduling Input.

ex2: fu 01 f3 02 - when you write one Scheduling Input Data in to 3rd index, "AV(CVBS)")

Acknowledgement`[u][][Set ID][][OK][Data1][Data2][x]`

39. Sleep Time (Command: f f)

Set Sleep Time.

Transmission

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

Data 00 : Off
 01 : 10
 02 : 20
 03 : 30
 04 : 60
 05 : 90
 06 : 120
 07 : 180
 08 : 240

Acknowledgement

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

40. Auto Sleep (Command: f g)

Set Auto Sleep.

Transmission

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

Data 00 : Off
 01 : On

Acknowledgement

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

41. Power On Delay (Command: f h)

Set the schedule delay when the power is turned on (Unit: second).

Transmission

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

Data : 00H to 64H (Data value)

* Refer to 'Real data mapping'. See p.50

Acknowledgement

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

42. Language (Command: f i)

Set the OSD language.

Transmission

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

Data 00 : English
 01 : French
 02 : German
 03 : Spanish
 04 : Italian
 05 : Portuguese
 06 : Chinese
 07 : Japanese
 08 : Korean
 09 : Russian

Acknowledgement

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

43. DPM Select (Command: f j)

Set the DPM (Display Power Management) function.

Transmission

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

Data 00 : Off
 01 : On

Acknowledgement

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

44. Reset (Command: f k)

Set the DPM (Display Power Management) function.

Transmission

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

Data 00 : Picture Reset
 01 : Screen Reset
 02 : Factory Reset

Acknowledgement

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

45. Power saving (Command: f l)

To set the Power saving mode.

Transmission

[f][l][][Set ID][][Data][Cr]

Data 00 : Off
01 : static level 1
02 : static level 2
03 : static level 3

Acknowledgement

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

46. Power Indicator (Command: f o)

To set the LED for Power Indicator

Transmission

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

Data 00 : Off
01 : On

Acknowledgement

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

47. Serial no.Check (Command: f y)

Check the Serial no.

Transmission

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

Data FF (to read the serial numbers)

Acknowledgement

[y][][Set ID][][OK/NG][Data1] to [Data13][x]

* The data format is ASCII Code.

48. S/W Version (Command: f z)

Check the software version.

Transmission

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

Data FFH : Read

Acknowledgement

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

49. Input Select (Command: x b)

To select input source for the Set.

Transmission

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

Data 20H : AV(CVBS)
40H : Component
60H : RGB(PC)
90H : HDMI/DVI(DTV)
A0H : HDMI/DVI(PC)

Acknowledgement

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

Data 20H : AV(CVBS)
40H : Component
60H : RGB(PC)
90H : HDMI/DVI(DTV)
A0H : HDMI/DVI(PC)



Make sure to read the Safety Precautions before using the product.
Keep the Owner's Manual(CD) in an accessible place for future reference.
The model and serial number of the SET is located on the back and one side of the SET.
Record it below should you ever need service.

MODEL _____

SERIAL _____

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

■■■ Regulatory Information cont.

:: FCC Compliance Statement

This equipment has been tested and found to comply within the limits of a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception (which can be determined by turning the equipment on and off), the user is encouraged to try to correct the interference by using one or more of the following measures:

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

Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the user's (or your) authority to operate the equipment. Only peripherals (digital input/output devices, terminals, printers, etc.) certified to comply with the Class B limits may be attached to this monitor. Operation with non-certified peripherals is likely to result in interference to radio and TV reception. Only shielded signal cables may be used with this System.

NOTICE

The regulations are applied only to the products with the ID LABEL indicating specific requirements.

:: Canadian DOC Notice

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations. Cet appareil numérique de la classe B

respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

NOTICE

The regulations are applied only to the products with the ID LABEL indicating specific requirements.

:: CE Conformity Notice (for Europe)

Products with the "CE" Marking comply with the EMC Directive(89/336/EEC) and LOW VOLTAGE Directive (73/23/EEC) issued by the Commission of the European Community.

Compliance with these directives implies conformity to the following European Norms :

- EN 55022 ; Radio Frequency Interference
- EN 55024 ; Electromagnetic Immunity
- EN 61000-3-2 ; Power Line Harmonics
- EN 61000-3-3 ; Voltage Fluctuations
- EN 60950-1 ; Product Safety

NOTICE

The regulations are applied only to the products with the ID LABEL indicating specific requirements.

:: Low Radiation Compliance (MPR II)

This monitor meets one of the strictest guidelines available today for low radiation emissions, offering the user extra shielding and an antistatic screen coating. These guidelines, set forth by a government agency in Sweden, limit the amount of emission allowed in the Extremely Low Frequency (ELF) and Very Low Frequency (VLF) electromagnetic range.

:: TCO'99 (TCO'99 applied model only)



Congratulations!

You have just purchased a TCO'99 approved and labelled product! Your choice has provided you with a product developed for professional use. Your purchase has also contributed to reducing the burden on the environment and also to the further development of environmentally adapted electronics products.

■■■ Regulatory Information cont.

Why do we have environmentally labelled computers?

In many countries, environmental labelling has become an established method for encouraging the adaptation of goods and services to the environment. With the growing manufacture and usage of electronic equipment throughout the world, there is a recognized concern for the materials and substances used by electronic products with regards to their eventual recycling and disposal. By proper selection of these materials and substances, the impact on the environment can be minimized.

There are also other characteristics of a computer, such as energy consumption levels, that are important from the viewpoints of both the work (internal) and natural (external) environments. Electronic equipment in offices is often left running continuously, resulting in unnecessary consumption of large amounts of energy and additional power generation. From the standpoint of carbon dioxide emissions alone, it is vital to save energy.

What does labelling involve?

The product meets the requirements for the TCO'99 scheme which provides for international and environmental labelling of personal computers and/or displays.

The labelling scheme was developed as a joint effort by the TCO (The Swedish Confederation of Professional Employees), Svenska Naturskyddsforeningen (The Swedish Society for Nature Conservation) and Statens Energimyndighet (The Swedish National Energy Administration).

Approval requirements cover a wide range of issues: ecology, ergonomics, emission of electrical and magnetical fields, energy consumption and electrical safety.

Ecological criteria impose restrictions on the presence and use of heavy metals, brominated and chlorinated flame retardants, and other substances. The product must be prepared for recycling and the manufacturing site(s) shall be certified according to ISO14001 or EMAS registered.

Energy requirements include a demand that the system unit and/or display, after a certain period of inactivity, shall reduce its power consumption to a lower level in one or more stages. The length of time to reactivate the system unit shall be reasonable for the user.

Labelled products must meet strict environmental demands, for example, in respect of the reduction of electrical and magnetical fields as well as work load and

visual ergonomics.

Below you will find a brief summary of the ecological requirements met by this product. The complete ecological criteria document can be found at TCO Development's website <http://www.tcodevelopment.com> or may be ordered from:

TCO Development

SE-114 94 STOCKHOLM, Sweden

Fax: +46 8 782 92 07

Email : development@tco.se

Information regarding TCO'99 approved and labelled products may also be obtained at <http://www.tcodevelopment.com>

Ecological requirements

Flame retardants

Flame retardants may be present in printed wiring board laminates, cables, and housings. Their purpose is to prevent, or at least to delay the spread of fire. Up to 30% by weight of the plastic in a computer casing can consist of flame retardant substances. Many flame retardants contain bromine or chlorine, and these flame retardants are chemically related to PCBs (polychlorinated biphenyls). Both the flame retardants containing bromine or chlorine and the PCBs are suspected of giving rise to health effects, including reproductive damage in fish-eating birds and mammals, due to the bio-accumulative* processes when not disposed of in accordance with strict standards for disposal.

TCO'99 requires that plastic components weighing more than 25 grams shall not contain flame retardants with organically bound bromine or chlorine. Flame retardants are allowed in the printed wiring board laminates due to the lack of commercially available alternatives.

Cadmium**

Cadmium is present in rechargeable batteries and in the colour-generating layers of certain computer displays. TCO'99 requires that batteries, the colour-generating layers of display screens, and the electrical or electronics components shall not contain any cadmium.

Mercury**

Mercury is sometimes found in batteries, relays and switches. TCO'99 requires that batteries shall not contain any mercury. It also demands that mercury is not present in any of the electrical or electronics components associated with the labelled unit. There is however one

■■■ Regulatory Information cont.

exception. Mercury is, for the time being, permitted in the back light system of flat panel monitors as there today is no commercially available alternative. TCO aims on removing this exception when a mercury free alternative is available.

Lead**

Lead can be found in picture tubes, display screens, solders and capacitors. TCO'99 permits the use of lead due to the lack of commercially available alternatives, but in future requirements TCO Development aims at restricting the use of lead.

* **Bio-accumulative is defined as substances which accumulate in living organisms.**

** **Lead, Cadmium and Mercury are heavy metals which are bio-accumulative.**

:: TCO'03 (TCO'03 applied model only)



Congratulations!

The display you have just purchased carries the TCO'03 Displays label.

This means that your display is designed, manufactured and tested according to some of the strictest quality and environmental requirements in the world. This makes for a high performance product, designed with the user in focus that also minimizes the impact on our natural environment. Some of the features of the TCO'03 Display requirements:

Ergonomics

- Good visual ergonomics and image quality in order to improve the working environment for the user and to reduce sight and strain problems. Important parameters are luminance, contrast, resolution, reflectance, colour rendition and image stability.

Energy

- Energy-saving mode after a certain time – beneficial both for the user and the environment
- Electrical safety

Emissions

- Electromagnetic fields

- Noise emissions

Ecology

- The product must be prepared for recycling and the manufacturer must have a certified environmental management system such as EMAS or ISO 14 001
- Restrictions on
 - chlorinated and brominated flame retardants and polymers
 - heavy metals such as cadmium, mercury and lead.

The requirements included in this label have been developed by TCO Development in co-operation with scientists, experts, users as well as manufacturers all over the world. Since the end of the 1980s TCO has been involved in influencing the development of IT equipment in a more user-friendly direction. Our labelling system started with displays in 1992 and is now requested by users and IT-manufacturers all over the world.

For more information, please visit
www.tcodevelopment.com

English

Information for Environmental Preservation

LGE. announced the 'LG Declaration for a Cleaner Environment' in 1994, and this ideal has served as a guiding managerial principle ever since. The Declaration is a foundation that has allowed us to undertake environmentally friendly activities in careful consideration of economic, environmental, and social aspects.

We promote activities for environmental preservation, and we specifically develop our products to embrace the concept of environment-friendly.

We minimize the hazardous materials contained in our products. For example, there is no cadmium to be found in our monitors.

Information for recycling

This monitor may contain parts which could be hazardous to the environment. It is important that this monitor be recycled after use.

LGE. handles all waste monitors through an environmentally acceptable recycling method. There are several take-back and recycling systems currently in

■■■ Regulatory Information cont.

operation worldwide. Many parts will be reused and recycled, while harmful substances and heavy metals are treated by an environmentally friendly method.

If you want to find out more information about our recycling program, please contact your local LG vendor or a corporate representative of LG.

We set our vision and policies on a cleaner world by selecting the issue of the global environment as a task for corporate improvement. Please visit our website for more information about our 'green' policies.

<http://www.lge.com/about/environment/html/Recycling.jsp>

■ ■ ■ Deutsch

Informationen zur Erhaltung der Umwelt

Im Jahr 1994 verkündete LGE die 'LG Declaration for a Cleaner Environment' (LG Erklärung für eine sauberere Umwelt). Seitdem dient dieses Ideal als führendes Prinzip des Unternehmens. Diese Erklärung war die Basis für die Durchführung von

umweltfreundlichen Aktivitäten, wobei wirtschaftliche, umweltbezogene und soziale Aspekte in die Überlegungen mit einbezogen wurden.

Wir fördern Aktivitäten zum Schutz der Umwelt und die Entwicklung unserer Produkte ist darauf ausgerichtet, unserem Konzept bezüglich Umweltfreundlichkeit gerecht zu werden.

Wir sind darauf bedacht, den Anteil der in unseren Produkten enthaltenen schädlichen Materialien zu minimieren. So ist in unseren Monitoren beispielsweise kein Kadmium zu finden.

Informationen zum Thema Recycling

Dieser Monitor enthält Teile, die umweltschädlich sein können. Es ist unbedingt erforderlich, dass der Monitor recycelt wird, nachdem er außer Dienst gestellt wurde.

Bei LGE werden alle ausrangierten Monitore in einem unter umweltbezogenen Aspekten geeigneten Verfahren recycelt. Augenblicklich sind weltweit mehrere Rücknahme- und Recyclingsysteme im Einsatz. Viele Teile werden wieder verwendet und recycelt. Schädliche Substanzen und Schwermetalle werden durch umweltverträgliche Verfahren behandelt.

Falls Sie mehr über unser Recyclingprogramm erfahren möchten, wenden Sie sich bitte an Ihren lokalen LG-Händler oder einen Unternehmensvertreter von LG.

Wir richten unsere Firmenpolitik auf eine sauberere Umwelt hin aus, indem wir umweltspezifische Aspekte als wichtigen Punkt in die Weiterentwicklung unseres Unternehmens einfließen lassen. Zusätzliche Informationen über unsere 'grüne' Firmenpolitik erhalten Sie auf unserer Website.

<http://www.lge.com/about/environment/html/Recycling.jsp>

■ ■ ■ Français

Information sur la protection de l'environnement

LGE a publié sa 'Déclaration en faveur d'un environnement plus propre' en 1994 et celle-ci est restée, depuis lors, un principe directeur de notre entreprise. Cette déclaration a servi de base à notre réflexion et nous a permis de prendre en compte à la fois les aspects économiques et sociaux de nos activités, tout en respectant l'environnement.

Nous encourageons les activités en faveur de la préservation de l'environnement et c'est dans cet esprit que nous développons nos produits : nous réduisons au minimum les matières dangereuses qui entrent dans leur composition et l'on ne trouve pas de cadmium, par exemple, dans nos moniteurs.

Information sur le recyclage

Ce moniteur peut contenir des composants qui présentent un risque pour l'environnement. Il est donc important que celui-ci soit recyclé après usage.

LGE traite les moniteurs en fin de cycle conformément à une méthode de recyclage respectueuse de l'environnement. Nous reprenons nos produits et les recyclons dans plusieurs sites répartis dans le monde entier. De nombreux composants sont réutilisés et recyclés, et les matières dangereuses, ainsi que les métaux lourds, sont traités selon un procédé écologique.

Si vous souhaitez plus de renseignements sur notre programme de recyclage, veuillez contacter votre revendeur LG ou un l'un de nos représentants.

Nous voulons agir pour un monde plus propre et croyons au rôle de notre entreprise dans l'amélioration de l'environnement. Pour plus de renseignements sur notre politique "verte", rendez visite à notre site :

<http://www.lge.com/about/environment/html/Recycling.jsp>

Regulatory Information cont.

Italiano

Informazioni per la tutela dell'ambiente

La LGE. ha annunciato nel 1994 la cosiddetta 'LG Declaration for a Cleaner Environment' (Dichiarazione di LG a favore di un ambiente più pulito), un ideale che da allora funge da principio ispiratore della gestione aziendale. La dichiarazione rappresenta il fondamento che consente di intraprendere attività a favore dell'ambiente tenendo conto degli aspetti economici, ambientali e sociali. Noi della LG, promuoviamo attività a favore della tutela dell'ambiente sviluppando appositamente i nostri prodotti per cogliere il concetto del rispetto dell'ambiente riducendo i materiali dannosi presenti nei nostri prodotti. Ad esempio nei nostri monitor non è presente il cadmio.

Informazioni per il riciclaggio

Il monitor può presentare componenti che potrebbero risultare eventualmente dannosi per l'ambiente. È importante che il monitor sia riciclato al termine del suo utilizzo.

La LGE. gestisce tutti i monitor di rifiuto con un metodo di riciclaggio soddisfacente dal punto di vista ambientale. In tutto il mondo sono attualmente in funzione numerosi sistemi di riciclaggio e recupero. I diversi componenti sono riutilizzati e riciclati, mentre le sostanze dannose e i metalli pesanti vengono trattati con un metodo rispettoso dell'ambiente.

Se si desiderano maggiori informazioni in merito al programma di riciclaggio, è consigliabile rivolgersi al proprio rivenditore LG o ad un rappresentante aziendale della LG.

Noi della LG impostiamo la nostra visione e le nostre politiche a favore di un mondo più pulito ponendo la questione dell'ambiente dal punto di vista globale come una mansione rivolta al miglioramento della nostra azienda. Vi invitiamo a visitare il nostro sito internet per ulteriori informazioni sulla nostra politica "verde".
<http://www.lge.com/about/environment/html/Recycling.jsp>

Espanol

Información para la conservación medioambiental

LGE. presentó la 'Declaración para un entorno más limpio de LG' en 1994 y este ideal ha servido para guiar nuestros principios empresariales desde entonces. La Declaración es la base que nos ha permitido llevar a cabo tareas que

respetan el medio ambiente siempre teniendo en cuenta aspectos sociales, económicos y medioambientales.

Promocionamos actividades orientadas a la conservación del medio ambiente y desarrollamos nuestros productos específicamente para que se ajusten a la filosofía que protege el entorno.

Reducimos al máximo el uso de materiales de riesgo en nuestros productos. Un ejemplo de ello es la ausencia total de cadmio en nuestros monitores.

Información para el reciclaje

Este monitor puede contener piezas que entrañen riesgos medioambientales. Es importante reciclar este monitor después de su utilización.

LGE. trata todos los monitores usados siguiendo un método de reciclaje que no daña al entorno. Contamos con diversos sistemas de recuperación y reciclaje que funcionan a nivel mundial en la actualidad. Es posible reciclar y reutilizar muchas de las piezas, mientras que las sustancias dañinas y los metales pesados se tratan siguiendo un método que no perjudique al medio ambiente. Si desea obtener más información acerca del programa de reciclaje, póngase en contacto con su proveedor local de LG o con un representante empresarial de nuestra marca.

Basamos nuestra visión y nuestras políticas en un mundo más limpio y para ellos optamos por un entorno global como tarea principal de nuestra evolución como empresa. Visite nuestra página Web para obtener más información sobre nuestras políticas ecológicas.

<http://www.lge.com/about/environment/html/Recycling.jsp>

Português

Informações relacionadas à preservação ambiental

A LGE. anunciou a 'LG Declaration for a Cleaner Environment' (Declaração da LG para um ambiente mais limpo) em 1994 e esse ideal tem servido desde então como um princípio administrativo de orientação. A Declaração é a base que nos tem permitido realizar atividades favoráveis ao ambiente com consideração atenta aos aspectos econômicos, ambientais e sociais.

Promovemos atividades de preservação ambiental e desenvolvemos nossos produtos para englobar

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especificamente o conceito de favorável ao ambiente.

Reduzimos os materiais perigosos contidos em nossos produtos. Por exemplo, não há cádmio em nossos monitores.

Informações relacionadas à reciclagem

Este monitor pode conter peças que podem representar riscos ao ambiente. É importante que ele seja reciclado após o uso.

A LGE. cuida de todos os monitores descartados através de um método de reciclagem agradável ao ambiente. Há vários sistemas de devolução e reciclagem atualmente em operação no mundo. Muitas peças serão reutilizadas e recicladas e as substâncias nocivas e os metais pesados passarão por tratamento através de um método favorável ao ambiente.

Para obter mais informações sobre nosso programa de reciclagem, entre em contato com seu fornecedor LG local ou com um representante corporativo da LG.

Definimos nossa visão e nossas políticas relacionadas a um mundo mais limpo selecionando a questão do ambiente global como uma tarefa de aprimoramento corporativo. Visite nosso site para obter mais informações sobre nossas políticas de meio ambiente.

<http://www.lge.com/about/environment/html/Recycling.jsp>

■ ■ ■ Nederlands

Informatie met betrekking tot het behoud van het milieu

LGE. publiceerde in 1994 de 'LG Declaration for a Cleaner Environment' (de LG-verklaring met betrekking tot een schoner milieu). Deze verklaring en het ideaal van een schoner milieu fungeren sindsdien als een bestuurlijke leidraad voor onze onderneming. Op basis van deze verklaring ontplooiën wij milieuvriendelijke activiteiten, waarbij er zowel met sociale en economische aspecten, als met milieuaspecten zorgvuldig rekening wordt gehouden.

Wij ondersteunen activiteiten die zijn gericht op het behoud van het milieu en wij houden bij het ontwikkelen onze producten specifiek rekening met de milieuvriendelijkheid van onze producten.

Wij minimaliseren het gebruik van schadelijke stoffen in onze producten. Er wordt bijvoorbeeld geen cadmium verwerkt in onze monitoren.

Informatie met betrekking tot recycling

Deze monitor bevat materialen die schadelijk zouden kunnen zijn voor het milieu. Het is belangrijk dat deze monitor aan het einde van zijn levensduur wordt gerecycled.

LGE. verwerkt alle afvalmonitoren via een milieuvriendelijke recyclingmethode. Hiervoor worden er momenteel wereldwijd verscheidene inname- en recyclingsystemen gehanteerd. Een groot aantal onderdelen wordt opnieuw gebruikt en gerecycled, waarbij schadelijke stoffen en zware metalen volgens een milieuvriendelijke methode worden verwerkt.

Voor meer informatie over ons recyclingprogramma kunt u contact opnemen met uw plaatselijke LG-vertegenwoordiger of een LG-vestiging.

Onze visie en ons beleid met betrekking tot een schonere wereld vloeien voort uit het feit dat wij het milieu hebben aangemerkt als een onderwerp dat speciale aandacht verdient binnen onze onderneming. Bezoek onze website voor meer informatie over ons 'groene' beleid.

<http://www.lge.com/about/environment/html/Recycling.jsp>

■ ■ ■ Russian

Информация по охране окружающей среды

В 1994 году корпорация LGE опубликовала 'Декларацию LG по охране окружающей среды', которая с тех пор служит основным принципом управления. На основе этой декларации мы смогли предпринять действия, обеспечивающие безопасность окружающей среды, уделяя при этом должное внимание экономическим, экологическим и социальным аспектам.

Мы стимулируем деятельность по охране окружающей среды, уделяя особое внимание разработке нашей продукции в соответствии с концепцией экологической безопасности.

Мы сводим к минимуму содержание опасных веществ в нашей продукции. Например, в наших мониторах вы не найдете кадмия.

Информация по утилизации отходов

Этот монитор может содержать компоненты, которые могут нанести ущерб окружающей среде.

■■■ Regulatory Information cont.

Необходимо утилизировать монитор после использования.

Корпорация LGE перерабатывает все бракованные мониторы с помощью экологически приемлемого метода утилизации отходов. По всему миру действуют системы утилизации отходов и возврата использованной продукции. Многие компоненты будут вторично использованы и утилизированы, в то время как вредные вещества и тяжелые металлы будут обработаны с помощью экологически приемлемого метода.

За более подробной информацией по нашей программе утилизации отходов обращайтесь к местному поставщику или представителю корпорации LG.

Мы ориентируемся на обеспечение экологической безопасности, ставя себе целью глобальную защиту окружающей среды. Дополнительную информацию о нашей политике по охране окружающей среды вы можете найти на нашем сайте:
<http://www.lge.com/about/environment/html/Recycling.jsp>

한국어

환경 보존 정보

LG 전자는 1994년 'LG 환경 선언문'을 발표한 후 현재까지 이를 기업 경영의 이념으로 삼아왔습니다. 이 선언문을 바탕으로 LG 전자는 모든 경영 활동에서 경제성뿐만 아니라 환경성 및 사회성을 주요 의사 결정의 기준으로 삼음으로써 지속적으로 환경 친화적인 경영을 전개하고 있습니다.

본사는 보다 활발한 환경 보존 활동과 더불어 환경 친화적 제품 개발에 주력해 왔습니다.

또한 제품에 포함되는 환경 위해 요소를 최소화하는 데에도 노력을 기울이지 않고 있습니다. LG 전자 모니터의 경우 카드를 전혀 사용하지 않는 것에서도 이러한 노력을 알 수 있습니다.

재활용 정보

본 모니터에는 환경에 위해를 주는 부품이 포함되어 있을 수도 있습니다. 따라서 사용이 끝난 모니터는 재활용하는 것이 좋습니다.

폐모니터는 모두 환경 친화적 방식으로 처리됩니다. 현재 세계적으로 운영되고 있는 회수 및 재활용 시스템에는

여러 가지가 있습니다. 대부분의 부품의 경우 재사용 또는 재활용되지만 환경 위해 물질과 중금속은 환경 친화적 방법으로 처리됩니다.

본사의 재활용 프로그램에 대한 자세한 정보는 각 지역의 LG 공급업체나 LG 기업 대표부에 문의하시기 바랍니다.

LG 전자는 기업 개선 정책의 하나로 지구 환경 문제를 채택함으로써 보다 나은 환경을 만들어 나가기 위한 비전과 정책을 수립했습니다. 본사의 친환경 정책에 대한 자세한 정보를 보시려면 아래의 웹 사이트를 방문하십시오.

http://www.lge.co.kr/cckr/about/environ/purity_02.jsp

∴EPA (EPA applied model only)

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



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

∴NOM MARK (Mexico only)



■■■ Regulatory Information cont.

:: WEEE (for Europe)



English

Disposal of your old appliance

1. When this crossed-out wheeled bin symbol is attached to a product it means the product is covered by the European Directive 2002/96/EC.
2. All electrical and electronic products should be disposed of separately from the municipal waste stream via designated collection facilities appointed by the government or the local authorities.
3. The correct disposal of your old appliance will help prevent potential negative consequences for the environment and human health.
4. For more detailed information about disposal of your old appliance, please contact your city office, waste disposal service or the shop where you purchased the product.

French

Élimination de votre ancien appareil

1. Ce symbole, représentant une poubelle sur roulettes barrée d'une croix, signifie que le produit est couvert par la directive européenne 2002/96/EC.
2. Les éléments électriques et électroniques doivent être jetés séparément, dans les vide-ordures prévus à cet effet par votre municipalité.
3. Une élimination conforme aux instructions aidera à réduire les conséquences négatives et risques éventuels pour l'environnement et la santé humaine.
4. Pour plus d'information concernant l'élimination de votre ancien appareil, veuillez contacter votre mairie, le service des ordures ménagères ou encore la magasin où vous avez acheté ce produit.

Italian

Smaltimento delle apparecchiature obsolete

1. Quando su un prodotto è riportato il simbolo di

un bidone della spazzatura barrato da una croce significa che il prodotto è coperto dalla direttiva europea 2002/96/EC.

2. Tutti i prodotti elettrici ed elettronici dovrebbero essere smaltiti separatamente rispetto alla raccolta differenziata municipale, mediante impianti di raccolta specifici designati dal governo o dalle autorità locali.
3. Il corretto smaltimento delle apparecchiature obsolete contribuisce a prevenire possibili conseguenze negative sulla salute umana e sull'ambiente.
4. Per informazioni più dettagliate sullo smaltimento delle apparecchiature obsolete, contattare il comune, il servizio di smaltimento rifiuti o il negozio in cui è stato acquistato il prodotto.

Swedish

Kassering av din gamla apparat

1. När den här symbolen med en överkryssad soptunna på hjul sitter på en produkt innebär det att den regleras av European Directive 2002/96/EC.
2. Alla elektriska och elektroniska produkter bör kasseras via andra vägar än de som finns för hushållsavfall, helst via för ändamålet avsedda uppsamlingsanläggningar som myndigheterna utser.
3. Om du kasserar din gamla apparat på rätt sätt så bidrar du till att förhindra negativa konsekvenser för miljön och människors hälsa.
4. Mer detaljerad information om kassering av din gamla apparat kan fås av kommunen, renhållningsverket eller den butik där du köpte produkten.

Dutch

Uw oude toestel wegdoen

1. Als het symbool met de doorgekruiste verrijdbare afvalbak op een product staat, betekent dit dat het product valt onder de Europese Richtlijn 2002/96/EC.
2. Elektrische en elektronische producten mogen niet worden meegegeven met het huishoudelijk afval, maar moeten worden ingeleverd bij speciale inzamelingspunten die door de lokale of landelijke overheid zijn aangewezen.
3. De correcte verwijdering van uw oude toestel helpt negatieve gevolgen voor het milieu en de menselijke gezondheid voorkomen.

Regulatory Information cont.

4. Wilt u meer informatie over de verwijdering van uw oude toestel? Neem dan contact op met uw gemeente, de afvalophaaldienst of de winkel waar u het product hebt gekocht.

Finnish

Vanhonjen laitteiden hävittäminen

1. Tämä merkki tuotteessa tarkoittaa, että tuote kuuluu sähkö- ja elektroniikkalaiteromusta annetun EU-direktiivin 2002/96/EY soveltamisalaan.
2. Kaikki elektroniset laitteet ovat ongelmajätettä, joten ne on toimitettava paikalliseen keräyspisteeseen.
3. Vanhan laitteen asianmukainen hävittäminen ehkäisee mahdollisia ympäristöön ja terveyteen kohdistuvia haittavaikutuksia.
4. Lisätietoa vanhan laitteen hävittämisestä saat ottamalla yhteyden paikallisiin viranomaisiin, kierrätyskeskukseen tai myymälään, josta ostit laitteen.

German

Entsorgung von Altgeräten

1. Wenn dieses Symbol eines durchgestrichenen Abfalleimers auf einem Produkt angebracht ist, unterliegt dieses Produkt der europäischen Richtlinie 2002/96/EC.
2. Alle Elektro- und Elektronik-Altgeräte müssen getrennt vom Hausmüll über dafür staatlich vorgesehenen Stellen entsorgt werden.
3. Mit der ordnungsgemäßen Entsorgung des alten Geräts vermeiden Sie Umweltschäden und eine Gefährdung der persönlichen Gesundheit.
4. Weitere Informationen zur Entsorgung des alten Geräts erhalten Sie bei der Stadtverwaltung, beim Entsorgungsamt oder in dem Geschäft, wo Sie das Produkt erworben haben.

Danish

Sådan smider du dit gamle apparat ud

1. Når der er et tegn med et kryds over en skraldespand, betyder det, at produktet er omfattet af EU-direktiv 2002/96/EC.
2. Alle elektriske og elektroniske produkter skal smides ud et andet sted end gennem den kommunale affaldsordning ved hjælp af specielle indsamlingsfaciliteter, der er organiseret af staten

eller de lokale myndigheder.

3. Korrekt bortskaffelse af dit gamle apparat er med til at forhindre mulige skadevirkninger på miljøet og menneskelig sundhed.
4. Mere detaljerede oplysninger om bortskaffelse af dit gamle apparat kan fås ved at kontakte dit lokale kommunekontor, renovationselskab eller den butik, hvor du købte produktet.

Greek

Απόρριψη της παλιάς σας συσκευής

1. Όταν ένα προϊόν διαθέτει το σύμβολο ενός διαγραμμένου κάλαθου απορριμμάτων, τότε το προϊόν καλύπτεται από την Ευρωπαϊκή Οδηγία 2002/96/ΕΟΚ.
2. Η απόρριψη όλων των ηλεκτρικών και ηλεκτρονικών προϊόντων πρέπει να γίνεται χωριστά από τα γενικά οικιακά απορρίμματα μέσω καθορισμένων εγκαταστάσεων συλλογής απορριμμάτων, οι οποίες έχουν δημιουργηθεί είτε από την κυβέρνηση ή από τις τοπικές αρχές.
3. Η σωστή απόρριψη της παλιάς σας συσκευής θα βοηθήσει στην αποτροπή πιθανών αρνητικών συνπειών ως προς το περιβάλλον και την υγεία του ανθρώπου.
4. Για πιο λεπτομερείς πληροφορίες σχετικά με την απόρριψη της παλιάς σας συσκευής, επικοινωνήστε με το αρμόδιο τοπικό γραφείο, υπηρεσία διάθεσης οικιακών απορριμμάτων ή το μαγαζί από το οποίο αγοράσατε το προϊόν.

Spanish

Cómo deshacerse de aparatos eléctricos y electrónicos viejos

1. Si en un producto aparece el símbolo de un contenedor de basura tachado, significa que éste se acoge a la Directiva 2002/96/CE.
2. Todos los aparatos eléctricos o electrónicos se deben desechar de forma distinta del servicio municipal de recogida de basura, a través de puntos de recogida designados por el gobierno o las autoridades locales.
3. La correcta recogida y tratamiento de los dispositivos inservibles contribuye a evitar riesgos potenciales para el medio ambiente y la salud pública.
4. Para obtener más información sobre cómo deshacerse de sus aparatos eléctricos y electrónicos viejos, póngase en contacto con su ayuntamiento, el servicio de recogida de basuras o el establecimiento donde adquirió el producto.

Regulatory Information cont.

Portuguese

Eliminação do seu antigo aparelho

1. Quando este símbolo de latão cruzado estiver afixado a um produto, significa que o produto é abrangido pela Directiva Europeia 2002/96/EC.
2. Todos os produtos eléctricos e electrónicos devem ser eliminados separadamente do lixo doméstico através de pontos de recolha designados, facilitados pelo governo ou autoridades locais.
3. A eliminação correcta do seu aparelho antigo ajuda a evitar potenciais consequências negativas para o ambiente e para a saúde humana.
4. Para obter informações mais detalhadas acerca da eliminação do seu aparelho antigo, contacte as autoridades locais, um serviço de eliminação de resíduos ou a loja onde comprou o produto.

Slovak

Likvidácia váš ho starého prístroja

1. Keď sa na produkte nachádza tento symbol prečiarknutej smetnej nádoby s kolieskami, znamená to, že daný produkt vyhovuje európskej Smernici č. 2002/96/EC.
2. Všetky elektrické a elektronické produkty by mali byť zlikvidované oddelene od komunálneho odpadu prostredníctvom na to určených zberných zariadení, ktoré boli ustanovené vládou alebo orgánmi miestnej správy.
3. Správnu likvidáciu starých zariadení pomôžete predchádzať potenciálnym negatívnym následkom pre prostredie a ľudské zdravie.
4. Podrobnejšie informácie o likvidácii starých zariadení nájdete na miestnom úrade, v službe na likvidáciu odpadu alebo u predajcu, kde ste tento produkt zakúpili.

Czech

Likvidace starých spotřebičů

1. Pokud je u výrobku uveden symbol pojízdného kontejneru v přeškrtnutém poli, znamená to, že na výrobek se vztahuje směrnice Evropské unie číslo 2002/96/EC.
2. Všechny elektrické a elektronické výrobky by měly být likvidovány odděleně od běžného komunálního odpadu prostřednictvím sběrných zařízení zřízených za tímto účelem vládou nebo místní samosprávou.
3. Správný způsob likvidace starého elektrického spotřebiče pomáhá zamezit možným negativním dopadům na životní prostředí a zdraví.
4. Bližší informace o likvidaci starého spotřebiče získáte u místní samosprávy, ve sběrném zařízení nebo v obchodě, ve kterém jste výrobek zakoupili.

Croatian

Uklanjanje starog aparata

1. Ako se na proizvodu nalazi simbol prekrizhene kante za smeće, to znači da je proizvod pokriven europskom direk-

tivom 2002/96/EC.

2. Električni i elektronski proizvodi ne smiju se odlagati zajedno s komunalnim otpadom, već u posebna odlagališta koja je odredila vlada ili lokalne vlasti.
3. Pravilno odlaganje starog proizvoda sprečiti će potencijalne negativne posljedice po okoliš i zdravlje ljudi.
4. Podrobnije informacije o odlaganju starog proizvoda potražite u gradskom uredu, službi za odlaganje otpada ili u trgovini u kojoj ste kupili proizvod.

Hungarian

Régi eszközök ártalmatlanítása

1. A termékhez csatolt áthúzott, keresek szeméttároló jel jelöli, hogy a termék a 2002/96/EC EU-direktíva hatálya alá esik.
2. Minden elektromos és elektronikai terméket a lakossági hulladéktól elkülönítve kell begyűjteni, a kormány vagy az önkormányzatok által kijelölt begyűjtő eszközök használatával.
3. Régi eszközeinek megfelelő ártalmatlanítása segíthet megelőzni az esetleges egészségre vagy környezetre ártalmas hatásokat.
4. Ha több információra van szüksége régi eszközeinek ártalmatlanításával kapcsolatban, tanulmányozza a vonatkozó környezetvédelmi szabályokat, vagy lépjen kapcsolatba az üzlettel, ahol a terméket vásárolta.

Polish

Utylizacja starych urządzeń

1. Kiedy do produktu dołączony jest niniejszy przekreślony symbol kołowego pojemnika na śmieci, oznacza to, że produkt jest objęty dyrektywą 2002/96/EC.
2. Wszystkie elektryczne i elektroniczne produkty powinny być utylizowane niezależnie od odpadów miejskich, z wykorzystaniem przeznaczonych do tego miejsc składowania wskazanych przez rząd lub miejscowe władze.
3. Właściwy sposób utylizacji starego urządzenia pomoże zapobiec potencjalnie negatywnemu wpływowi na zdrowie i środowisko.
4. Aby uzyskać więcej informacji o sposobach utylizacji starych urządzeń, należy skontaktować się z władzami lokalnymi, przedsiębiorstwem zajmującym się utylizacją odpadów lub sklepem, w którym produkt został kupiony.

■■■ Regulatory Information cont.

■ ■ ■ Estonian

Kasutuskõlbmatu seadme käitlemise kord

1. Kui seade on märgistatud selle elektri- ja elektroonikaseadmete lahuskogumist märgistava tähisega (ratastega prügikonteineri kujutis, millele on rist peale tõmmatud), tuleb toodet käidelda vastavalt Eurodirektiivile 2002/96/EÜ.
2. Elektri- ja elektroonikaseadmeid ei tohi visata tavalise prügi hulka. Nad kuuluvad lahuskogumisele selleks määratud kogumispunktides.
3. Kasutuskõlbmatu tervikseadme käitlemine tavaprügist lahus on korraldatud selleks, et vältida negatiivseid tagajärgi, mida põhjustaksid seadme osade purunemisel vabaneda võivad ohtlikud jäätmed loodusele või inimorganismile.
4. Täpsemat informatsiooni selle kohta, kuhu ja millal saab ära anda oma kasutamiskõlbmatu elektri- ja elektroonikaseadme, küsige kohalikult omavalitsuselt, prügifirmalt või kaupluselt, kust seadme ostsite.

■ ■ ■ Latvian

Vecās elektroierīces nodošana

1. Ja uz produkta ir simbols ar pārsvītrotu atkritumu tvertni, tas nozīmē, ka produkts ir iekļauts Eiropas direktīvā 2002/96/EC.
2. Visi elektriskie un elektroniskie produkti ir jāutilizē, nododot pašvaldības īpaši noteiktās pieņemšanas vietās. Tos nedrīkst izmest parastās municipalitātes atkritumu urnās.
3. Ievērojot prasības veco elektroierīču utilizēšanā, jūs pasargāsi apkārtējo vidi un cilvēku veselību no iespējami nelabvēlīgajām sekām, kādas varētu rasties, ierīcēm sadaloties nepiemērotā vietā.
4. Lai gūtu plašāku informāciju par veco ierīču utilizēšanas iespējām, sazinieties ar pilsētas pašvaldību, atkritumu savākšanas saimniecību vai veikalu, kurā ierīci iegādājāties.

■ ■ ■ Lithuanian

Senos įrangos atliekų tvarkymas

1. Užbrauktas konteinerio simbolis priverčia ant prekės reiškia, kad įrangą saugo Europos direktyva 2002/96/EC.
2. Visos elektros ir elektroninės įrangos atliekos turi būti renkamos atskirai ir neišmetamos į atliekų konteinerį kartu su kitomis komunalinėmis atliekomis, taikant specialią atliekų surinkimo sistemą, patvirtintą vyriausybės ar vietos valdžios.
3. Teisingas senos įrangos atliekų tvarkymas, padės išvengti neigiamų pasekmių aplinkai ir žmonių sveikatai.
4. Dėl išsamesnės informacijos apie senos įrangos tvarkymą, prašome kreiptis į miesto valdžią, atliekų perdirbimo tarnybą arba parduotuvę, kurioje pirkote įrangą.