



**LG**  
Life's Good

# OWNER'S MANUAL

# MONITOR SIGNAGE

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

## MONITOR SIGNAGE MODELS

32LS33A  
42LS33A  
47LS33A  
55LS33A

**WARNING:** This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. ***Wash hands after handling.***

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# LICENSES

Supported licenses may differ by model. For more information of the licenses, visit [www.lg.com](http://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 has passed rigorous testing to verify that it plays DivX video. Visit [divx.com](http://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](http://vod.divx.com) for more information on how to complete your registration. DivX Certified® to play DivX® video up to HD 1080p, including premium content.

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

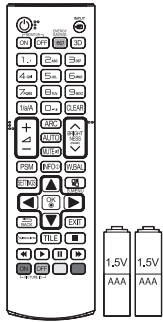


Manufactured under license from Dolby Laboratories. Dolby and the double-D symbol are trademarks of Dolby Laboratories.

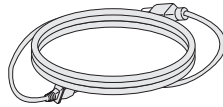
# ASSEMBLING AND PREPARING

## Accessories

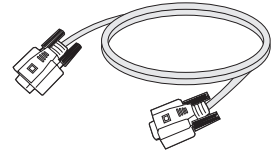
Check your product box for the following items. If there are any missing accessories, contact the local dealer where you purchased your product. The illustrations in this manual may differ from the actual product and accessories.



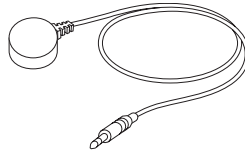
**Remote Control and Batteries**



**Power Cord**



**D-sub 15-pin Signal Cable**



**IR Receiver**



**CD (Owner's Manual, SuperSign Program/ Manual/ Cards)**



### 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.

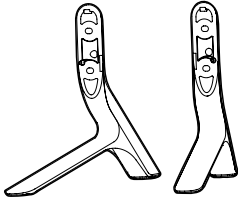


### NOTE

- 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.

## Optional Accessories

Without prior notice, optional accessories are subject to change to improve the performance of the product, and new accessories may be added. The illustrations in this manual may differ from the actual product and accessories.



**Stand**

ST-321T (32LS33A)  
ST-421T (42LS33A)

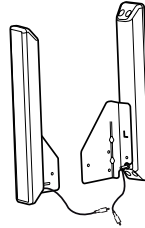
ST-471T (47LS33A)  
ST-551T (55LS33A)



**Screws**

Diameter 4.0 mm x Pitch 0.7 mm  
x Length 14 mm (Included Spring  
Washer)

**Stand kit**



**Speaker  
SP-2100**

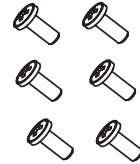


**Cable holder/  
Cable Tie**



**Screws**

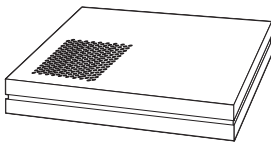
Diameter 4.0 mm x Pitch  
0.7 mm x Length 8 mm  
(Included Spring Washer)



**Screws**

Diameter 4.0 mm x  
Pitch 1.6 mm x Length  
10 mm

**Speaker kit**



**Media Player  
MP500/ MP700**



**Screws**



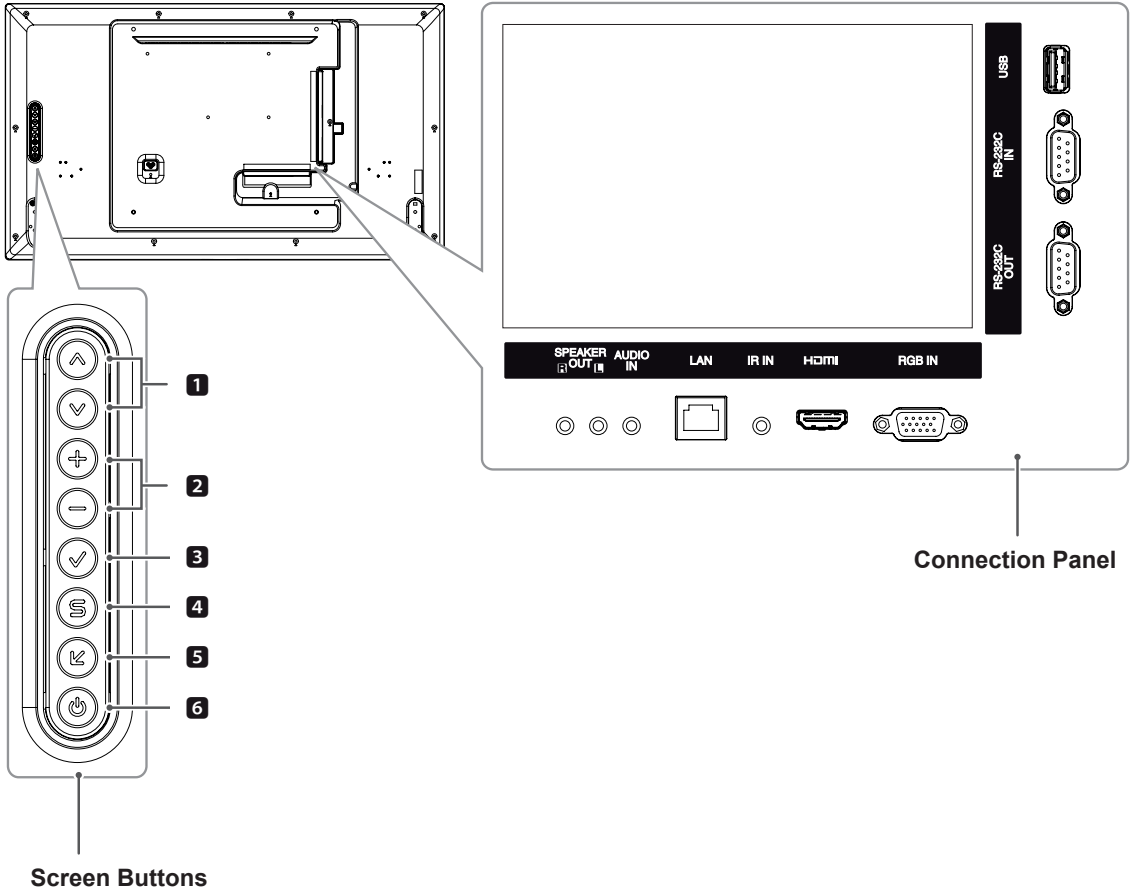
**CD(Owner's Manual)/  
Cards**

**Media Player kit**

**! NOTE**

- Cable holder/cable tie may not be available in some areas or for some models.
- Optional accessories are not included for all models.

# Parts and Buttons

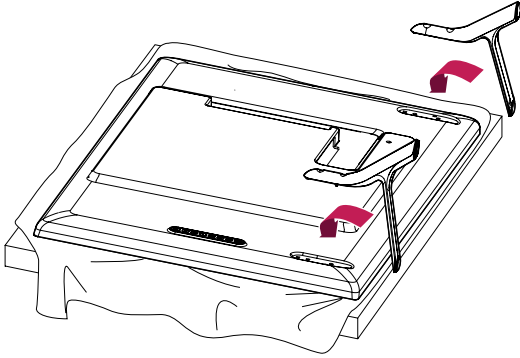


No.	Description
<b>1</b>	Moves the selection up and down.
<b>2</b>	Adjusts the volume level.
<b>3</b>	Displays the current signal and mode. Press this button to adjust the screen automatically (available only in RGB mode)
<b>4</b>	Accesses the main menus, or saves your input and exits the menus.
<b>5</b>	Changes the input source.
<b>6</b>	Turns the power on or off.

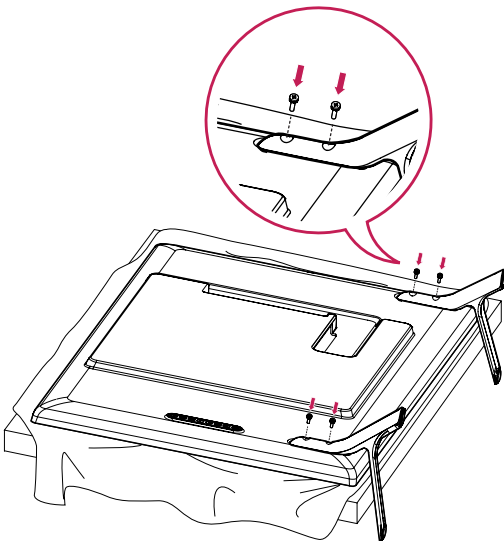
## Connecting the Stand

- Only on some models.

- 1 Place a soft cloth on the table and put the product with the screen facing downward.



- 2 Use the screws to secure the stand on the rear side of the product as shown in the diagram.



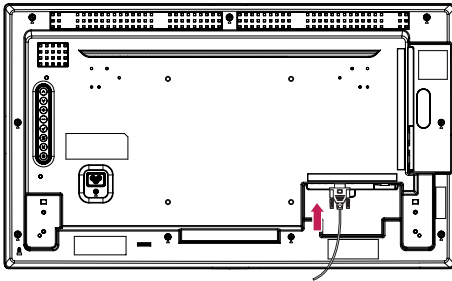


## Connecting the Speaker

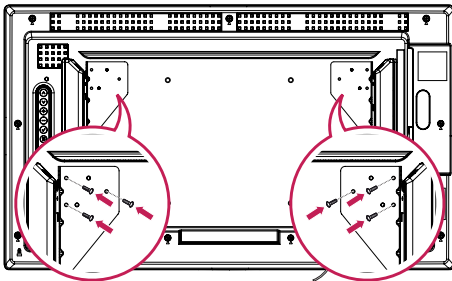
- Only on some models.

32LS33A

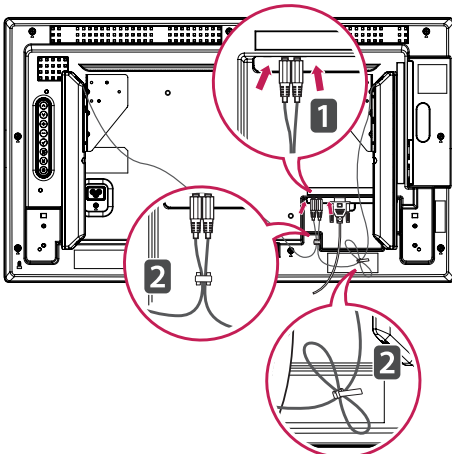
- 1 Connect the input signal cable to the monitor before installing the speakers. Use a cable tie to organize the cables.



- 2 Mount the speaker by using a screw as shown in the following. Make sure the power cable is disconnected.



- 3 Then connect the speaker cable. After installing your speakers, use holders and cable ties to organize the speaker cables.

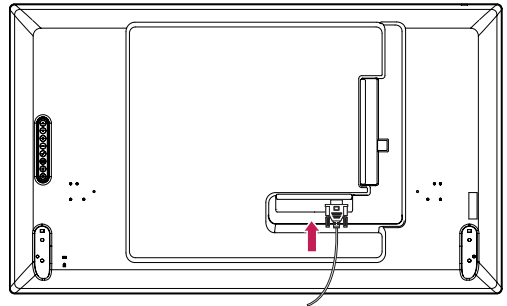


42LS33A

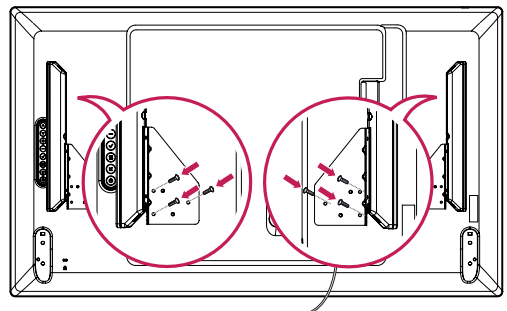
47LS33A

55LS33A

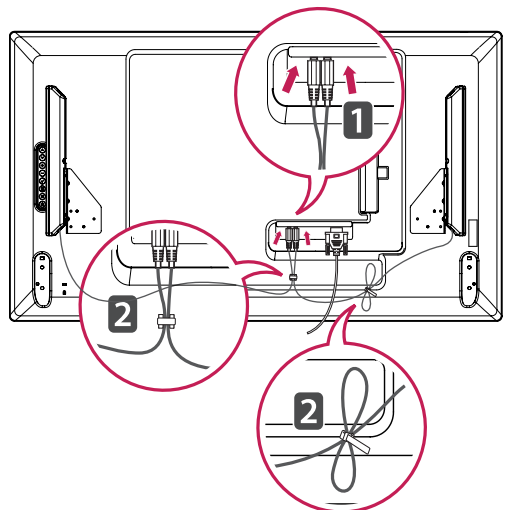
- 1 Connect the input signal cable to the monitor before installing the speakers. Use a cable tie to organize the cables.



- 2 Mount the speaker by using a screw as shown in the following. Make sure the power cable is disconnected.



- 3 Then connect the speaker cable. After installing your speakers, use holders and cable ties to organize the speaker cables.



## Using the IR Receiver

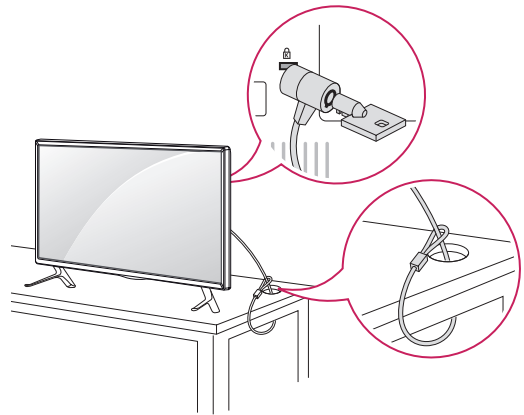
This allows a remote control sensor to be placed in a custom location. The IR receiver is made with a magnet. You can attach it to the monitor edge.



## 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.

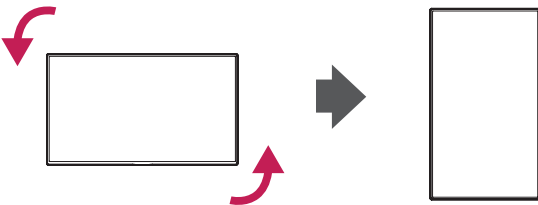


### ! NOTE

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

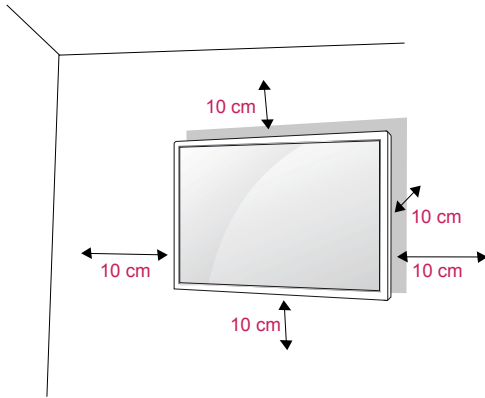
## Portrait Layout

To install in portrait mode, rotate the set counterclockwise 90 degrees when looking at from the front.



## Mounting on a Wall

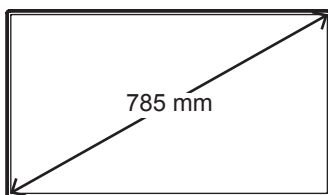
For proper ventilation, allow a clearance of 10 cm on each side and from the wall. Detailed installation instructions are available from your dealer, see the optional Tilt Wall Mounting Bracket Installation and Setup Guide.



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

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

- 1 Please, use a wall mount and screws in accordance with VESA Standards.
- 2 If you use screws longer than standard, the monitor might be damaged internally.
- 3 If you use improper screws, the product might be damaged and drop from mounted position. In this case, LG Electronics is not responsible for damage.
- 4 Please use VESA standard as below.
  - 785 mm or greater
  - \* Fastening screw: Diameter 6.0 mm x Pitch 1.0 mm x Length 10 mm



### CAUTION

- Disconnect the power cord first, and then move or install the monitor set. Otherwise electric shock may occur.
- If you install the monitor set on a ceiling or slanted wall, it may fall and result in severe injury.
- Use an authorized LG wall mount and contact the local dealer or qualified personnel.
- Do not over tighten the screws as this may cause damage to the monitor set and void your warranty.
- Use the screws and wall mounts that meet the VESA standard. Any damages or injuries by misuse or using an improper accessory are not covered by the warranty.
- To prevent injury, this apparatus must be securely attached to the wall in accordance with the installation instructions. (This only pertains to Australia and New Zealand.)

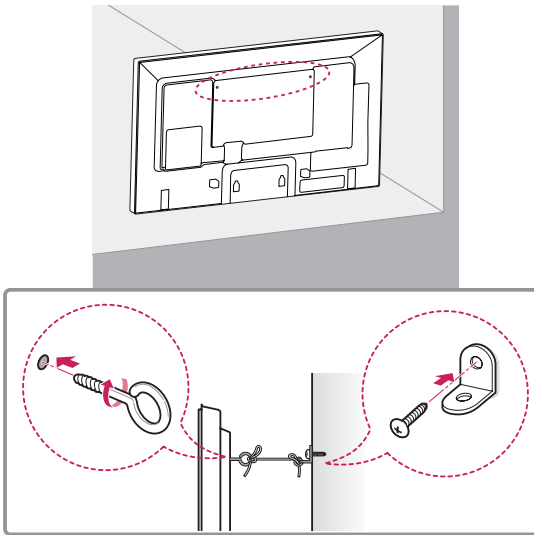


### NOTE

- 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.
- The warranty will not cover any damages caused by using the product in an excessively dusty environment.

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

(Depending on model)



- 1 Insert and tighten the eye-bolts, or product brackets and bolts on the back of the product.
  - If there are bolts inserted at the eye-bolts position, remove the bolts first.
- 2 Mount the wall brackets with the bolts to the wall.
 

Match the location of the wall bracket and the eye-bolts on the rear of the product.
- 3 Connect the eye-bolts and wall brackets tightly with a sturdy rope.
 

Make sure to keep the rope horizontal with the flat surface.

**CAUTION**

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

**NOTE**

- Use a platform or cabinet that is strong and large enough to support the product securely.
- Brackets, bolts and ropes are optional. You can obtain additional accessories from your local dealer.
- The illustration shows a general example of installation and may look different from the actual product.

**WARNING**

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

# REMOTE CONTROL

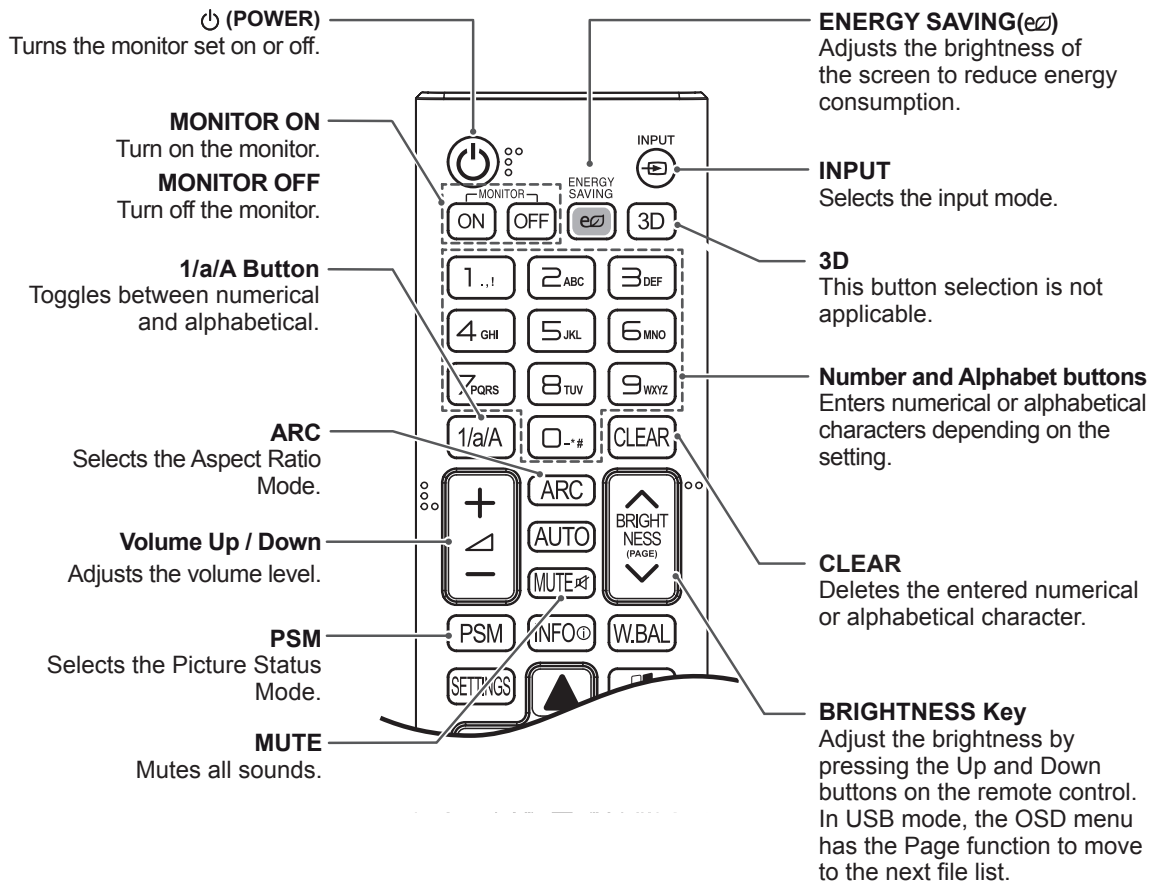
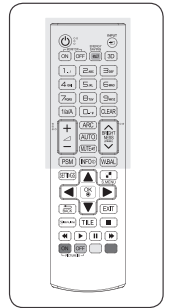
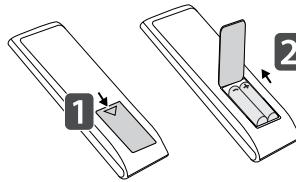
The descriptions in this manual are based on the buttons of the remote control. Please read this manual carefully and use the monitor set correctly.

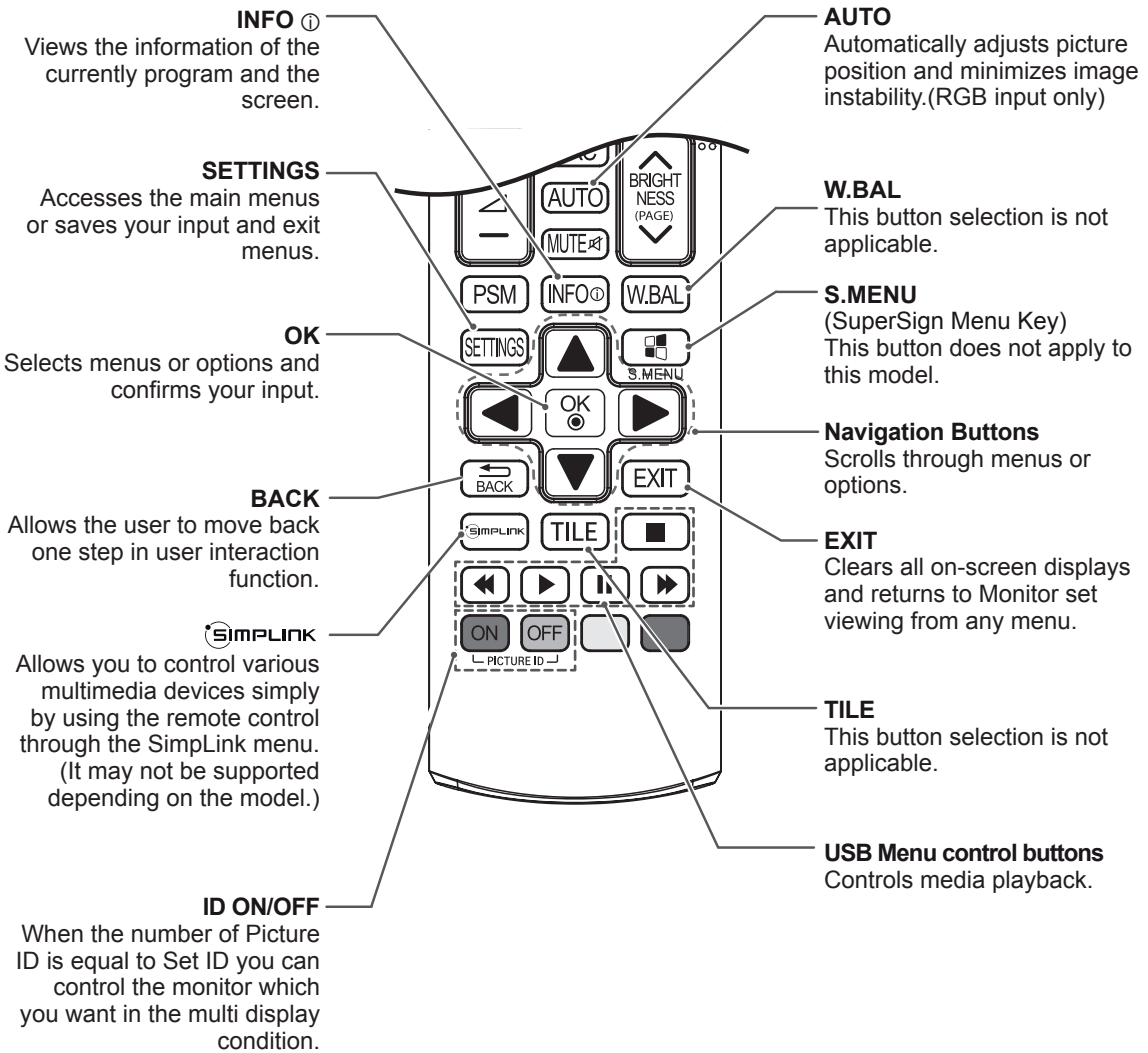
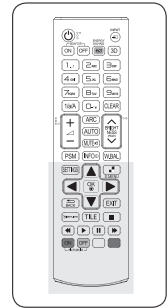
To replace batteries, open the battery cover, replace batteries (1.5 V AAA) matching ⊕ and ⊖ ends to the label inside the compartment, and close the battery cover.

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.

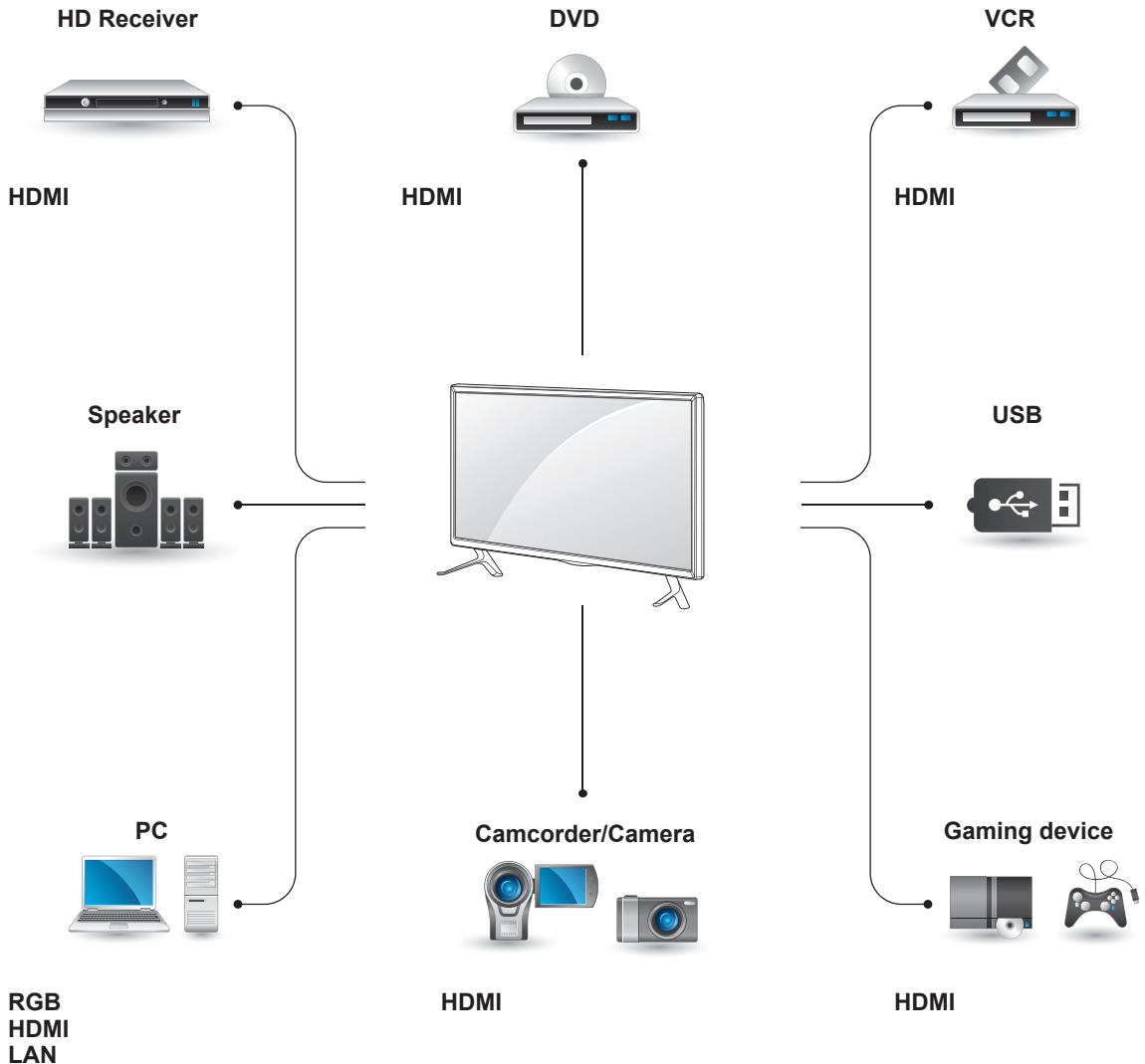




# MAKING CONNECTIONS

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.
- It is recommended you to use the optional speaker provided.

**Instructions for connecting to PC**

Your monitor supports the Plug & Play\* feature.

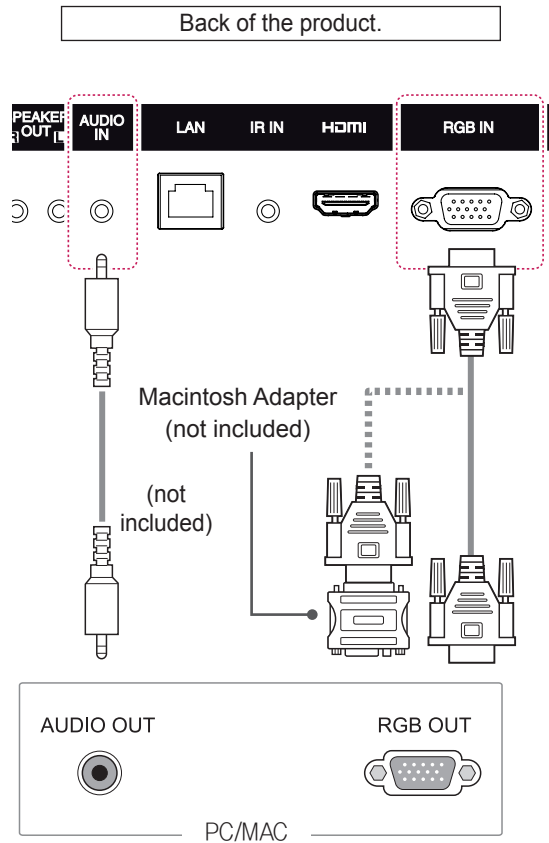
\* Plug & Play: A PC will have a built-in driver for the monitor, no extra software is needed.

**NOTE**

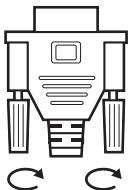
- It is recommended you use an HDMI connection for the best image quality.
- Use a shielded signal interface cable, such as D-sub 15-pin signal cable and DVI/HDMI cable, with a ferrite core to maintain standard compliance for the product.
- If you turn the monitor set on when the set is cold, the screen may flicker. This is normal.
- Some red, green, or blue spots may appear on the screen. This is normal.
- If you use a cable longer than the D-sub 15-pin signal cable provided, certain images may appear blurry.

**RGB Connection**

Transmits an analog video signal from your PC to the monitor. Connect the PC and the monitor with the 15-pin signal cable as shown in following illustration. Select RGB input. To transmit an audio signal, connect an optional audio cable.



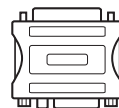
**CAUTION**



- Connect the signal input cable and tighten it by turning the screws clockwise.

- Do not press the screen with your finger for a long time as this may result in temporary distortion on the screen.
- Avoid displaying a fixed image on the screen for a long period of time to prevent image burn. Use a screensaver if possible.

**NOTE**

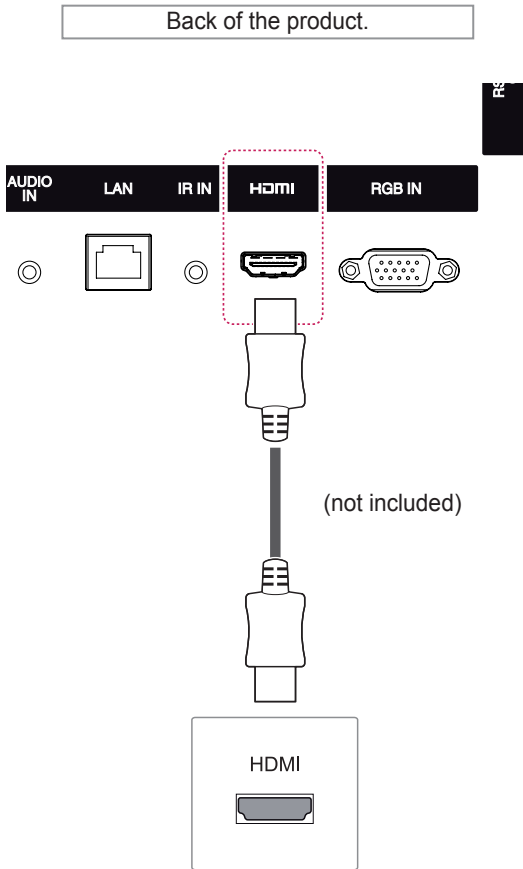


- Use the standard Macintosh adapter since an incompatible adapter is available in the market. (Different signaling system)
- Apple computers may require an adapter to connect to this monitor. Call or visit their web site for more information.



## HDMI Connection

Transmits digital video and audio signals from your PC or external device to the monitor. Connect the PC or the external device and the Monitor using the HDMI cable as shown in the following diagrams. Select the HDMI input after connecting.

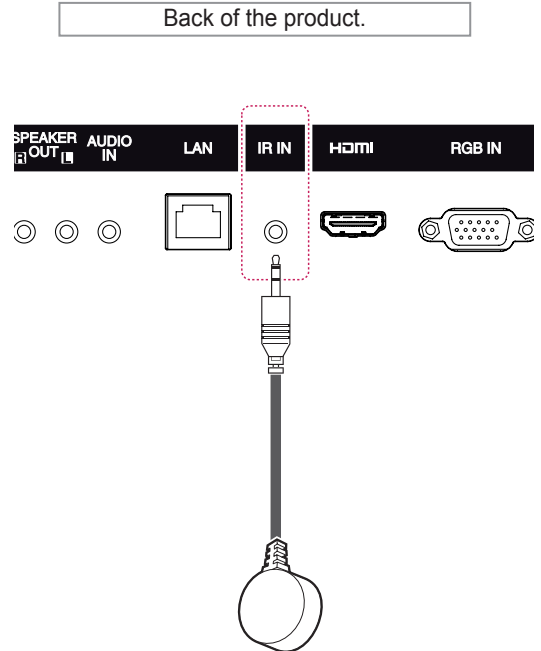


### ! NOTE

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

## IR Receiver Connection

Allows the use of a wired remote or IR receiver extension.

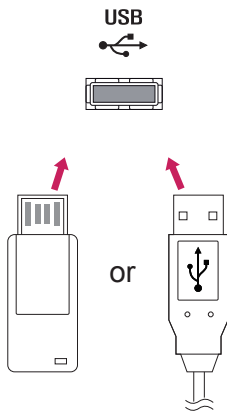


### ! NOTE

- Make sure the power cable is disconnected.

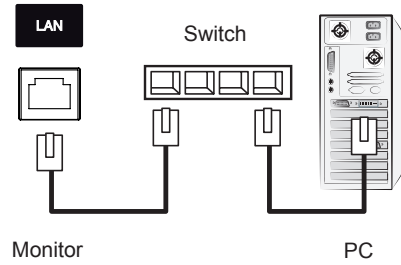
## USB Connection

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

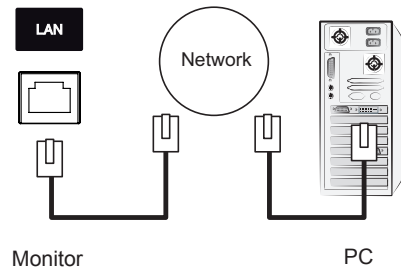


## LAN Connection

### A Using a router (Switch)



### B Using the Internet.



# USING THE MONITOR

## Using the Input List

- 1 Press **INPUT** to access the **Input List**.
- 2 Press the navigation buttons to scroll to one of the input mode and press **OK**.

Input mode	Description
<b>RGB</b>	View a PC display on the screen
<b>HDMI</b>	Watch contents in a PC, DVD of digital set-top box other high definition devices
<b>USB</b>	Plays the multimedia file saved in the USB.

## Adjusting Aspect Ratio

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

MODE	RGB	HDMI	
	PC	DTV	PC
<b>Aspect Ratio</b>			
<b>16:9</b>	o	o	o
<b>Just Scan</b>	x	o	x
<b>Set By Program</b>	x	o	x
<b>4:3</b>	o	o	o
<b>Zoom</b>	x	o	x
<b>Cinema Zoom</b>	x	o	x



### NOTE

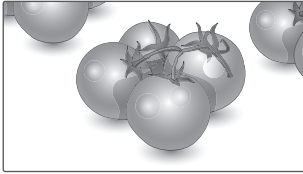
- You can also change the image size by accessing the main menus.
- The Just Scan mode operates when a video signal has resolution of 720p or higher.



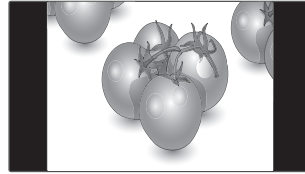
### CAUTION

- 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 you don't use your monitor, turn the power off or set a screen saver program from the PC or the system to prevent image retention.
- 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.

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



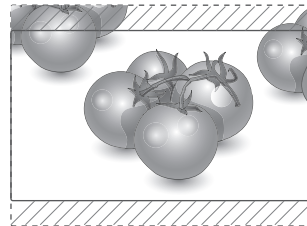
- **4:3** : This selection will allow you to view a picture with an original 4:3 aspect ratio, black bars will appear on both the left and right of the screen.



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



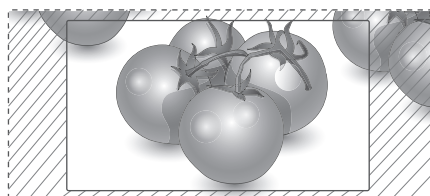
- **Zoom** : This selection will allow you to view the picture without any alteration, while filling the entire screen. However, the top and bottom of the picture will be cropped.



- **Set By Program** : Depending on the input video signal screen changes automatically to 4:3 or 16:9.



- **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.



# ENTERTAINMENT

## Using the Network

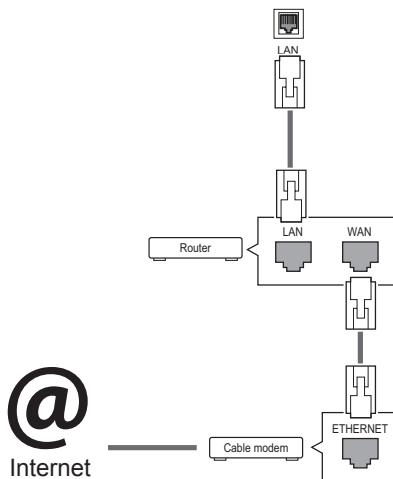
### Connecting to a Wired Network

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

Only supports wired network connection.

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

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



#### ! CAUTION

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

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

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

#### ! CAUTION

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

 **NOTE**

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

**Tips for Network setting**

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

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

**Network Status**

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

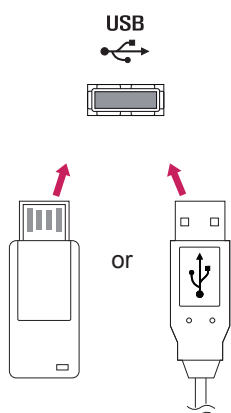
Option	Description
<b>Setting</b>	Return to the network setting menu.
<b>Test</b>	Test the current network status after setting the network.
<b>Close</b>	Return to the previous menu.

## Using the My Media

### Connecting USB storage devices

Connect USB storage devices such as a USB flash memory, external hard drive to the display and use multimedia features.

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



#### CAUTION

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

#### Tips for using USB storage devices

- Only a USB storage device is recognizable.
- If the USB storage device is connected through a USB hub, the device is not recognizable.
- A USB storage device using an automatic recognition program may not be recognized.
- A USB storage device which uses its own driver will not be recognized.
- The recognition speed of a USB storage device may depend on each device.
- Please do not turn off the display or unplug the USB device when the connected USB storage device is working. When such a 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. Only use a USB storage device which has normal music files, image files or movie files.
- Please use only a USB storage device which was formatted as a FAT32 file system, NTFS file system by with the Windows operating system. In case of a storage device formatted with a different utility programme which is not supported by Windows, it may not be recognized.
- Please connect power to a USB storage device (over 0.5 A) which requires an external power supply. If not, the device may not be recognized.
- Please connect a USB storage device with the cable included by the device maker.
- Some USB storage devices may not be supported or operate smoothly.
- File alignment method of USB storage devices is similar to Window XP and the monitor can recognize up to 100 English characters.
- Be sure to back up important files since data stored on a USB memory device may be damaged. We will not be responsible for any data loss.

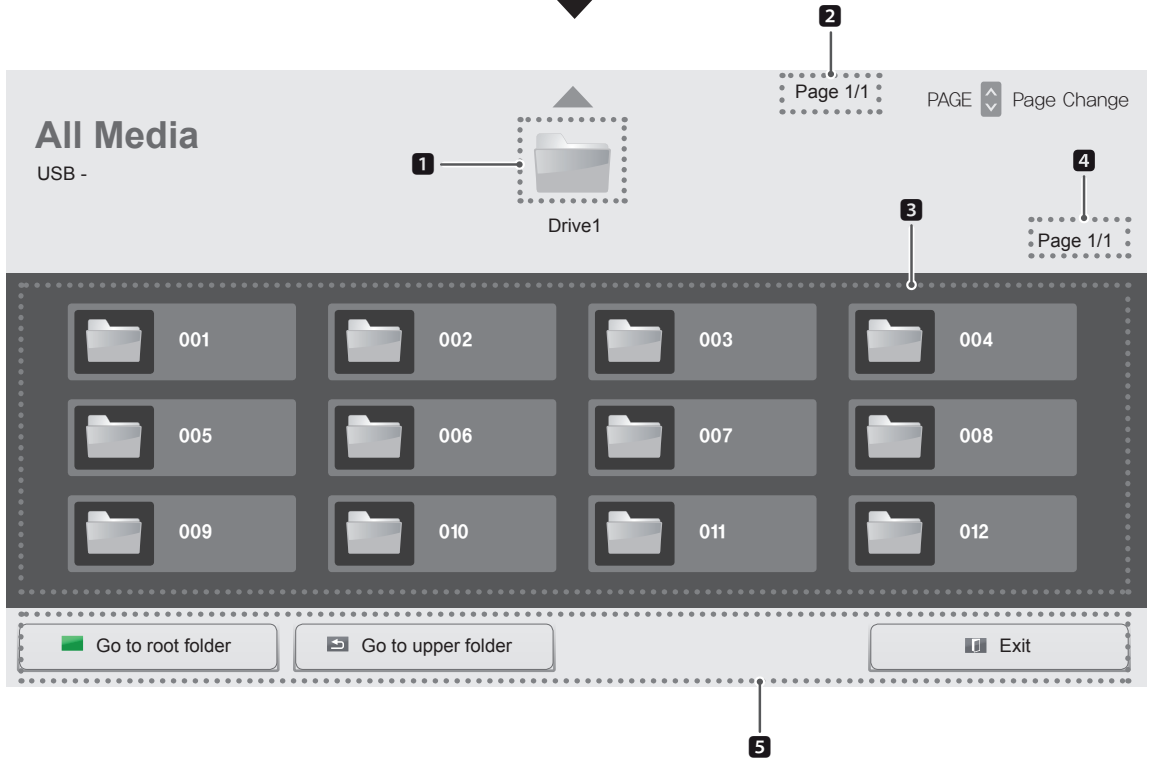
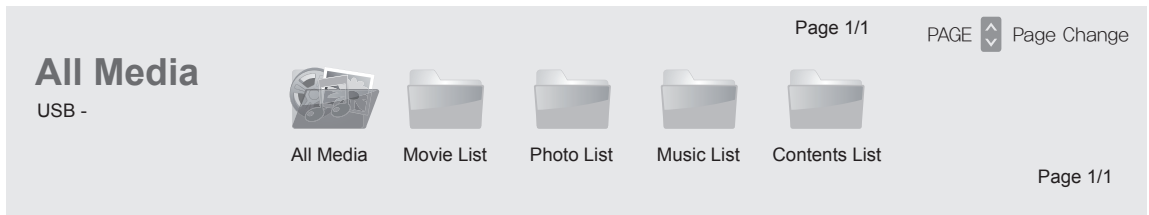
- If the USB HDD does not have an external power source, the USB device may not be detected. So be sure to connect the external power source.
  - Please use a power adaptor for an external power source.
- If your USB memory device has multiple partitions, or if you use a USB multi-card reader, you can use up to 4 partitions or USB memory devices.
- If a USB memory device is connected to a USB multi-card reader, its volume data may not be detected.
- If the USB memory device does not work properly, disconnect and reconnect it.
- How fast a USB memory device is detected differs from device to device.
- If the USB is connected in Standby Mode, that drive will automatically be loaded when the display is turned on.
- The recommended capacity is 1 TB or less for a USB external hard disk and 32 GB or less for USB memory.
- Any device with more than the recommended capacity may not work properly.
- If a USB external hard disk with a Energy Saving function does not work, turn the hard disk off and on again to make it work properly.
- USB storage devices below USB 2.0 are supported as well. But they may not work properly with videos.
- A maximum of 999 folders or files can be recognized under one folder.
- It is recommended you use a certified USB storage device and cable. Otherwise, a USB storage device may not be detected or a playback error may occur.
- Only a USB memory device can be used to play back the files distributed and stored by SuperSign Manager. A USB hard disk or multi-card reader will not work.
- Only an FAT 32 file formatted storage device can play back the files distributed and stored by SuperSign manager.
- A USB 3.0 storage device may not work.



## Browsing Files

Browse files saved in a USB storage device.

- 1 Press **SETTINGS** to access the main menu.
- 2 Press the search button to scroll to **MY MEDIA** and press **OK**.
- 3 Press the Search button to go to the **Movie List**, **Photo List**, **Music List**, or **Content List** that you want, and press **OK**.



No.	Description
1	Returns to the previous level.
2	Current page/total pages of the folder above
3	Lower item of 1
4	Current page/total pages of 3
5	Remote control button

## Supported file format

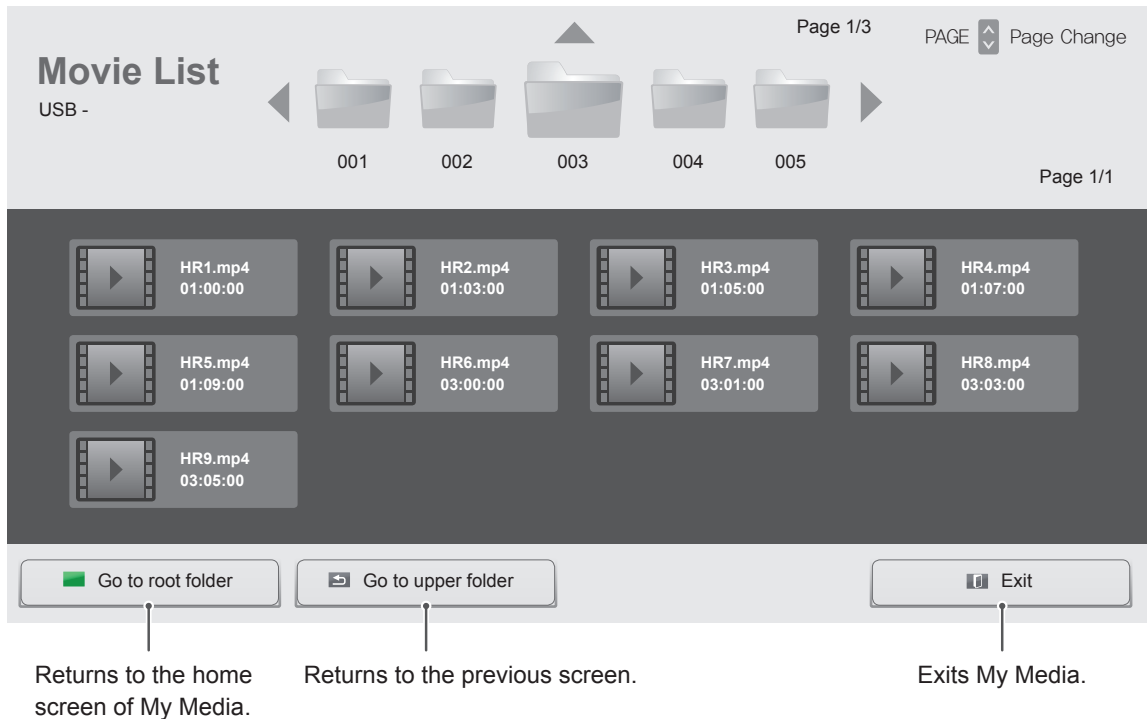
Type	Supported file format				
Movie	Video	MPEG1 / MPEG2	DAT, MPG, MPEG, DVD, TS, TP	1920 X 1080 @ 30I	
		MPEG4 ( Divx 3.11, Divx4.12, Divx5.x, Divx6, Divx HD, Xvid 1.01, Xvid 1.01, Xvid 1.02, Xvid 1.03, Xvid 1.10-beta1/2 )	AVI, DIVX, MP4, MKV, TS, TRP	1920 X 1080 @ 30P	
		H.264	AVI, MP4, MKV, TS, TRP, TP	1920 X 1080 @ 30P	
	Audio	MP3	MP3	32 kbps to 320 kbps(Bit rate) 32 kHz to 48 kHz(Sample rate)	
		AC3	AC3	32 kbps to 640 kbps(Bit rate) 32 kHz, 44.1 kHz, 48 kHz(Sample rate)	
		MPEG	MPA	32 kbps to 448 kbps(Bit rate) 32 kHz to 48 kHz(Sample rate)	
		AAC, HEAAC	M4A	24 kbps to 3844 kbps(Bit rate) 8 kHz to 96 kHz(Sample rate)	
		LPCM	AIF, WAV	1.41 Mbps to 9.6 Mbps(Bit rate) Multi-channel 44.1 kHz, 88.2 kHz(Sample rate), 48 kHz, 96 kHz(Sample rate) Stereo 176.4 kHz, 192 kHz(Sample rate)	
	Bit rate : within 32 kbps to 320 kbps(MP3) External Subtitle format : *.smi/*.*.srt/*.*.sub(MicroDVD,Subviewer1.0/2.0)/*.*.ass/*.*.ssa/*.*.txt(TMPlayer)/*.*.psb(PowerDivX) Internal Subtitle format : only, XSUB (It is the subtitle format used in DivX6 files)				

Type	Supported file format			
Photo	JPEG Baseline : 64 x 64 to 15360 x 8640 Progressive : 64 x 64 to 1920 x 1440 <ul style="list-style-type: none"> <li>You can play JPEG files only.</li> <li>Non-supported files are displayed in the form of predefined icon.</li> </ul>			
	File Extensions	Item	Profile	
	jpeg jpg jpe	supported file format	<ul style="list-style-type: none"> <li>SOF0: baseline</li> <li>SOF1: Extend Sequential</li> <li>SOF2: Progressive</li> </ul>	
photo size		<ul style="list-style-type: none"> <li>Min: 64 x 64</li> <li>Max-Normal Type: 15360 (W) x 8640 (H)</li> <li>Progressive Type: 1920 (W) x 1440 (H)</li> </ul>		
Music	MP3 Bit rate 32 to 320 <ul style="list-style-type: none"> <li>Sampling rate MPEG1 Layer3 : 32 kHz, 44.1 kHz, 48 kHz</li> <li>Sampling rate MPEG2 Layer3 : 16 kHz, 22.05 kHz, 24 kHz</li> <li>Sampling rate MPEG2.5 Layer3 : 8 kHz, 11.025 kHz, 12 kHz</li> </ul>			
Content (when using SuperSign Manager)	File Extensions : *.cts/ *.cse Movie <b>File Extensions:</b> *.mpg/*.mpeg/*.dat/*.ts/*.trp/*.tp/*.vob/*.mp4/*.mov/*.mkv/*.avi/*.asf/*.wmv/*.avi(motion JPEG)/*.mp4(motion JPEG)/*.mkv(motion JPEG) <b>Video format:</b> MPEG1, MPEG2, MPEG4,H.264/AVC, DivX 3.11, DivX 4.12, DivX 5.x, DivX 6, Xvid 1.00,Xvid 1.01, Xvid 1.02, Xvid 1.03,Xvid 1.10-beta1/2, JPEG, VC1(WVC1/WMV3) <b>Audio format:</b> MP2,MP3,Dolby Digital, LPCM, AAC, HE-AAC,LPCM, ADPCM, WMA, MP3			
	File Extensions	Item	Profile	
	Photo	JPEG JPG PNG BMP	supported file format	<ul style="list-style-type: none"> <li>SOF0: baseline</li> <li>SOF1: Extend Sequential</li> <li>SOF2: Progressive</li> </ul>
			Photo size	<ul style="list-style-type: none"> <li>Min: 64 x 64</li> <li>Max Type: 1366 x 768</li> </ul>
	Music	MP3	Bit rate	32 kbps to 320 kbps
Sampling rate			32 kHz, 44.1 kHz, 48 kHz (MPEG1 L3) 16 kHz, 22.05 kHz, 24 kHz (MPEG2 L3) 8kHz, 11.025 kHz, 12 kHz (MPEG2.5 L3)	

## Viewing Movies

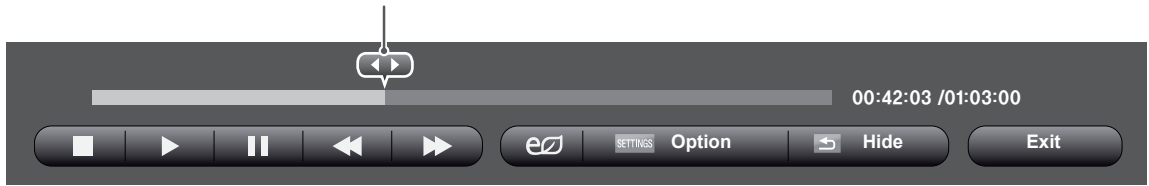
Plays movie files saved in the USB storage device.

- 1 Press **SETTINGS** to access the main menu.
- 2 Press the navigation button to scroll to **MY MEDIA** and press **OK**.
- 3 Press the navigation button to scroll to **Movie List** and press **OK**.
- 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**.



- 6 During movie playback, press **OK** to access the following settings.

Selects the desired point and plays.



Remote button	Description
■	Stops the playback.
▶	Plays a video.
⏸	Pauses or resumes the playback.
◀◀	Scans backward in a file.
▶▶	Scans forward in a file.
e	Adjusts the screen brightness to save energy.
SETTINGS	Show the Option menu.
↶	Hide the menu on the full-sized screen.
BACK	
EXIT	Returns to <b>Movie List</b> .
◀ or ▶	Skips to specific points in a file during playback. The time of a specific point will appear on the status bar. In some files, this function may not work properly.

### Tips for using playing video files

- Some user-created subtitles may not work properly.
- Some special characters are not supported in subtitles.
- HTML tags are not supported in subtitles.
- Subtitles in languages other than the supported languages are not available.
- The screen may suffer temporary interruptions (image stoppage, faster playback, etc.) when the audio language is changed.
- A damaged movie file may not be played correctly, or some player functions may not be usable.
- Movie files produced with some encoders may not be played correctly.
- If the video and audio structure of recorded file is not interleaved, either video or audio is outputted.
- HD videos with a maximum of 1920x1080@25/30P or 1280x720@50/60P are supported, depending on the frame.
- Videos with resolutions higher than 1920X1080@25/30P or 1280x720@50/60P may not work properly depending on the frame.
- Movie files other than the specified types and formats may not work properly.
- Max bitrate of playable movie file is 20 Mbps. (only, Motion JPEG : 10 Mbps)
- We do not guarantee smooth playback of profiles encoded level 4.1 or higher in H.264/AVC.
- DTS Audio codec is not supported.
- A movie file more than 30 GB in file size is not supported for playback.
- A DivX movie file and its subtitle file must be located in the same folder.
- A video file name and its subtitle file name must be identical for it to be displayed.
- Playing a video via a USB connection that doesn't support high speed may not work properly.
- Files encoded with GMC(Global Motion Compensation) may not be played.

**Video options**

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

**NOTE**

- The option values changed in **Movie List** do not affect **Photo List** or **Music List**. Therefore, they are not affected by option values changed in **Photo List** or **Music List**.
- The option values changed in **Photo List** and **Music List** do affect each other.
- When replaying the video file after stopping, you can play from where it stopped previously.

<b>Size</b>	Selects your desired Subtitle size during movie play.
<b>Repeat</b>	Turn on/off repeat function of movie playback. When turned on, the file within the folder will be played back repeatedly. Even when the repeated playback is turned off, it can run the playback if the file name is similar to the previous file.

**NOTE**

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

Select **Set Video Play.** to access the following menus:

Menu	Description
<b>Picture Size</b>	Selects your desired picture format during movie play.
<b>Audio Language</b>	Changes the Language Group of the audio during movie play. Files with a single audio track cannot be selected.
<b>Subtitle Language</b>	Turn on/off the subtitle.
<b>Language</b>	Activated for SMI subtitle and can select the language within the subtitle.
<b>Code Page</b>	Can select the font for subtitle. When set to default, same font as general menu will be used.
<b>Sync</b>	Adjusts the time synchronisation of the subtitle from -10 secs to +10 secs by steps of 0.5 secs during movie play.
<b>Position</b>	Changes the position of the subtitle either up or down during movie play.

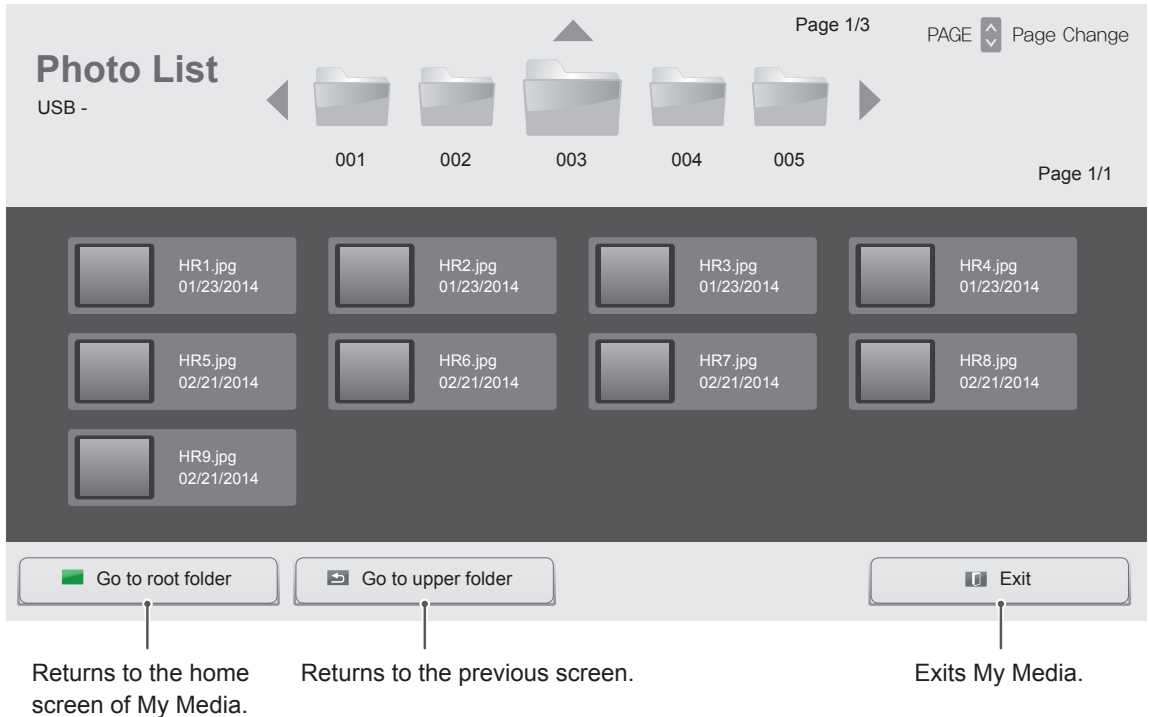
For more details about the **Set Video.** menu, see the **CUSTOMIZE SETTINGS** section. See page 37.

For more details about the **Set Audio.** menu, see the **CUSTOMIZE SETTINGS** section. See page 40.

## Viewing Photos

View image files saved in the USB storage device.

- 1 Press **SETTINGS** to access the main menu.
- 2 Press the navigation button to scroll to **MY MEDIA** and press **OK**.
- 3 Press the navigation button to scroll to **Photo List** and press **OK**.
- 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**.



6 While viewing photos, you can access the following settings.



Menu	Description
<b>Slideshow</b>	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 <b>Option</b> .
<b>BGM</b>	Turns the background music on or off. To set the background music folder, select <b>Option</b> . You can adjust option by <b>SETTINGS</b> button on the remote control.
	Rotates photos clockwise (90°, 180°, 270°, 360°).  <div style="border: 1px solid black; padding: 5px;"> <p><b>NOTE</b></p> <ul style="list-style-type: none"> <li>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.</li> </ul> </div>
	Enlarges the photo by 100%, 200% or 400%.  <div style="border: 1px solid black; padding: 5px;"> <p><b>NOTE</b></p> <ul style="list-style-type: none"> <li>Photos with a resolution of 960 x 540 or less cannot be enlarged.</li> </ul> </div>
	Adjusts the screen brightness to save energy.
<b>Option</b>	To display the options
<b>Hide</b>	Hides the option window. To display the options, press <b>OK</b> .
<b>Exit</b>	Return to <b>Photo List</b> .

### Photo options

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

#### **NOTE**

- The option values changed in **Movie List** do not affect **Photo List** or **Music List**. Therefore, they are not affected by option values changed in **Photo List** or **Music List**.
- The option values changed in **Photo List** and **Music List** do affect each other.

Select **Setting Photo View.** to access the following menus:

Menu	Description
<b>Slide Speed</b>	Select a slideshow speed. (Options: Fast, Medium or Slow.)
<b>BGM</b>	Selects a music folder for the background music.

For more details about the **Set Video.** menu, see the **CUSTOMIZE SETTINGS** section. See page 37.

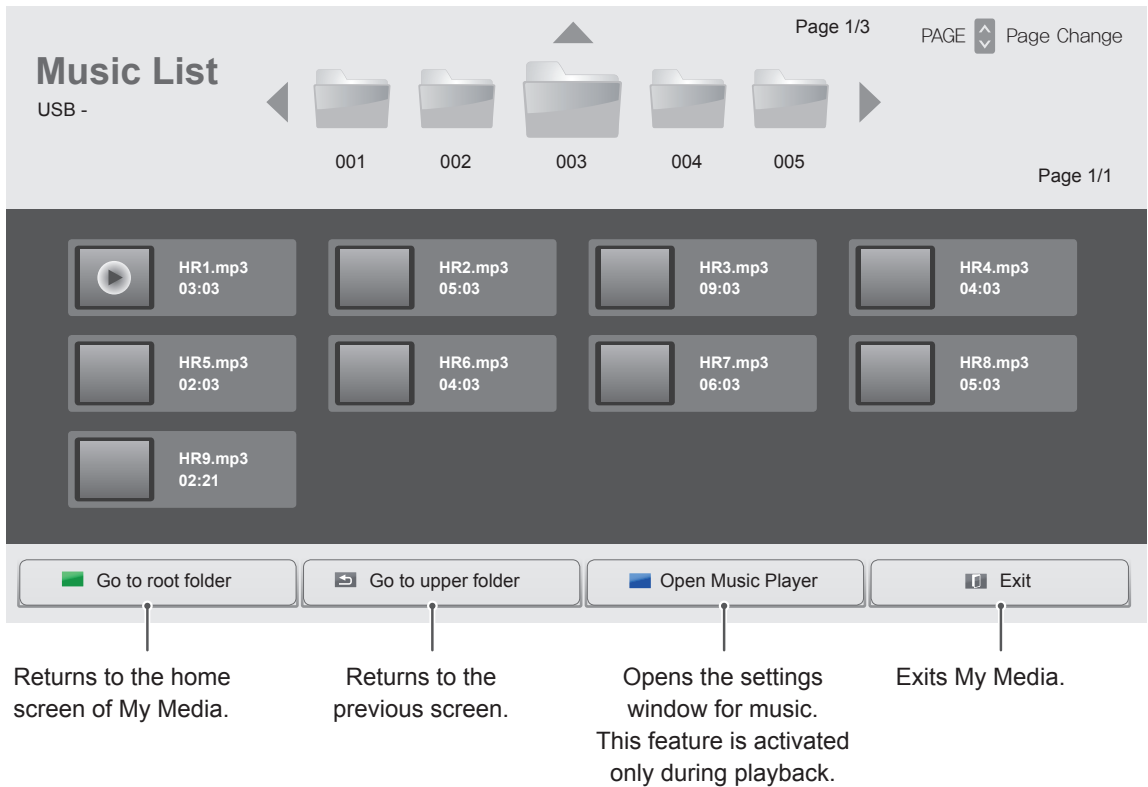
For more details about the **Set Audio.** menu, see the **CUSTOMIZE SETTINGS** section. See page 40.



## Listening to Music

Plays music files saved in the USB storage device.









- 1 Press **SETTINGS** to access the main menu.
- 2 Press the navigation button to scroll to **MY MEDIA** and press **OK**.
- 3 Press the navigation button to scroll to **Music List** and press **OK**.
- 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**.



- 6 During music playback, press **OK** or the blue button (  ) to access the following settings.

Selects the desired point and plays.











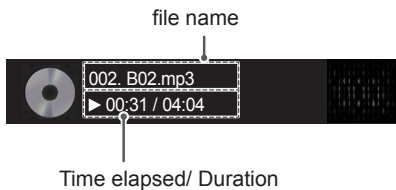
Remote button	Description
	Stops playing back the file and moves back to the <b>Music List</b> .
	Plays a music file.
	Pauses or resumes playback.
	Skips to the previous file.
	Skips to the next file.
	Adjusts the screen brightness to save energy.
<b>SETTINGS</b>	Show the <b>Option</b> menu.
 <b>BACK</b>	Hides the option window. To display the options, press <b>OK</b> .
<b>EXIT</b>	Return to <b>Music List</b> .
	Skips to specific points in a file during playback. The time of a specific point will appear on the status bar. In some files, this function may not work properly.

**Tips for playing music files**

- This unit cannot support the ID3 Tag embedded MP3 files.

**NOTE**

- A damaged or corrupted music does not play but displays 00:00 in playtime.
- A music downloaded from a paid service with copyright protection does not start but displays inappropriate information in playtime.
- If you press OK,  buttons, screen saver is stopped.
- The PLAY() , Pause() , , ,  buttons on the remote control are also available in this mode.
- You can use the  button to select the next music and the  button to select the previous music.

**Music options**

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

**NOTE**

- The option values changed in **Movie List** do not affect **Photo List** or **Music List**. Therefore, they are not affected by option values changed in **Photo List** or **Music List**.
- The option values changed in **Photo List** and **Music List** do affect each other.

When you select the **Set Audio Play,**

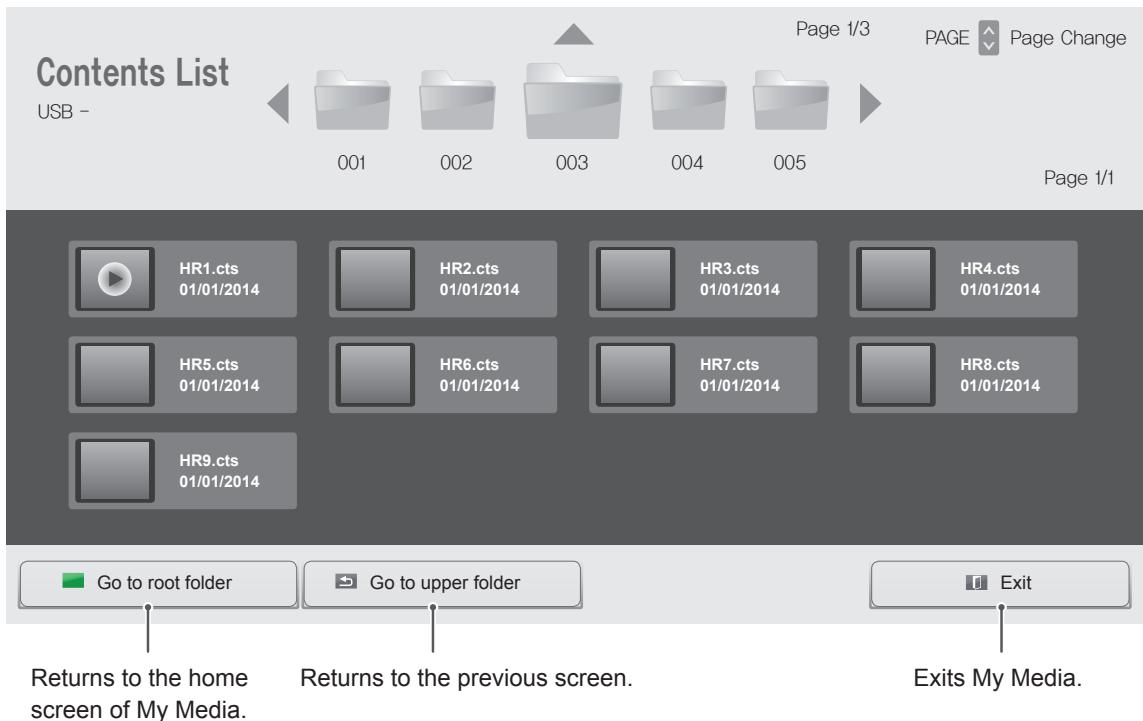
Menu	Description
<b>Repeat</b>	Repeats the music playback.
<b>Random</b>	Plays random music tracks.

For more details about the **Set Audio.** menu, see the **CUSTOMIZE SETTINGS** section. See page 40.

## Viewing the Contents List

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

- 1 Press **SETTINGS** to access the main menu.
- 2 Press the navigation button to scroll to **MY MEDIA** and press **OK**.
- 3 Press the navigation button to scroll to **Contents List** and press **OK**.
- 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**.



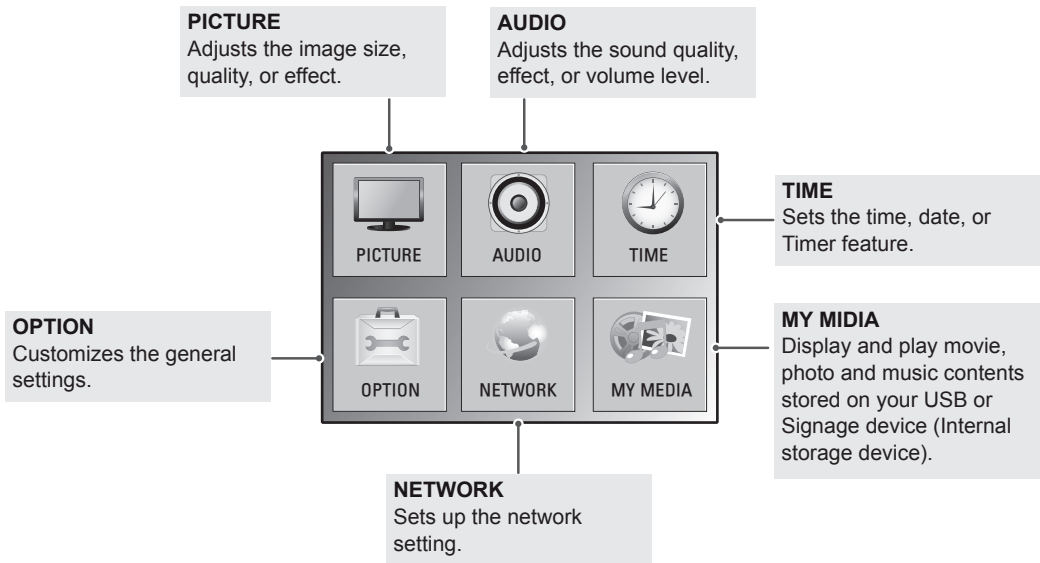
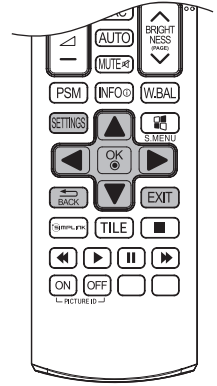
### NOTE

- While playing media files from **Contents List**, only the **BACK**, **EXIT**, or volume button are available. Selecting the **BACK** or **EXIT** button stops playing media files and returns to the **Contents List**.
- If there is the AutoPlay folder in the USB device and its files are in supported formats, they can be played back automatically when the USB device is connected to the monitor.

# CUSTOMIZING SETTINGS

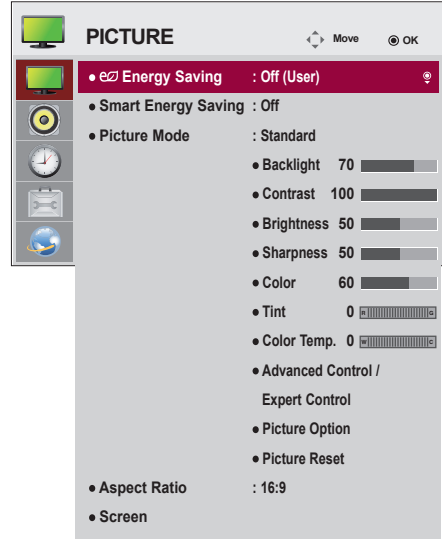
## Accessing Main Menu

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



## PICTURE Settings

- 1 Press **SETTINGS** to access the main menus.
- 2 Press the navigation buttons to scroll to **PICTURE** and press **OK**.
- 3 Press the navigation buttons to scroll to the setting or option you want and press **OK**.  
- To return to the previous level, press **BACK**.
- 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	
<b>Energy Saving</b>	Sets to automatically adjust the screen brightness corresponding to the surroundings.	
	Level	
	<b>Off</b>	Disables Energy Saving function.
	<b>Minimum/ Medium/ Maximum</b>	Selects the brightness level of the backlight.
	<b>Screen Off</b>	The screen turns off in 3 seconds.
<b>Smart Energy Saving</b>	Adjusts the backlight and contrast depending on the screen brightness.	
	Level	
	<b>Off</b>	Disables the Smart Energy Saving function.
	<b>On</b>	Enables the Smart Energy Saving function to save power consumption as much as the value set in the smart energy saving rate.
<b>Picture Mode</b>	Selects the picture mode optimized for the viewing environment or the programme.	
	Mode	
	<b>Vivid</b>	Heightens contrast, brightness and sharpness to display vivid images.
	<b>Standard</b>	Displays images in standard levels of contrast, brightness and sharpness.
	<b>Eco</b>	The Energy Saver feature changes settings on the monitor to reduce power consumption.
	<b>Cinema</b>	Optimizes the video image for a cinematic look to enjoy movies as if you are in a movie theater.
	<b>Sport</b>	Optimizes the video image for high and dynamic actions by emphasizing primary Colors such as white, grass, or sky blue.
	<b>Game</b>	Optimizes the video image for a fast gaming screen such as PCs or games.
<b>Expert1-2</b>	Menu for adjusting picture quality that allows experts and amateurs to enjoy the best Monitor viewing. This menu is ISF-certified and provided for picture tuning experts. (ISF logo can only be used on ISF-certified Monitor units.) ISFccc: Imaging Science Foundation Certified Calibration Control	
<b>Aspect Ratio</b>	Changes the image size to view images at its optimal size.	

Setting	Description	
<b>Screen (In RGB Mode Only)</b>	Customizes the PC display options in RGB mode.	
	Option	
	<b>Resolution</b>	Selects a proper resolution.
	<b>Auto Configure</b>	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.
	<b>Position/Size/Phase</b>	Adjusts the options when the picture is not clear, especially when characters are shaky, after the auto configuration.
	<b>Reset</b>	Restores the options to the default setting.

### Basic image options

Setting	Description
<b>Backlight</b>	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.
<b>Contrast</b>	Increases or decreases the gradient of the video signal. You may use Contrast when the bright part of the picture is saturated.
<b>Brightness</b>	Adjusts the base level of the signal in the picture. You may use Brightness when the dark part of the picture is saturated.
<b>Sharpness</b>	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.
<b>Color</b>	Adjusts intensity of all colors.
<b>Tint</b>	Adjusts the balance between red and green levels.
<b>Color Temp .</b>	Set to warm to enhance hotter Colors such as red, or set to cool to make picture bluish.
<b>Advanced Control/ Expert Control</b>	You can adjust the picture for each <b>Picture Mode</b> , or adjust the picture settings according to a specific picture image. First, select a desired <b>Picture Mode</b> . * This option is unavailable if <b>Picture Mode</b> is set to <b>Vivid</b> .
<b>Picture Option</b>	Sets additional picture option.
<b>Picture Reset</b>	Restores the options to the default setting.

### ! NOTE

- When you select a picture mode, related menus are set automatically.
- When using the Smart Energy Saving function, the screen may look saturated in the white area of a still image.
- If Energy Saving is set to Minimum, Medium, or Maximum, the Smart Energy Saving function is disabled.

**Advanced Control - Picture Mode (Standard/ Eco/ Sport/ Game)**

Setting	Description
<b>Dynamic Contrast</b>	Adjusts the contrast to the optimal level according to the brightness of the image.
<b>Dynamic Color</b>	Adjusts color for more natural-looking colors.
<b>Color Gamut</b>	Selects the range of colours that can be expressed.
<b>Skin Color</b>	Skin Color spectrum can be separately set to implement the skin Color as defined by the user.
<b>Sky Color</b>	Sky color is set separately.
<b>Grass Color</b>	Natural color spectrum (meadows, hills, etc.) can be separately set.
<b>Gamma</b>	Sets the gradation curve according to the output of the picture signal in relation to the input signal.

**Expert Control - Picture Mode (Cinema/ Expert1/ Expert2)**

Setting	Description
<b>Dynamic Contrast</b>	Adjusts the contrast to the optimal level according to the brightness of the image. (Function works in the following mode - HDMI-DTV)
<b>Color Gamut</b>	Selects the range of colours that can be expressed.
<b>Edge Enhancer</b>	Shows clearer and distinctive yet natural edges of the video.
<b>Color Filter</b>	Filters a specific colour spectrum in RGB colours to fine-tune colour saturation and hue accurately.
<b>Color Temperature</b>	Adjusts the overall tone of the screen as desired. In Expert mode, detailed fine-tuning can be set via Gamma method, etc.
<b>Colour Management System</b>	This is a system that experts use when they adjust colour with a test pattern. They can select from six colour areas (Red / Green / Blue / Cyan / Magenta / Yellow) without affecting other colours. For normal images, adjustments may not result in noticeable colour changes.

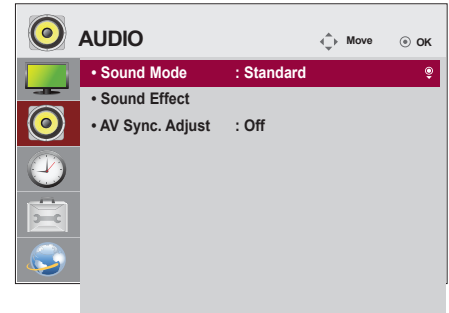
**Picture Option - HDMI(DTV) Mode**

Setting	Description
<b>Noise Reduction</b>	Reduces screen noise in the video.
<b>MPEG Noise Reduction</b>	Reduces noise caused by compressing digital video.
<b>Black Level</b>	Adjusts the brightness or darkness of the screen to suit the black level of the picture input using the degree of darkness (black level) of the screen.
<b>Real Cinema</b>	Optimizes the screen for movie viewing.
<b>Motion Eye Care</b>	Adjusts screen brightness to prevent eye glare. (Depending on model)



## AUDIO Settings

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



The available audio options are described in the following:

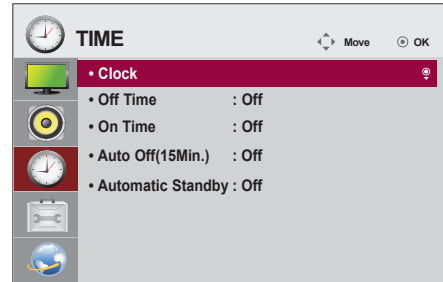
Setting	Description										
<b>Sound Mode</b>	Allows optimized sound for custom Monitor installation.										
	Mode										
	<table border="1"> <tr> <td><b>Standard</b></td> <td>Suitable for all types of video.</td> </tr> <tr> <td><b>News/ Music/ Cinema/ Sport/ Game</b></td> <td>Sets audio optimized for a specific genre.</td> </tr> </table>	<b>Standard</b>	Suitable for all types of video.	<b>News/ Music/ Cinema/ Sport/ Game</b>	Sets audio optimized for a specific genre.						
<b>Standard</b>	Suitable for all types of video.										
<b>News/ Music/ Cinema/ Sport/ Game</b>	Sets audio optimized for a specific genre.										
<b>Sound Effect</b>	the user can select various sound effects. - <b>Sound Effect</b> function is available only for <b>Standard</b> mode in <b>Sound Mode</b> menu.										
	Level										
	<table border="1"> <tr> <td><b>Clear Voice II</b></td> <td>Boosts voice clarity.</td> </tr> <tr> <td><b>Virtual Surround</b></td> <td>LG's proprietary audio processing technology allows 5.1ch-like surround sound from two speakers. - If <b>Clear Voice II</b> is set to <b>On</b>, <b>Virtual Surround</b> will not be chosen.</td> </tr> <tr> <td><b>Equalizer</b></td> <td>Adjusts the volume to a level of your choice using the Equalizer.</td> </tr> <tr> <td><b>Balance</b></td> <td>Adjusts left/right audio balance.</td> </tr> <tr> <td><b>Reset</b></td> <td>You can reset the settings under the Sound Effects menu.</td> </tr> </table>	<b>Clear Voice II</b>	Boosts voice clarity.	<b>Virtual Surround</b>	LG's proprietary audio processing technology allows 5.1ch-like surround sound from two speakers. - If <b>Clear Voice II</b> is set to <b>On</b> , <b>Virtual Surround</b> will not be chosen.	<b>Equalizer</b>	Adjusts the volume to a level of your choice using the Equalizer.	<b>Balance</b>	Adjusts left/right audio balance.	<b>Reset</b>	You can reset the settings under the Sound Effects menu.
	<b>Clear Voice II</b>	Boosts voice clarity.									
	<b>Virtual Surround</b>	LG's proprietary audio processing technology allows 5.1ch-like surround sound from two speakers. - If <b>Clear Voice II</b> is set to <b>On</b> , <b>Virtual Surround</b> will not be chosen.									
	<b>Equalizer</b>	Adjusts the volume to a level of your choice using the Equalizer.									
	<b>Balance</b>	Adjusts left/right audio balance.									
<b>Reset</b>	You can reset the settings under the Sound Effects menu.										
<b>AV Sync. Adjust</b>	Synchronizes video and audio directly when they do not match. If you set AV Sync. to <b>ON</b> , you can adjust the sound output to the screen image. <ul style="list-style-type: none"> <li>● <b>Speaker</b>: Adjusts the synchronization of the sound from the speakers. The "-" button makes the sound output faster and the "+" button slower than the default value.</li> <li>● <b>Bypass</b> : The audio of an external device without audio delay. Audio may be output before video as it takes time to process video input into the Monitor.</li> </ul>										

### ! NOTE

- Some models may not have built-in speakers. In that case, you need to connect external speakers to listen to sound.

## TIME Settings

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



The available time settings are described in the following:

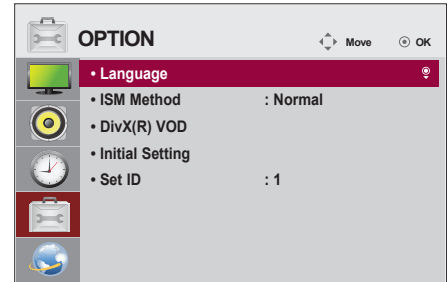
Setting	Description
<b>Clock</b>	Sets the time feature.
<b>On/Off Time</b>	Sets the time to turn on or off the monitor set.
<b>Auto Off(15Min.)</b>	If Auto-off is active and there is no input signal, the set switches to off mode automatically after 15 minutes.
<b>Automatic Standby</b>	If the monitor is left unattended for a set period of time, it automatically goes into standby mode.

### NOTE

- Off Time/ On Time can be saved for up to seven schedules; the monitor is turned on or off at the preset time in the schedule list. If multiple preset times are stored in the schedule list, this function works at the nearest time from the current time.
- Once the on or off time is set, these functions operate daily at the preset time.
- When the scheduled power-on and power-off times are the same, the power-off time has priority over the power-on time if the set is turned on, and vice versa if the set is turned off.

## OPTION Settings

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

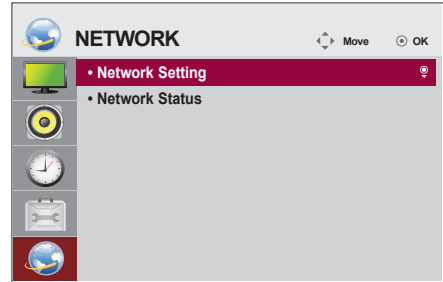


The available option settings are described in the following:

Setting	Description			
<b>Language</b>	Selects a language for the display text.			
<b>ISM Method</b>	This function removes image sticking which is caused by prolonged display of static images.			
	Setting			
	<table border="1"> <tr> <td><b>Normal</b></td> <td>Minimizes image sticking by gradually lowering the brightness when displaying static images and by increasing the brightness when displaying moving images.</td> </tr> <tr> <td><b>Color Wash</b></td> <td>Removes image sticking by moving every pixel in a certain pattern on the screen for a specific period of time. Please use this function to remove temporary image sticking.</td> </tr> </table>	<b>Normal</b>	Minimizes image sticking by gradually lowering the brightness when displaying static images and by increasing the brightness when displaying moving images.	<b>Color Wash</b>
<b>Normal</b>	Minimizes image sticking by gradually lowering the brightness when displaying static images and by increasing the brightness when displaying moving images.			
<b>Color Wash</b>	Removes image sticking by moving every pixel in a certain pattern on the screen for a specific period of time. Please use this function to remove temporary image sticking.			
<b>DivX(R) VOD</b>	Registers or releases DivX. Checks DivX Registration Code for playing DivX-protected videos. Register at <a href="http://vod.divx.com">http://vod.divx.com</a> . Uses Registration Code to rent or purchase movies at <a href="http://www.divx.com/vod">www.divx.com/vod</a> . * Rented/purchased DivX files cannot be played if the DivX Registration Code of a different device is used. Use only the DivX Registration Code granted to this device. * Converted files not conforming to the DivX Codec Standard may not play or may produce abnormal images and sound.			
<b>Initial Setting</b>	Deletes all optional settings and returns to initial default mode.			
<b>Set ID</b>	You can assign a unique Set ID NO (name assignment) to each product when several products are connected for display. Specify the number (1 to 255) using the button and exit. Use the assigned Set ID to individually control each product using the Product Control Program.			

## NETWORK Settings

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



The available option settings are described in the following:

Setting	Description
<b>Network Setting</b>	Configure the network settings.
<b>Network Status</b>	Display the network status.

# TROUBLESHOOTING

## No image is displayed

Problem	Resolution
Is the product power cord connected?	<ul style="list-style-type: none"> <li>• See if the power cord is properly connected to the outlet.</li> </ul>
Does the Out of range message appear?	<ul style="list-style-type: none"> <li>• 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.</li> </ul>
Does the Check signal cable message appear?	<ul style="list-style-type: none"> <li>• The signal cable between PC and product is not connected. Check the signal cable.</li> <li>• Press the 'INPUT' menu in the remote Control to check the input signal.</li> </ul>

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

Problem	Resolution
Did you install the driver?	<ul style="list-style-type: none"> <li>• See if the plug&amp;play function is supported by referring to the video card user manual.</li> </ul>

## The screen image looks abnormal.

Problem	Resolution
Is the screen position wrong?	<ul style="list-style-type: none"> <li>• D-Sub analog signal - Press the "AUTO" button in the remote control to automatically select the optimal screen status that fits into the current mode. If adjustment is not satisfactory, select [PICTURE] - [Screen] - [Position] in OSD menu.</li> <li>• See if the video card resolution and frequency are supported by the product. If the frequency is out of range, set to the recommended resolution in the Control Panel "Display" Setting menu.</li> </ul>
Do thin lines appear on the background screen?	<ul style="list-style-type: none"> <li>• 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, select [PICTURE] - [Screen] - [Size] in OSD menu.</li> </ul>
Horizontal noise appears or the characters look blurred.	<ul style="list-style-type: none"> <li>• 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, select [PICTURE] - [Screen] - [Phase] in OSD menu.</li> </ul>
The screen is displayed abnormally.	<ul style="list-style-type: none"> <li>• The proper input signal is not connected to the signal port. Connect the signal cable that matches with the source input signal.</li> </ul>

**After-image appears on the product.**

Problem	Resolution
After-image appears when the product is turned off.	<ul style="list-style-type: none"> <li>• If you use a fixed image for a long time, the pixels may be damaged quickly. Use the screen-saver function.</li> <li>• When a dark image is displayed on the screen after an image with high contrast (black and white or gray), this may cause image sticking. This is normal for LCD screen.</li> </ul>

**The audio function does not work.**

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

**Screen color is abnormal.**

Problem	Resolution
Screen has poor color resolution (16 colors).	<ul style="list-style-type: none"> <li>• Set the number of colors to more than 24 bits (true color) Select Control Panel - Display - Settings - Color Table menu in Windows.</li> </ul>
Screen color is unstable or mono-colored.	<ul style="list-style-type: none"> <li>• Check the connection status of the signal cable. Or, re-insert the PC video card.</li> </ul>
Do black spots appear on the screen?	<ul style="list-style-type: none"> <li>• 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.</li> </ul>

**The operation does not work normally.**


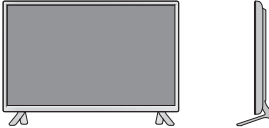

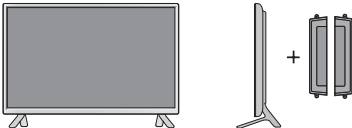
Problem	Resolution
The power suddenly turned off.	<ul style="list-style-type: none"> <li>• Is Off Timer set?</li> <li>• Check the power control settings. Power interrupted.</li> </ul>

# SPECIFICATIONS

32LS33A

LCD Panel	Screen Type	32" class (31.5" / 80.0 cm diagonal) Wide TFT (Thin Film Transistor) LCD (Liquid Crystal Display) Panel.
	Pixel Pitch	0.36375 mm (H) x 0.36375 mm (V)
Video Signal	Max. Resolution	1920 x 1080 @ 60 Hz - It may not be supported depending on the OS or video card type.
	Recommended Resolution	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 : 30 kHz to 83 kHz
	Vertical Frequency	RGB : 50 Hz to 75 Hz HDMI : 50 Hz to 60 Hz
	Synchronization Type	Separate Sync, Digital
Input Connector		15-pin D-Sub, HDMI, Audio In, Speaker Out, IR, USB, RS-232C, LAN
Power	Rated Voltage	AC 100-240 V~ 50/60 Hz 1.3 A
	Power Consumption	On Mode : 55 W Typ. Sleep Mode (RGB) : ≤ 0.5 W Sleep Mode (HDMI) : ≤ 0.7 W Off Mode : ≤ 0.5 W
Environmental conditions	Operating Temperature	0 °C to 40 °C
	Operating Humidity	10 % to 80 %
	Storage Temperature	-20 °C to 60 °C
	Storage Humidity	5 % to 95 %

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

Dimensions (Width x Height x Depth) / Weight		
		730.9 mm x 430.1 mm x 55.5 mm / 5.6 kg
		
		730.9 mm x 480.2 mm x 207 mm / 5.8 kg
		
		730.9 mm x 430.1 mm x 105.1 mm / 6.4 kg
		
		730.9 mm x 480.2 mm x 207 mm / 6.6 kg

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

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


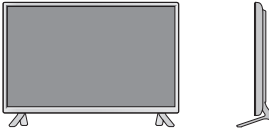


Product specifications shown above may be changed without prior notice due to upgrade of product functions.



## 42LS33A

LCD Panel	Screen Type	42" class (42.0" / 106.7 cm diagonal) Wide TFT (Thin Film Transistor) LCD (Liquid Crystal Display) Panel.
	Pixel Pitch	0.4833 mm (H) x 0.4833 mm (V)
Video Signal	Max. Resolution	1920 x 1080 @ 60 Hz - It may not be supported depending on the OS or video card type.
	Recommended Resolution	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 : 30 kHz to 83 kHz
	Vertical Frequency	RGB : 50 Hz to 75 Hz HDMI : 50 Hz to 60 Hz
	Synchronization Type	Separate Sync, Digital
Input Connector		15-pin D-Sub, HDMI, Audio In, Speaker Out, IR, USB, RS-232C, LAN
Power	Rated Voltage	AC 100-240 V~ 50/60 Hz 1.2 A
	Power Consumption	On Mode : 80 W Typ. Sleep Mode (RGB) : ≤ 0.5 W Sleep Mode (HDMI) : ≤ 0.7 W Off Mode : ≤ 0.5 W
Environmental conditions	Operating Temperature	0 °C to 40 °C
	Operating Humidity	10 % to 80 %
	Storage Temperature	-20 °C to 60 °C
	Storage Humidity	5 % to 95 %

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

Dimensions (Width x Height x Depth) / Weight		959.5 mm x 559 mm x 55.5 mm / 9.1 kg
		959.5 mm x 610.8 mm x 218 mm / 9.3 kg
		959.5 mm x 559 mm x 91 mm / 9.9 kg
		959.5 mm x 610.8 mm x 218 mm / 10.1 kg

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


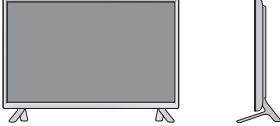

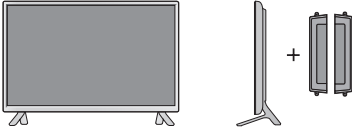
Audio	RMS Audio Output	10 W + 10 W (R + L)
	Input Sensitivity	0.7 Vrms
	Speaker Impedance	8 Ω

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

## 47LS33A

LCD Panel	Screen Type	47" class (46.9" / 119.2 cm diagonal) Wide TFT (Thin Film Transistor) LCD (Liquid Crystal Display) Panel.
	Pixel Pitch	0.5415 mm (H) x 0.5415 mm (V)
Video Signal	Max. Resolution	1920 x 1080 @ 60 Hz - It may not be supported depending on the OS or video card type.
	Recommended Resolution	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 : 30 kHz to 83 kHz
	Vertical Frequency	RGB : 50 Hz to 75 Hz HDMI : 50 Hz to 60 Hz
	Synchronization Type	Separate Sync, Digital
Input Connector		15-pin D-Sub, HDMI, Audio In, Speaker Out, IR, USB, RS-232C, LAN
Power	Rated Voltage	AC 100-240 V~ 50/60 Hz 1.3 A
	Power Consumption	On Mode : 83 W Typ. Sleep Mode (RGB) : ≤ 0.5 W Sleep Mode (HDMI) : ≤ 0.7 W Off Mode : ≤ 0.5 W
Environmental conditions	Operating Temperature	0 °C to 40 °C
	Operating Humidity	10 % to 80 %
	Storage Temperature	-20 °C to 60 °C
	Storage Humidity	5 % to 95 %

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

Dimensions (Width x Height x Depth) / Weight	
	1071 mm x 621.6 mm x 55.8 mm / 12.2 kg
	
	1071 mm x 675.1 mm x 247 mm / 12.5 kg
	
1071 mm x 621.6 mm x 90.4 mm / 13.0 kg	
	
1071 mm x 675.1 mm x 247 mm / 13.3 kg	

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


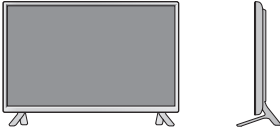

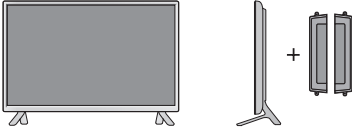
Audio	RMS Audio Output	10 W + 10 W (R + L)
	Input Sensitivity	0.7 Vrms
	Speaker Impedance	8 Ω

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

## 55LS33A

LCD Panel	Screen Type	55" class (54.6" / 138.7 cm diagonal) Wide TFT (Thin Film Transistor) LCD (Liquid Crystal Display) Panel.
	Pixel Pitch	0.630 mm (H) x 0.630 mm (V)
Video Signal	Max. Resolution	1920 x 1080 @ 60 Hz - It may not be supported depending on the OS or video card type.
	Recommended Resolution	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 : 30 kHz to 83 kHz
	Vertical Frequency	RGB : 50 Hz to 75 Hz HDMI : 56 Hz to 60 Hz
	Synchronization Type	Separate Sync, Digital
Input Connector		15-pin D-Sub, HDMI, Audio In, Speaker Out, IR, USB, RS-232C, LAN
Power	Rated Voltage	AC 100-240 V~ 50/60 Hz 1.5 A
	Power Consumption	On Mode : 105 W Typ. Sleep Mode (RGB) : ≤ 0.5 W Sleep Mode (HDMI) : ≤ 0.7 W Off Mode : ≤ 0.5 W
Environmental conditions	Operating Temperature	0 °C to 40 °C
	Operating Humidity	10 % to 80 %
	Storage Temperature	-20 °C to 60 °C
	Storage Humidity	5 % to 95 %

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

Dimensions (Width x Height x Depth) / Weight		1240.9 mm x 717.2 mm x 56.8 mm / 17.8 kg
		1240.9 mm x 770.8 mm x 247 mm / 18.1 kg
		1240.9 mm x 717.2 mm x 91.4 mm / 18.6 kg
		1240.9 mm x 770.8 mm x 247 mm / 18.9 kg

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

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

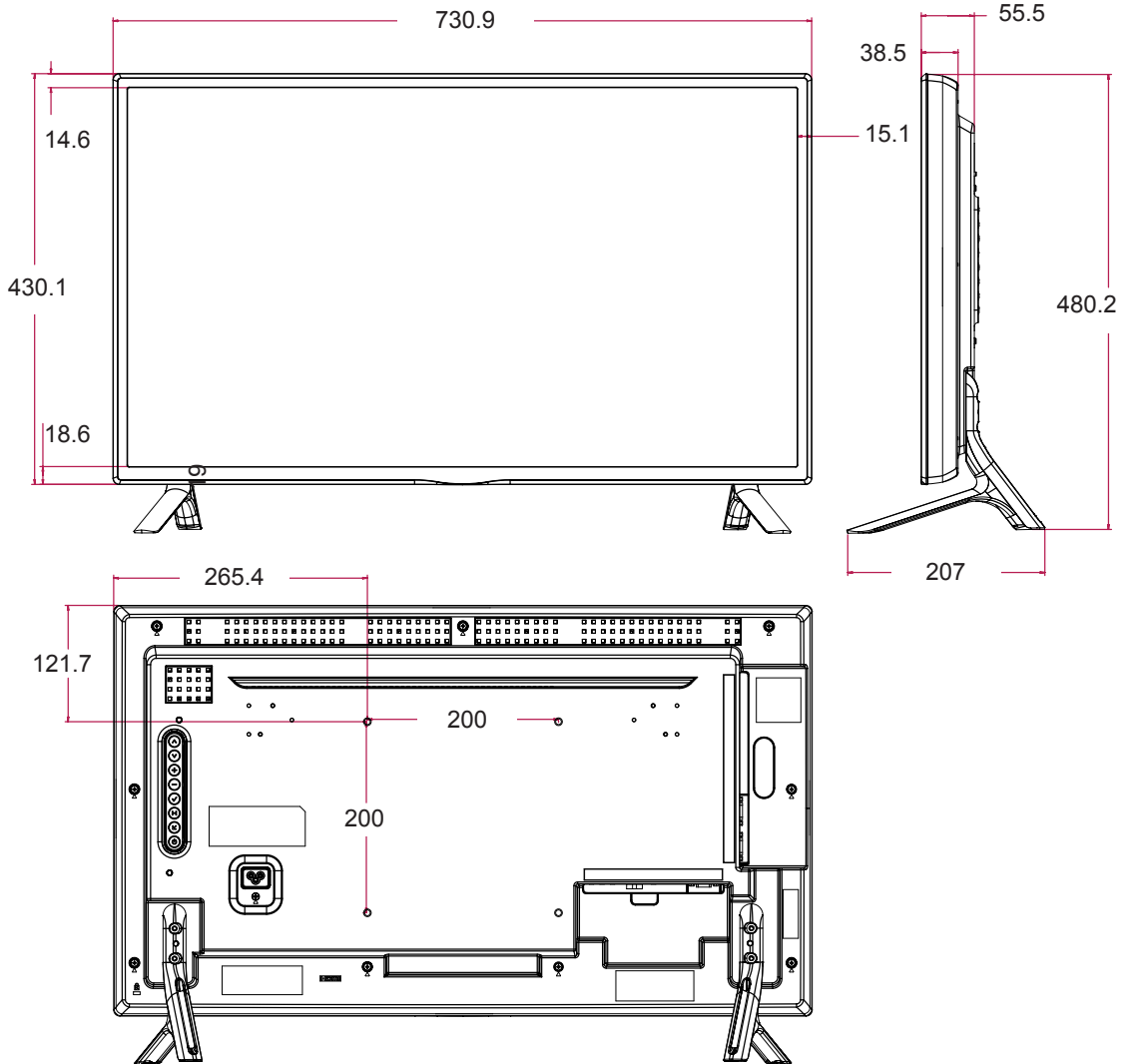
Product specifications shown above may be changed without prior notice due to upgrade of product functions.

**Dimensions**

The illustrations in this manual may differ from the actual product and accessories. Please see the Mounting on a Wall section for sizes of screws. ( See page 10. )

(Unit : mm)

32LS33A



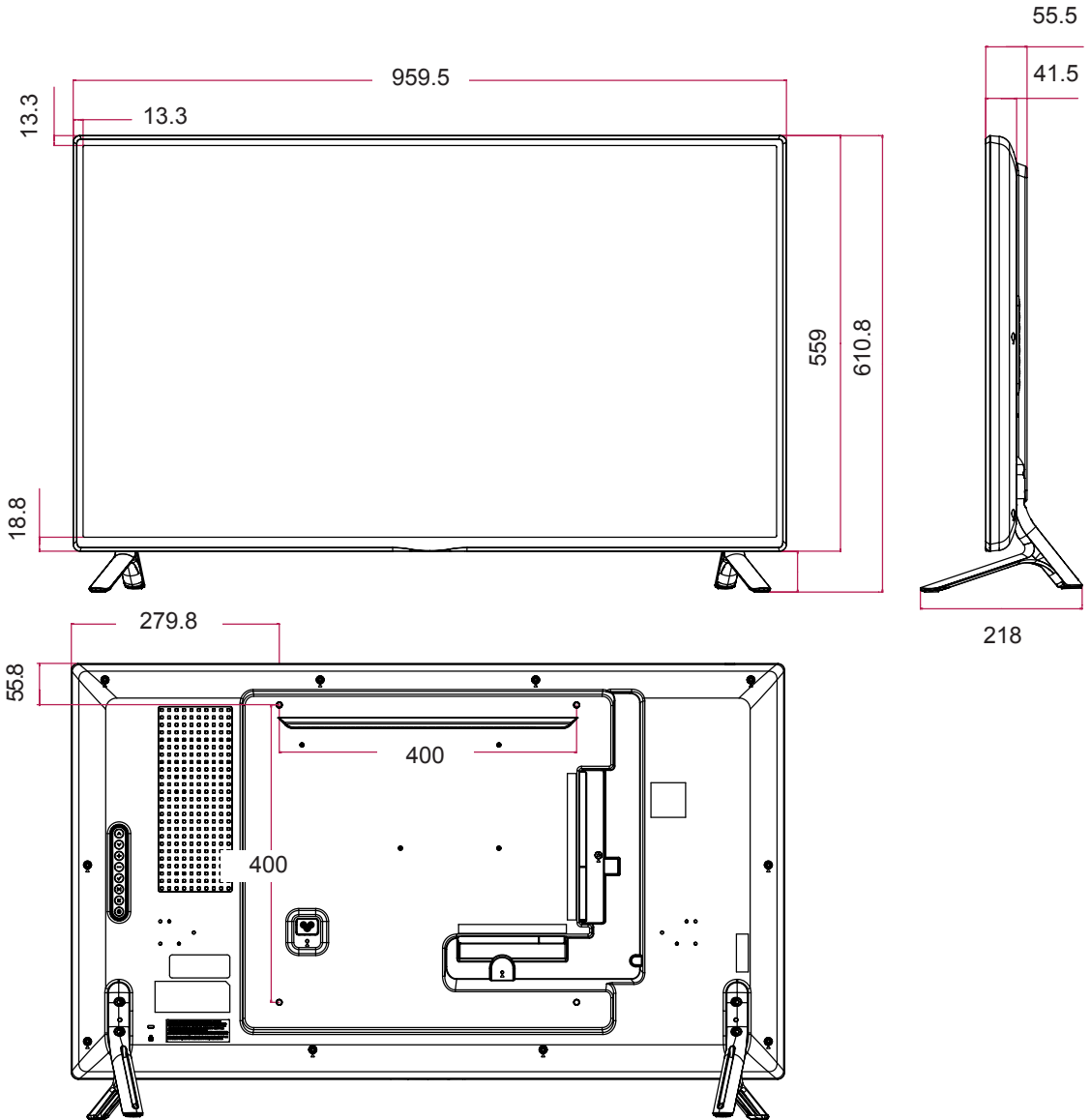
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**Dimensions**

The illustrations in this manual may differ from the actual product and accessories. Please see the Mounting on a Wall section for sizes of screws. ( See page 10. )

(Unit : mm)

42LS33A



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

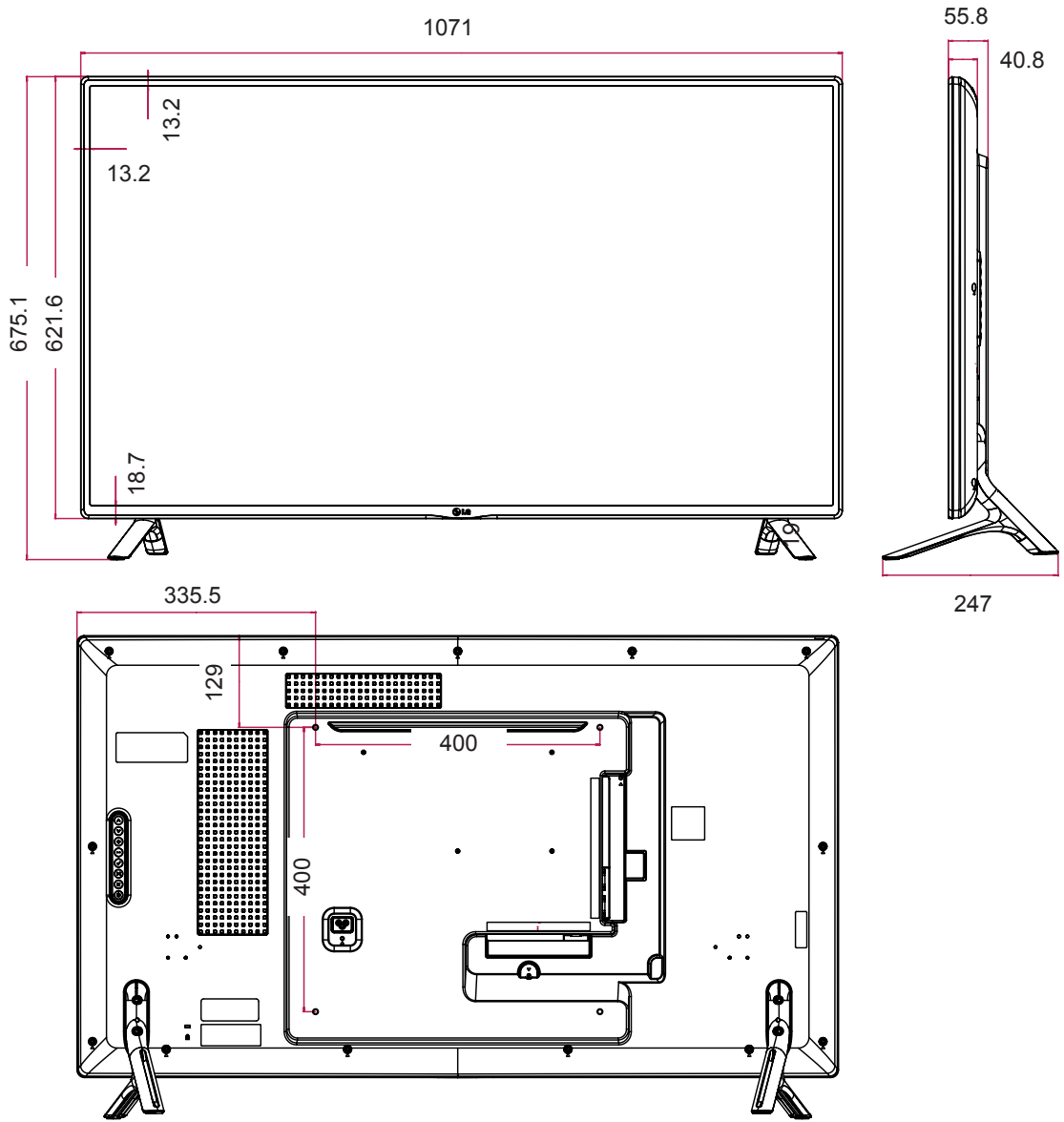


**Dimensions**

The illustrations in this manual may differ from the actual product and accessories. Please see the Mounting on a Wall section for sizes of screws. ( See page 10. )

(Unit : mm)

47LS33A



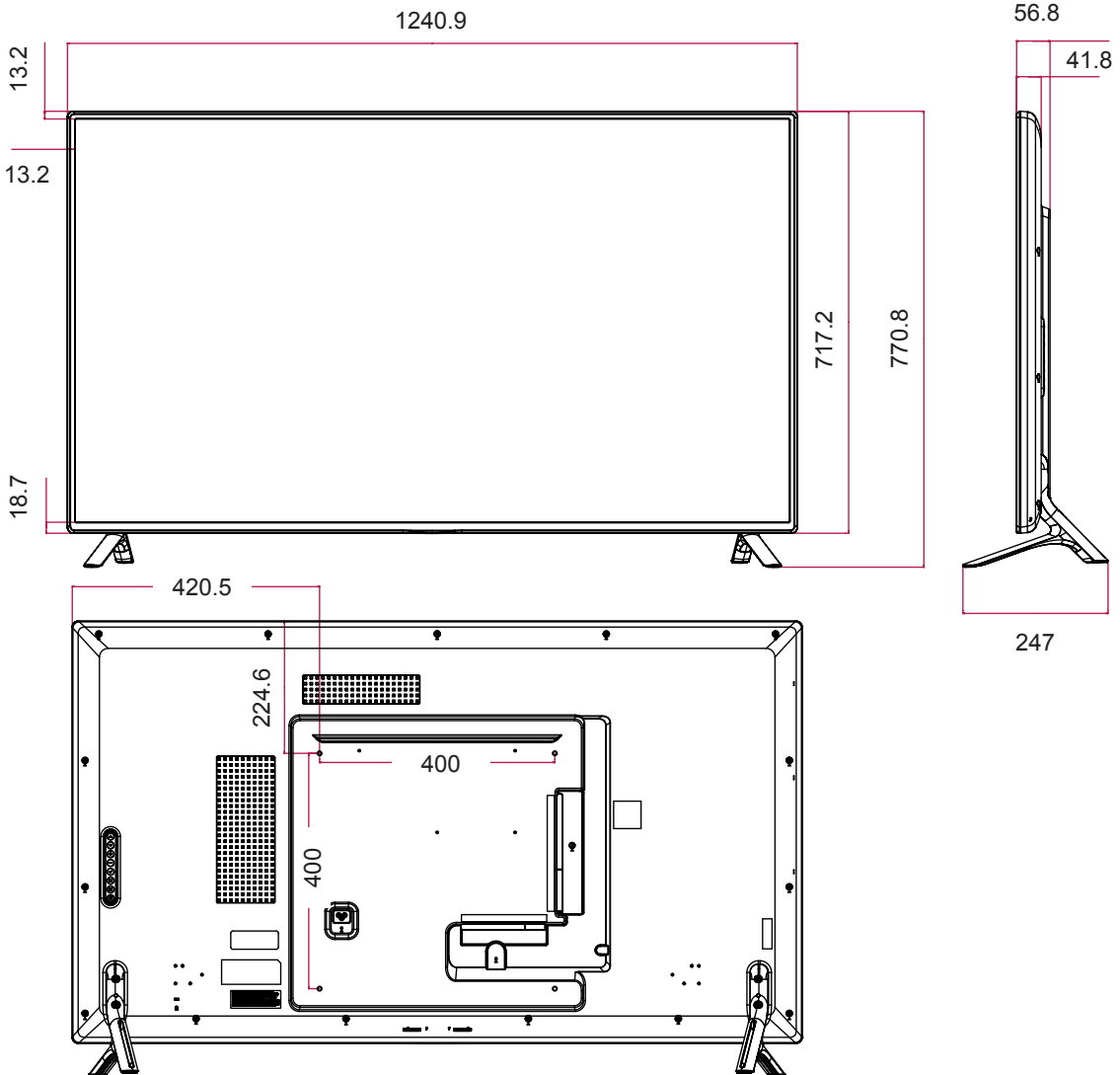
Product specifications shown above may be changed without prior notice due to upgrade of product functions.

**Dimensions**

The illustrations in this manual may differ from the actual product and accessories.  
Please see the Mounting on a Wall section for sizes of screws. ( See page 10. )

(Unit : mm)

55LS33A



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)
720 x 400	31.468	70.8
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 960	60	60
1152 x 864	57.717	59.934
1280 x 1024	63.981	60.02
1920 x 1080	67.5	60

**HDMI (DTV) supported mode**

Resolution	Horizontal Frequency(kHz)	Vertical Frequency(Hz)
480/60P	31.5	60
576/50P	31.25	50
720/50P	37.5	50
720/60P	45	60
1080/50i	28.1	50
1080/60i	33.75	60
1080/50P	56.25	50
1080/60P	67.5	60

**HDMI (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
1366 x 768	47.7	60
1280 x 1024	63.981	60.02
1680 x 1050	65.290	59.954
1920 x 1080	67.5	60

**NOTE**

- PC resolutions available as the input label option in RGB and HDMI input mode : 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 vertical line. When 1 is divided by the horizontal interval, the number of horizontal lines displayed every second can be tabulated as the horizontal frequency. The unit is kHz.

# IR CODES

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

Code (Hexa)	Function	Note
08	⏻ Power	R/C BUTTON
0B	INPUT	R/C BUTTON
C4	MONITOR ON	R/C BUTTON
C5	MONITOR OFF	R/C BUTTON
95	ENERGY SAVING (e0)	R/C BUTTON
DC	3D	R/C BUTTON
10 to 19	Number Key 0 to 9	R/C BUTTON
53	1/a/A	R/C BUTTON
2F	CLEAR	R/C BUTTON
02	Volume ▲ ( + )	R/C BUTTON
03	Volume ▼ ( - )	R/C BUTTON
79	ARC	R/C BUTTON
99	AUTO	R/C BUTTON
09	MUTE	R/C BUTTON
E0	BRIGHTNESS ^ (Page UP)	R/C BUTTON
E1	BRIGHTNESS v (Page Down)	R/C BUTTON
4D	PSM	R/C BUTTON
AA	INFO ⓘ	R/C BUTTON
5F	W.BAL	R/C BUTTON
43	SETTINGS	R/C BUTTON
40	Up ▲	R/C BUTTON
41	Down ▼	R/C BUTTON
07	Left ◀	R/C BUTTON
06	Right ▶	R/C BUTTON
3F	S.MENU	R/C BUTTON
44	OK	R/C BUTTON
28	BACK	R/C BUTTON
5B	EXIT	R/C BUTTON
7E	 SIMPLINK	R/C BUTTON
7B	TILE (Tile Mode)	R/C BUTTON
B1	■	R/C BUTTON
B0	▶	R/C BUTTON
BA		R/C BUTTON
8F	◀◀	R/C BUTTON
8E	▶▶	R/C BUTTON
72	Red Key (PICTURE ID ON)	R/C BUTTON
71	Green Key (PICTURE ID OFF)	R/C BUTTON
63	Yellow Key	R/C BUTTON
61	Blue Key	R/C BUTTON

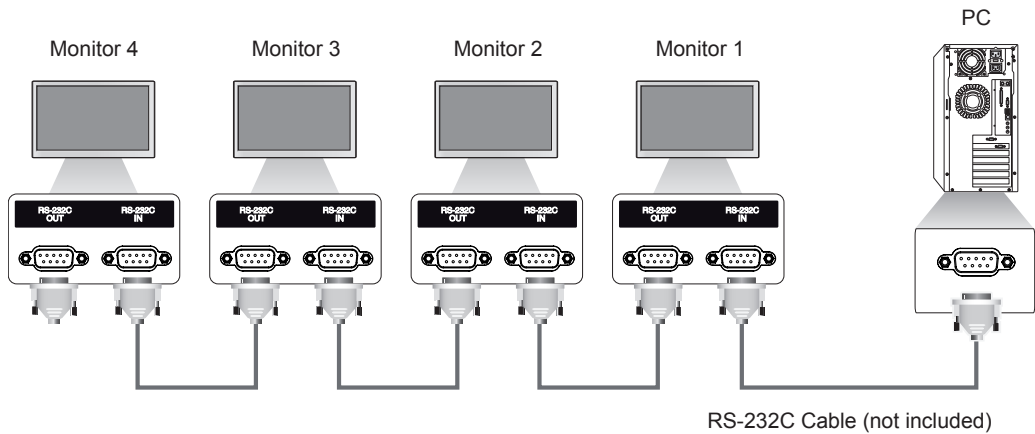
# CONTROLLING THE MULTIPLE PRODUCT

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

## Connecting the Cable

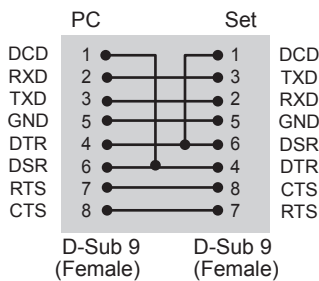
Connect the RS-232C cable as shown in the picture.

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



## RS-232C Configurations

### 8-Wire Configurations (Cross-over RS-232C cable)



### NOTE

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

## Communication Parameter

- Baud Rate : 9600 BPS
- 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 (Hexadecimal)
		1	2	
01	Power	k	a	00 to 01
02	Select input	x	b	See [Select input]
03	Aspect ratio	k	c	See [Aspect ratio]
04	Energy saving	j	q	See [Energy saving]
05	Picture mode	d	x	See [Picture mode]
06	Contrast	k	g	00 to 64
07	Brightness	k	h	00 to 64
08	Sharpness	k	k	00 to 64
09	Color	k	i	00 to 64
10	Tint	k	j	00 to 64
11	Color temperature	x	u	00 to 64
12	H position	f	q	00 to 64
13	V position	f	r	00 to 64
14	H size	f	s	00 to 64
15	Auto Config.	j	u	01
16	Balance	k	t	00 to 64
17	Sound Mode	d	y	See [Sound mode]
18	Mute	k	e	00 to 01
19	Volume	k	f	00 to 64
20	Clock 1 (year/month/day)	f	a	See [Clock 1]
21	Clock 2 (hour/minute/second)	f	x	See [Clock 2]
22	Off time schedule	f	c	00 to 01
23	On time schedule	f	b	00 to 01
24	Off timer (repeat mode/time)	f	e	See Off timer
25	On timer (repeat mode/time)	f	d	See On timer
26	On timer input	f	u	See [On timer input]
27	Automatic Standby	m	n	00 to 01
28	Auto off	f	g	00 to 01
29	Language	f	i	See [Language]
30	ISM method	j	p	See [ISM method]
31	Reset	f	k	00 to 02
32	Current temperature	d	n	FF
33	Key	m	c	See [Key]
34	Time elapsed	d	l	FF
35	Product serial number	f	y	FF
36	Software version	f	z	FF
37	White balance red gain	j	m	00 to FE
38	White balance green gain	j	n	00 to FE
39	White balance blue gain	j	o	00 to FE
40	Backlight	m	g	00 to 64
41	Screen off	k	d	00 to 01



**NOTE**

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

## Transmission / Receiving Protocol

### Transmission

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

- \* [Command1] Identifies the factory setting and the user setting modes.
- \* [Command2] Controls monitors.
- \* [Set ID] Used for selecting a set you want to control. A unique set ID can be assigned to each set ranging from 1 to 255 (01H to FFH) under Settings in the OSD menu. Selecting '00H' for set ID allows the simultaneous control of all connected monitors.
- \* [Data] Transmits command data.  
Data count may increase depending on the command.
- \* [Cr] Carriage Return. Corresponds to '0x0D' in ASCII code.
- \* [ ] White Space. Corresponds to '0x20' in ASCII code.

### Acknowledgement

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

- \* The Product transmits an ACK (acknowledgement) based on this format when receiving normal data. At this time, if the data is FF, it indicates the present status data. If the data is in data write mode, it returns the data of the PC computer.
- \* If a command is sent with Set ID '00' (=0x00), the data is reflected to all monitors and they do not send an acknowledgement (ACK).
- \* If the data value 'FF' is sent in control mode via RS-232C, the current setting value of a function can be checked (only for some functions).
- \* Some commands may not be supported on some models.



**01. Power (Command: k a)**

Controls the power on/off of the set.

**Transmission**

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

Data 00: Off  
01: On

**Acknowledgement**

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

\* Only when the monitor is fully powered on, the acknowledgement signal is returned properly.

\* There may be a delay between the transmission and acknowledgement signals.

**02. Select input (Command: x b)**

Selects an input signal.

**Transmission**

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

Data 60: RGB  
90: HDMI (HDMI1) (DTV)  
A0: HDMI (HDMI1) (PC)

**Acknowledgement**

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

\* Some input signals may not be supported on some models.

**03. Aspect ratio (Command: k c)**

Adjusts the aspect ratio.

**Transmission**

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

Data 01: 4:3  
02: 16:9  
04: Zoom (HDMI)(DTV)  
06: Auto ratio (HDMI)(DTV)  
09: Original (≥ 720p) (HDMI) (DTV)  
10 to 1F: Cinema zoom 1 to 16 (HDMI) (DTV)

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

\* The aspect ratio may differ depending on the model's input configuration.

**Acknowledgement**

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

**04. Energy saving (Command: j q)**

Sets the energy saving function.

**Transmission**

[j][q][ ][Set ID][ ][Data][Cr]

Data 00: Off  
01: Minimum  
02: Medium  
03: Maximum  
04: Automatic  
05: Screen off

**Acknowledgement**

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

\*\* This may not be supported on some models.

**05. Picture mode (Command: d x)**

Selects a picture mode.

**Transmission**

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

Data 00: Vivid  
01: Standard  
02: Cinema  
03: Sport  
04: Game  
05: Expert 1  
06: Expert 2  
08: Eco

**Acknowledgement**

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

**06. Contrast (Command: k g)**

Adjusts the screen contrast.

**Transmission**

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

Data 00 to 64: Contrast 0 to 100

**Acknowledgement**

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

**07. Brightness (Command: k h)**

Adjusts the screen brightness.

Transmission

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

Data 00 to 64: Brightness 0 to 100

Acknowledgement

`[h][ ][Set ID][ ][OK/NG][Data][x]`**10. Tint (Command: k j)**

Adjusts the screen tint.

Transmission

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

Data 00 to 64: Tint red 50 to green 50

Acknowledgement

`[j][ ][Set ID][ ][OK/NG][Data][x]`**08. Sharpness (Command: k k)**

Adjusts the screen sharpness.

Transmission

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

Data 00 to 32: Sharpness 0 to 50

Acknowledgement

`[k][ ][Set ID][ ][OK/NG][Data][x]`**11. Color temperature (Command: x u)**

Adjusts the screen color temperature.

Transmission

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

Data 00 to 64: Warm 50 to cool 50

Acknowledgement

`[u][ ][Set ID][ ][OK/NG][Data][x]`**09. Color (Command: k i)**

Adjusts the screen color.

Transmission

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

Data 00 to 64: Color 0 to 100

Acknowledgement

`[i][ ][Set ID][ ][OK/NG][Data][x]`**12. H position (Command: f q)**

Adjusts the horizontal position of the screen.

This function is only available when the Tile Mode is set to Off.

\* The operational range varies depending on the RGB input resolution.

(Only available in RGB-PC input mode)

Transmission

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

Data 00 to 64: Min -50 (left) to max 50 (right)

Acknowledgement

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

**13. V position (Command: f r)**

Adjusts the vertical position of the screen.  
This function is only available when the Tile Mode is set to Off.

\* The operational range varies depending on the RGB input resolution.

(Only available in RGB-PC input mode)

Transmission

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

Data 00 to 64: Min -50 (down) to max 50 (up)

Acknowledgement

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

**14. H size (Command: f s)**

Adjusts the horizontal size of the screen.

This function is only available when the Tile Mode is set to Off.

\* The operational range varies depending on the RGB input resolution.

(Only available in RGB-PC input mode)

Transmission

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

Data 00 to 64: Min -50 (small) to max 50 (large)

Acknowledgement

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

**15. Auto Config. (Command: j u)**

Automatically corrects position and shaking of the picture.

(Only available in RGB-PC input mode)

Transmission

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

Data 01: Execution

Acknowledgement

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

**16. Balance (Command: k t)**

Adjusts the sound balance.

Transmission

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

Data 00 to 64: Left 50 to right 50

Acknowledgement

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

**17. Sound mode (Command: d y)**

Selects a sound mode.

Transmission

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

Data 01: Standard  
02: Music  
03: Cinema  
04: Sport  
05: Game  
07: News

Acknowledgement

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

**18. Mute (Command: k e)**

Mutes/unmutes the sound.

Transmission

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

Data 00: Mute

01: Unmute

Acknowledgement

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

**19. Volume (Command: k f)**

Adjusts the playback volume.

Transmission

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

Data 00 to 64: Volume 0 to 100

Acknowledgement

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

**20. Clock 1 (year/month/day) (Command: f a)**

Adjusts the Clock 1 (year/month/day) value.

Transmission

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

Data1 00 to 14: Year 2010 to 2040

Data2 01 to 0C: January to December

Data3 01 to 1F: 1st to 31st

\* Enter "fa [Set ID] ff" to view the Clock 1 (year/month/day) settings.

Acknowledgement

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

**21. Clock 2 (hour/minute/second) (Command: f x)**

Adjusts the Clock 2 (hour/minute/second) value.

Transmission

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

Data1 00 to 17: 00 to 23 hours

Data2 00 to 3B: 00 to 59 minutes

Data3 00 to 3B: 00 to 59 seconds

\* Enter "fa [Set ID] ff" to view the Clock 2 (hour/minute/second) settings.

\*\* This function is only available when Clock 1 (year/month/day) is set.

Acknowledgement

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

**22. Off time schedule (Command: f c)**

Enables/disables the on time schedule.

Transmission

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

Data 00: Off

01: On

Acknowledgement

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

**23. On time schedule (Command: f b)**

Enables/disables the on time schedule.

Transmission

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

Data 00: Off

01: On

Acknowledgement

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

**24. Off timer (repeat mode/time) (Command: f e)**

Configures the off time (repeat mode/time) settings.

**Transmission**

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

**Data1**

1. F1 to F7 (reading data)

F1: Read the 1st off timer data

F2: Read the 2nd off timer data

F3: Read the 3rd off timer data

F4: Read the 4th off timer data

F5: Read the 5th off timer data

F6: Read the 6th off timer data

F7: Read the 7th off timer data

2. E1 to E7 (deleting one index), E0 (deleting all indexes)

E0: Erase all off timer setting

E1: Erase the 1st off timer setting

E2: Erase the 2nd off timer setting

E3: Erase the 3rd off timer setting

E4: Erase the 4th off timer setting

E5: Erase the 5th off timer setting

E6: Erase the 6th off timer setting

E7: Erase the 7th off timer setting

3. 01 to 0C (setting the day of the week for off timer)

01: Once

02: Daily

03: Mon - Fri

04: Mon - Sat

05: Sat - Sun

06: Every Sunday

07: Every Monday

08: Every Tuesday

09: Every Wednesday

0A: Every Thursday

0B: Every Friday

0C: Every Saturday

Data2 00 to 17: 00 to 23 hours

Data3 00 to 3B: 00 to 59 minutes

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

Example 1: fe 01 f1 ff ff - Read the 1st index data from off timer.

Example 2: fe 01 e1 ff ff - Delete the 1st index data from off timer.

Example 3: fe 01 04 02 03 - Sets Off Timer to 02:03 for Monday-Saturday.

\* This function is only available when Clock 1 (year/month/day) and Clock 2 (hour/minute/second) are set.

**Acknowledgement**

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

**25. On timer (repeat mode/time) (Command: f d)**

Configures the on time (repeat mode/time) settings.

**Transmission**

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

**Data1**

1. F1 to F7 (reading data)

F1: Read the 1st on timer data

F2: Read the 2nd on timer data

F3: Read the 3rd on timer data

F4: Read the 4th on timer data

F5: Read the 5th on timer data

F6: Read the 6th on timer data

F7: Read the 7th on timer data

2. E1 to E7 (deleting one index), E0 (deleting all indexes)

E0: Erase all on timer setting

E1: Erase the 1st on timer setting

E2: Erase the 2nd on timer setting

E3: Erase the 3rd on timer setting

E4: Erase the 4th on timer setting

E5: Erase the 5th on timer setting

E6: Erase the 6th on timer setting

E7: Erase the 7th on timer setting

3. 01 to 0C (setting the day of the week for the on timer)

01: Once

02: Daily

03: Mon - Fri

04: Mon - Sat

05: Sat - Sun

06: Every Sunday

07: Every Monday

08: Every Tuesday

09: Every Wednesday

0A: Every Thursday

0B: Every Friday

0C: Every Saturday

Data2 00 to 17: 00 to 23 hours

Data3 00 to 3B: 00 to 59 minutes

\* To read or delete an on timer list you have set, [Data2][Data3] must be set to FFH.

Example 1: fd 01 f1 ff ff - Read the 1st index data from on timer.

Example 2: fd 01 e1 ff ff - Delete the 1st index data from on timer.

Example 3: fd 01 04 02 03 - Set on timer at 02:03 on Monday to Saturday.

\* This function is only available when Clock 1 (year/month/day) and Clock 2 (hour/minute/second) are set.

**Acknowledgement**

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

**26. On timer input (Command: f u)**

Adds a new schedule entry by selecting input for the current on timer setting.

**Transmission**

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

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

Data (adding schedule)

60: RGB

90: HDMI (HDMI1)

Data1

1. f1h to f7h (reading data)

F1: Select the 1st schedule input source

F2: Select the 2nd schedule input source

F3: Select the 3rd schedule input source

F4: Select the 4th schedule input source

F5: Select the 5th schedule input source

F6: Select the 6th schedule input source

F7: Select the 7th schedule input source

Data2

1. ffh (reading data)

To read the schedule input, enter FFH for [Data2].

If no schedule is available for [Data1] when attempting to read or change the schedule data, the text NG will be displayed and the operation will fail.

(Example 1: fu 01 60 - Move existing schedule entries down one row each and save RGB as input source for the 1st schedule entry.)

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

\* This function is only supported when 1 (year/month/date), 2 (hour/minute/second) and On Time (repeat mode/time) are set.

\*\* Input may not be supported on some models.

**Acknowledgement**

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

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

**27. Automatic standby (Command: m n)**

Configures the automatic standby settings.

**Transmission**

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

Data 00: Off (Will not turn off after 4/6/8 hours)

01: 4 hours (Off after 4 hours)

02: 6 hours (Off after 6 hours)

03: 8 hours (Off after 8 hours)

**Acknowledgement**

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

**28. Auto off (Command: f g)**

Configures the automatic off settings.

**Transmission**

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

Data 00: Off (Will not turn off after 15 minutes)

01: 15 minutes (Off after 15 minutes)

**Acknowledgement**

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

**29. Language (Command: f i)**

Sets the OSD language.

**Transmission**

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

Data 00: Czech

01: Danish

02: German

03: English

04: Spanish (Europe)

05: Greek

06: French

07: Italian

08: Dutch

09: Norwegian

0A: Portuguese

0B: Portuguese (Brazil)

0C: Russian

0D: Finnish

0E: Swedish

0F: Korean

10: Chinese (Cantonese)

11: Chinese (Mandarin)

**Acknowledgement**

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

**30. ISM method (Command: j p)**

Selects an ISM Method option.

**Transmission**

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

Data 08: Standard

20: Color wash

**Acknowledgement**

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

**27. Automatic standby (Command: m n)**

**31. Reset (Command: f k)**

Resets settings for Picture, Screen and Audio or restores factory settings.  
(Screen reset can only be performed in RGB input mode.)

Transmission

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

Data 00: Picture reset  
01: Screen reset  
02: Initial settings (factory reset)

Acknowledgement

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

**32. Current temperature (Command: d n)**

Checks the inside temperature value.

Transmission

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

Data FF: Check status

Acknowledgement

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

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

\* Temperature is displayed as a hexadecimal value.

**33. Key (Command: m c)**

Sends a key code for the IR remote control.

Transmission

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

Data IR\_KEY\_CODE

Acknowledgement

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

For key codes, see IR Codes.

\* Some key codes may not be supported on some models.

**34. Time elapsed (Command: d l)**

Checks the elapsed time.

Transmission

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

Data FF: Read status

Acknowledgement

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

\* The data received is shown as a hexadecimal value.

**35. Product serial number (Command: f y)**

Checks the serial number of the product.

Transmission

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

Data FF: Check product serial number

Acknowledgement

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

\* Data is in ASCII code.

**36. Software version (Command: f z)**

Checks the software version of the product.

Transmission

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

Data FF: Check software version

Acknowledgement

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

**37. White balance red gain (Command: j m)**

Adjusts the white balance red gain value.

Transmission

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

Data 00 to FE: Red gain 0 to 254

Acknowledgement

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

**38. White balance green gain (Command: j n)**

Adjusts the white balance green gain value.

Transmission

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

Data 00 to FE: Green gain 0 to 254

Acknowledgement

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

**39. White balance blue gain (Command: j o)**

Adjusts the white balance blue gain value.

Transmission

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

Data 00 to FE: Blue gain 0 to 254

Acknowledgement

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

**40. Backlight (Command: m g)**

Adjusts the back light brightness.

Transmission

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

Data 00 to 64: Back light brightness 0 to 100

Acknowledgement

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

\*\* This may not be supported on some models.

**41. Screen off (Command: k d)**

Turns the screen on or off.

Transmission

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

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

Acknowledgement

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





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



As an ENERGY STAR Partner LGE U. S. A.,Inc. has determined that this product meets the ENERGY STAR guidelines for energy efficiency. Refer to [ENERGYSTAR.gov](http://ENERGYSTAR.gov) for more information on the ENERGY STAR program.

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 \_\_\_\_\_

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

In addition to the source code, all referred license terms, warranty disclaimers and copyright notices are available for download. LG Electronics will also provide open source code to you on CD-ROM for a charge covering the cost of performing such distribution (such as the cost of media, shipping, and handling) upon email request to [opensource@lge.com](mailto:opensource@lge.com). This offer is valid for three (3) years from the date on which you purchased the product.

**WARNING** -This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

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