

OWNER'S MANUAL

LG Digital Signage

(MONITOR SIGNAGE)

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

55LV75D
55LV77D

TABLE OF CONTENTS

IMPORTANT PRECAUTIONS.....3

- Electrical Power Related Precautions.....3
- Precautions for installing the Product.....5
- Precautions for Moving the Product.....6
- Precautions for Using/Cleaning the Product.....7
- Product Disposal (Only, Hg lamp used LCD Monitor).....7

LICENSES.....8

ASSEMBLY AND PREPARATION ..9

- Parts and Buttons.....10
- Portrait Layout.....11
- Remove L-brackets before Installation.....11
- Storage Method for Panel Protection.....12
- Installing on a Wall.....14
- External equipment setup15
- Tiling Displays15

REMOTE CONTROL 17

MAKING CONNECTIONS..... 19

- Connecting to a PC.....19
- External Device Connection.....19
- Using the Input List19
- Daisy Chain Monitors21

TROUBLESHOOTING..... 22

PRODUCT SPECIFICATIONS..... 25

Warning: This equipment is compliant with Class A of CISPR 32. In a residential environment this equipment may cause radio interference.

IMPORTANT PRECAUTIONS

Please read these safety precautions carefully before using the product.

WARNING

If you ignore the warning message, you may be seriously injured or there is a possibility of accident or death.

CAUTION

If you ignore the caution message, you may be slightly injured or the product may be damaged.

WARNING

- Indoor Use Only.

Electrical Power Related Precautions

WARNING

- Use only the power cord supplied with the unit or another manufacturer's authorized cord.
 - Failure to do so may result in fire or electrical shock or damage to the product.
- Use only a properly grounded plug and receptacle.
 - If you do not you may be electrocuted or injured. Or the product might be damaged.
- Do not use a damaged or loose plug.
 - This may cause electrical shock or fire.
- Operate the display only from a power source(i.e. voltage) indicated in the product specification.
 - Otherwise the product can be damaged, fire can occur or you may be electrocuted. If you are not sure what type of power supply you have, consult a certified electrician.
- In the presence of thunder and lightning, never touch the power cord and signal cable because it can be very dangerous.
 - It can cause electric shock.
- Do not connect several extension cords, electrical appliances or electrical heaters to a single outlet. Use a power strip with a grounding terminal designed for exclusive use with the computer.
 - A fire can break out due to overheating.
- Do not touch the power plug with wet hands. Additionally, if the cord pin is wet or covered with dust, dry the power plug completely or wipe dust off before plugging in the cord.
 - You may be electrocuted due to excess moisture.

- If you don't intend to use the product for a long time, unplug the power cable from the product.
 - Layers of dust can cause a fire, or insulation deterioration can cause electric leakage, electric shock or fire.
- Insert the power plug firm so it cannot come loose.
 - A loose connection can cause fire.
- Hold the plug when pulling out the power cable. Do not pull the plug out by the wire. Do not bend the power cord with excessive force or put heavy objects on the power cord.
 - The power line can be damaged, which may cause electric shock or fire.
- Do not insert metal or other conductive materials into the product openings. Additionally, do not touch the power cable right after plugging into the wall input terminal.
 - You may be electrocuted.
- Use an appliance coupler as a disconnect device.
- Please make sure the device is installed near the wall outlet to which it is connected and that the outlet is easily accessible.
- Do not unplug the power cord while the product is in use.
 - Electrical shock can damage the product.
- As long as this unit is connected to the AC wall outlet, it is not disconnected from the AC power source even if the unit is turned off.

Precautions for installing the Product

WARNING

- Keep away from heat sources like heaters or open flames.
 - Electrical shock, fire, malfunction or deformation may occur.
- Keep the packing anti-moisture material or vinyl packing out of the reach of children.
 - Anti-moisture material is harmful if swallowed. If swallowed by mistake, force the patient to vomit and visit the nearest hospital. Additionally, vinyl packing can cause suffocation. Keep it out of the reach of children.
- Do not put heavy objects on the product or sit upon it.
 - If the product collapses or is dropped, you may be injured. Prevent Children from climbing or pulling on the unit.
- Do not leave the power or signal cable where someone can trip over it.
 - Pedestrians may become entangled in the cables and cause the device to become damaged causing electrical shock, fire, or serious injury.
- Install the product in a neat and dry place. Do not use near water.
 - Dust or moisture can cause electrical shock, fire or product damage.
- Do not add accessories that have not been designed for this display.
- If you smell smoke or other odors or hear a strange sound from the product unplug the power cord and contact LG Customer Service.
 - If you continue to use without taking proper measures, electrical shock or fire can occur.
- If you dropped the product or the case is broken, turn off the product and unplug the power cord.
 - If you continue to use without taking proper measures, electrical shock or fire can occur. Contact LG Customer Service.
- Do not drop an object on or apply impact to the product. Do not throw any toys or objects at the product.
 - It can cause injury to humans, problems to the product and damage the display.
- Keep out of reach of children and do not place toys near the product.
- Make sure the product ventilation hole is not blocked. Install the product more than 100 mm (3.9 inches) from the wall.
 - If you install the product too close to the wall, it may be deformed or fire can break out due to internal heat build-up.
- Do not cover the product with cloth or other material (eg. plastic) while plugged in.
 - The product can be deformed or fire can break out due to internal overheating.
- Place the product on a flat and stable surface that is large enough to support the product.
 - If the product is dropped, you may be injured or the product may be broken.
- Install the product where no Electromagnetic Interference occurs.
- Keep the product away from direct sunlight.
 - The product can be damaged.
- Do not place the product on the floor.
 - Small Children and others may trip over it.
- Do not install this product on a wall if it could be exposed to oil or oil mist.
 - This may damage the product and cause it to fall.
- For displays with glossy bezels the user should consider the placement of the display as the bezel may cause unwanted reflections from surrounding light and bright surfaces.

Precautions for Moving the Product



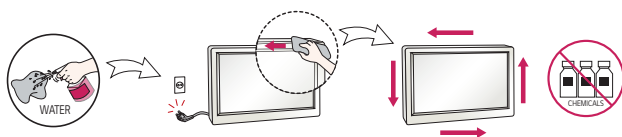
WARNING

- Make sure to turn off the product.
 - You may be electrocuted or the product can be damaged.
- Make sure to remove all cables before moving the product.
 - You may be electrocuted or the product can be damaged.
- When lifting or moving the product, do not hold it upside down while holding only the stand.
 - This may cause the product to fall resulting in damage or injury.
- Do not shock the product when moving it.
 - You may be electrocuted or the product can be damaged.
- Make sure the panel faces forward and hold it with both hands to move.
 - If you drop the product, the damaged product can cause electric shock or fire.
- Do not place the product face down.
 - This may damage the TFT-LCD screen.

Precautions for Using/Cleaning the Product

WARNING

- Do not attempt to disassemble, repair or modify the product yourself.
 - Fire or electric shock can occur.
 - Contact LG Customer Service for repair.
- When cleaning the product, unplug the power cord and scrub gently with a soft cloth to prevent scratching. Do not clean with a wet cloth or spray water or other liquids directly onto the product. An electric shock may occur. (Do not use chemicals such as benzene, paint thinners or alcohol.)
- Keep the product away from water.
 - Fire or electric shock accident can occur.
- Avoid high temperatures and humidity.
- Do not put or store flammable substances near the product.
 - There is a danger of explosion or fire.
- Keep the product clean at all times.
- Take a comfortable and natural position when working with the product.
- Take a regular break when working with the product for a long time.
- Do not press on the panel with a hand or sharp object such as nail, pencil or pen, or make a scratch on it.
- Keep proper distance from the product and rest from time-to-time.
 - Your vision may be impaired if you look at the product too closely or for too long.
- Set the appropriate resolution by referring to the User's Guide.
- Keep small accessories out of the reach of children.
- Displaying a still image for long time on the monitor may leave persistent image or stain on the monitor screen. To avoid this problem, use a screen saver and power off when this product is not used. Persistent image or stain caused by long time usage are not covered by the warranty on this product.
- Do not use products using high voltage around the Monitor. (ex. Electrical Swatter)
 - Monitor may have malfunction as its electrical shock.
- Spray water onto a soft cloth 2 to 4 times, and use it to clean the front frame; wipe in one direction only. Too much moisture may cause staining.



Product Disposal (Only, Hg lamp used LCD Monitor)

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

LICENSES

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



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



This DivX Certified® device has passed rigorous testing to ensure it plays DivX® video.

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

DivX Certified® to play DivX® video up to HD 1080p, including premium content.

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

Covered by DivX Patents 7,295,673; 7,515,710; RE45,052; and others available at [www.divx.com/patents]

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

ASSEMBLY AND PREPARATION

CAUTION

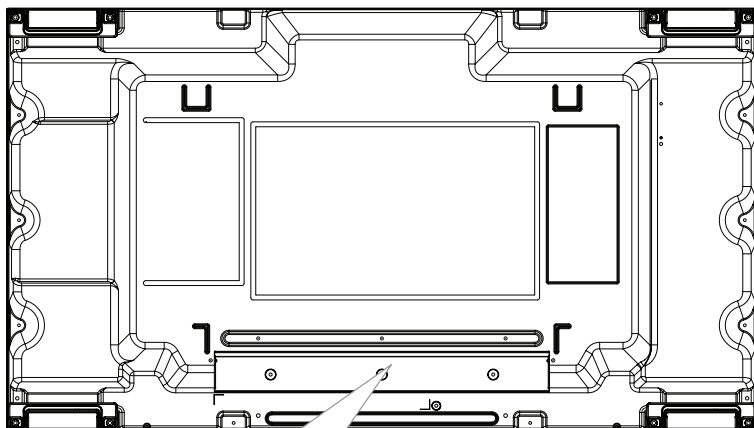
- Always use genuine components to ensure safety and product performance.
- The product warranty will not cover damage or injury caused by the use of counterfeit components.

NOTE

- The accessories provided with your product may vary depending on the model or region.
- Product specifications or contents in this manual may be changed without prior notice due to upgrade of product functions.
- SuperSign Software & Manual
 - Downloading from the LG Electronics website.
 - Visit the LG Electronics website (<http://partner.lge.com>) and download the latest software for your model.
- The warranty will not cover any damage caused by using the product in an excessively dusty environment.

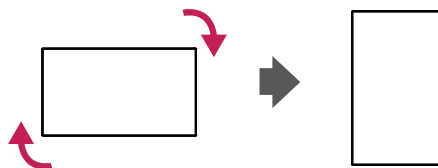
Parts and Buttons

The image may be different according to the model.



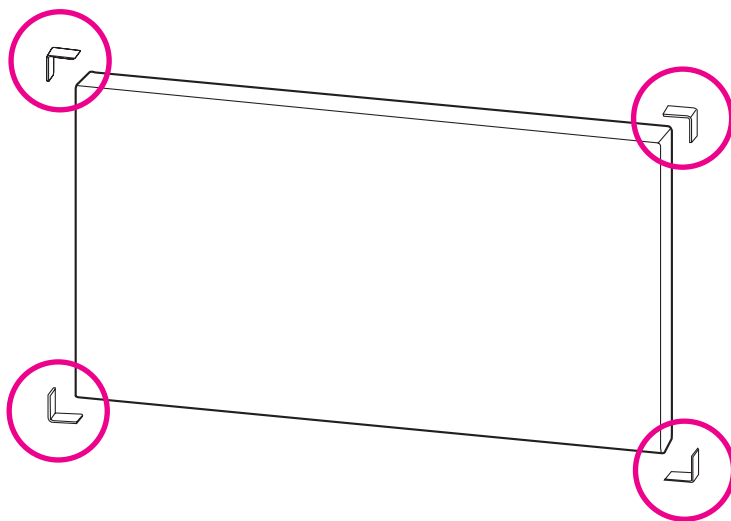
Portrait Layout

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



Remove L-brackets before Installation

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



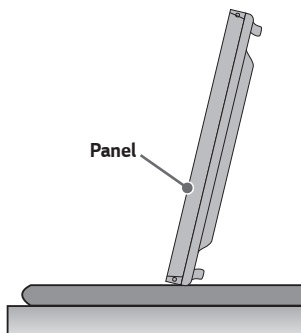
! NOTE

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

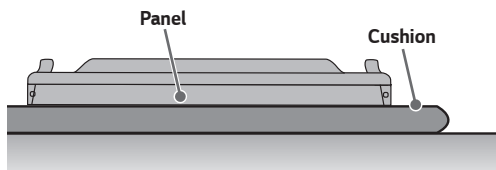
Storage Method for Panel Protection

Correct Method

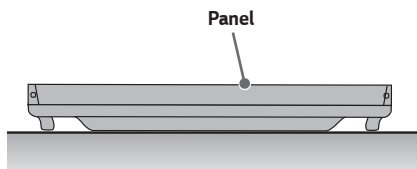
- 1 If the product needs to be set upright, hold both sides of the product, and tilt backward carefully for. Do not let the panel touch the floor.



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

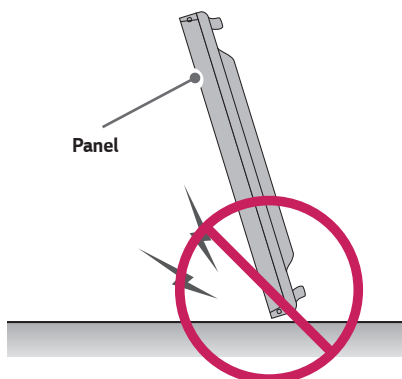


- 3 If there is not a cushion available, ensure the floor is clean and then lay the product down carefully with the panel facing either upward or downward. At this time, be careful for objects not to fall on the panel.

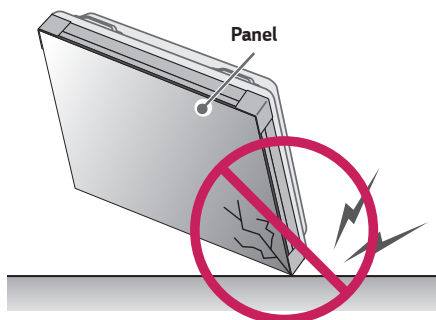


Incorrect Method

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



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

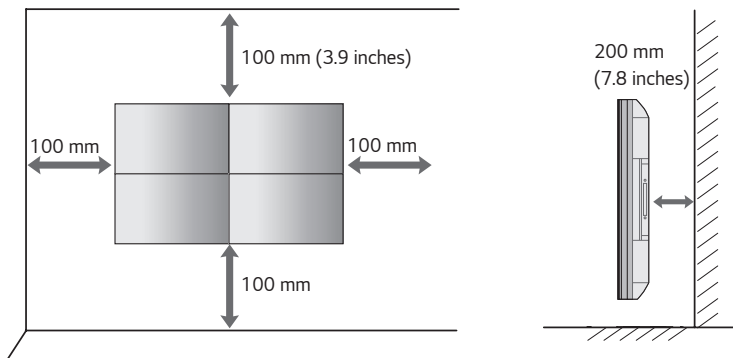


Installing on a Wall

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

Install the monitor at least 200 mm (7.8 inches) away from the wall and leave about 100 mm (3.9 inches) of space at each side of the monitor to ensure sufficient ventilation.

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



CAUTION

- Disconnect the power cord before moving or installing the monitor to avoid risk of electric shock.
- If you install the monitor on a ceiling or slanted wall, it may fall and result in injury. Use an authorized LG wall mount and contact your local dealer or qualified personnel to assist with the installation.
- Do not over tighten the screws as this may damage the monitor and void your warranty.
- Use only screws and wall mounting brackets that meet the VESA standard. Any damage or injuries caused by misuse or use of improper accessories are not covered by the warranty.

NOTE

- Do not install the product in a place with no ventilation (e.g., on a bookshelf or in a closet) or on a carpet or cushion. If there is no other option but to mount the product on the wall, make sure that sufficient ventilation is provided before installation.
 - Failure to do so may result in a fire due to the increase in the internal temperature.
- The illustration shows a general example of installation and may look different from the actual product.

External equipment setup

IR RECEIVER

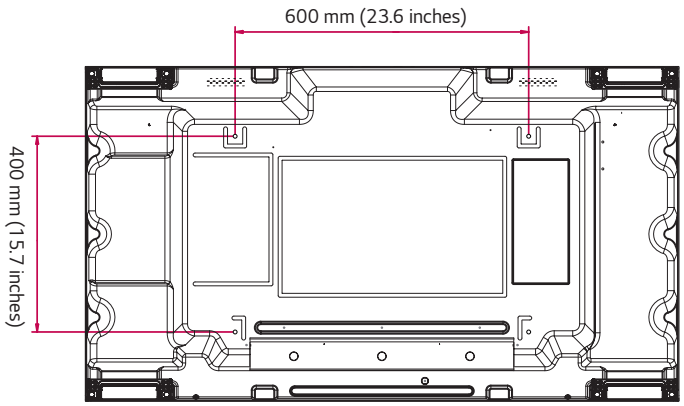
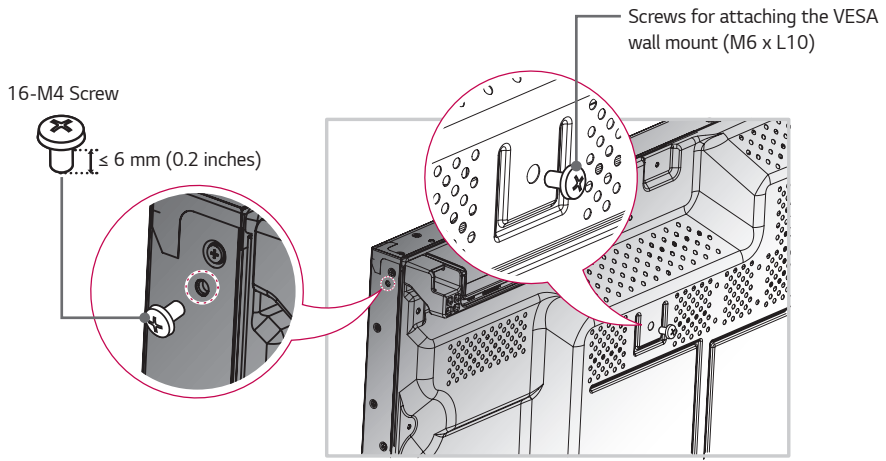
This allows a remote control sensor to be placed in a custom location. The display can then control other displays via an RS232C cable.

Tiling Displays

How to Mount the Set

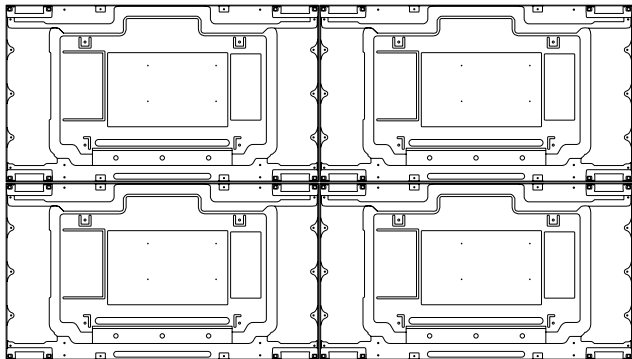
Example of 2 x 2 Tiling

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



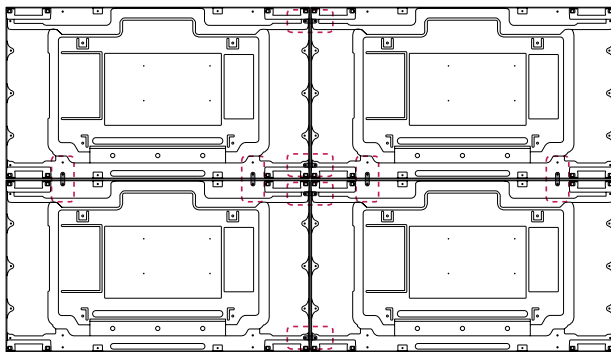
How to Join Sets

- 1 Join other sets using screws to attach the VESA wall mount in the same manner as previously described.



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

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



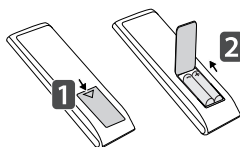
- 3 Now the 2 x 2 tiling is complete. You can tile in various combinations, such as 3 x 3.

! NOTE

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

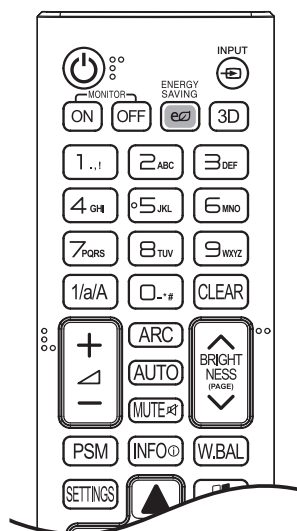
REMOTE CONTROL

The descriptions in this manual are based on the buttons on the remote control. Please read this manual carefully to use the monitor correctly. To install batteries, open the battery cover, place batteries (1.5 V AAA) matching $\oplus$ and $\ominus$ terminals to the labels inside the compartment, and close the battery cover. To remove the batteries, perform the installation actions in reverse. The illustrations may differ from the actual accessories.



CAUTION

- Do not mix old and new batteries, as this may damage the remote control.
- Be sure to point the remote control toward the remote control sensor on the monitor.
- Some features of the remote control may not be supported in certain models.



Power Turns the monitor on or off.

MONITOR ON Turns the monitor on.

MONITOR OFF Turns the monitor off.

ENERGY SAVING e Reduces power consumption by adjusting peak screen brightness.

INPUT Selects the input mode.

3D Used for viewing 3D videos.

1/a/A Toggles between numerical and alphabetical.

Number and Alphabet buttons

Enters numerical or alphabetical characters depending upon the setting.

CLEAR Deletes the entered numerical or alphabetical character.

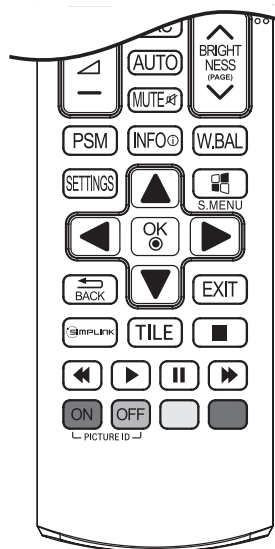
Volume Up/Down Button Adjusts the volume.

ARC Selects the Aspect Ratio mode.

AUTO Automatically adjusts picture position and minimizes image instability (available for RGB input only).

MUTE Mutes all sounds.

BRIGHTNESS Adjusts the brightness of the display. PAGE function is not supported in this model.



PSM Selects the Picture Mode.

INFO ⓘ Views the information of the currently program and the screen.

W.BAL Enters the White Balance menu.

SETTINGS Accesses the main menus or saves your input and exit menus.

S.MENU ⓘ SuperSign menu key.

Navigation Buttons Scrolls through menus or options.

OK ⓘ Selects menus or options and confirms your input.

↶ **BACK** Allows you to move back one step in the user interaction function.

EXIT Quit all OSD tasks and applications.

Ⓢ **SIMPLINK** Allows you to control various multimedia devices to enjoy multimedia simply by using the remote control through the Simplink menu.

TILE Selects the TILE Mode.

PICTURE ID ON/OFF When the Picture ID number matches the Set ID number, you can control whichever monitor you want in multi-display format.

USB Menu Control Buttons Controls media playback.

MAKING CONNECTIONS

You can connect various external devices to your monitor. Change the input mode and select the external device you want to connect. For more information about external device connections, see the user manual provided with each device.

Connecting to a PC

Some of the cables are not provided.

This monitor supports the Plug and Play* feature.

* Plug and Play: a feature that enables a PC to recognize devices attached by the user without device configuration or user intervention when powering up.

External Device Connection

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

Some of the cables are not provided. For the best picture and sound quality, connecting external devices to your monitor using HDMI cables is recommended.

Using the Input List

INPUT 

- HDMI, DISPLAYPORT, DVI-D, RGB, USB

! NOTE

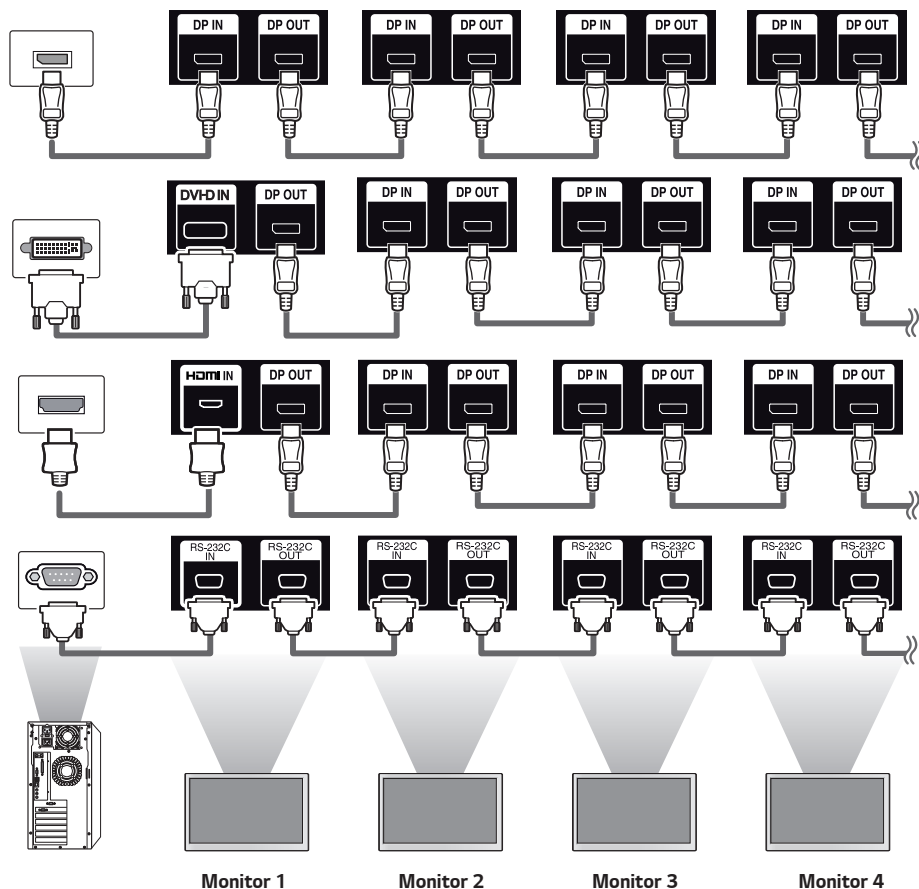
- For the best image quality, using the monitor with HDMI connection is recommended.
- To comply with the specifications of the product, use a shielded interface cable with ferrite core, such as a D-sub 15-pin cable and DVI-D/HDMI cable.
- If you turn the monitor on when the set is cold, the screen may flicker. This is normal.
- Sometimes red, green, or blue spots may appear on the screen. This is normal.
- Use a High Speed HDMI®/™ cable.
- Use a certified cable with the HDMI logo attached. If you do not use a certified HDMI cable, the screen may not display or a connection error may occur.
- Recommended HDMI Cable Types
 - High Speed HDMI®/™ Cable
 - High Speed HDMI®/™ Cable with Ethernet
- If you cannot hear any sound in HDMI mode please check your PC settings. Some PCs require you to manually change the default audio output to HDMI.
- If you want to use HDMI-PC mode, you must set your PC/DTV to PC mode.
- You may experience compatibility issues if you use HDMI-PC mode.
- Make sure the power cable is disconnected.
- If you connect a gaming device to the monitor, use the cable provided with the gaming device.
- High Speed HDMI®/™ cables transmit a HD signal up to 1080p and higher.
- 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.
- When connecting an external audio device, use a device with audio amplifier.

⚠ CAUTION

- Connect the signal input cable and tighten it by turning the screws clockwise.
- Do not press the screen with your finger for a prolonged period as this may result in temporary distortion on the screen.
- Avoid displaying static images on the screen for a long period of time to prevent image burn. Use a screensaver if possible.
- A wireless communication device near your monitor can affect the image.

Daisy Chain Monitors

To use different products connected to each other, connect one end of the signal input cable (DP Cable) to the DP Out connector of Monitor 1 and connect the other end to the DP In connector of the other product.



! NOTE

- If the signal cable between the product and your PC is too long, make sure to use the Booster or optical cable.
- Daisy chaining the video output may be limited depending on the performance of the input device that supports HDCP.

TROUBLESHOOTING

No image is displayed.

Problem	Action
Is the product power cord connected?	Check if the power cord is correctly plugged into the power outlet.
Power is on, but the screen appears extremely dark.	- Adjust brightness and contrast again. - Backlight may need repair.
Does the "Invalid Format" message appear?	The signal from the PC (Graphics 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.
Does the "No Signal" message appear?	- The signal cable between PC and product is not connected. Check the signal cable. - Access the input menu to check the input signal.

The Unknown Product message appears when the product is connected.

Problem	Action
Did you install the driver?	Check if the Plug and Play function is supported by referring to the graphics card user manual.

The screen image looks abnormal.

Problem	Action
Is the screen position wrong?	- 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. - See if the graphics 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. - Certain graphics cards themselves resize the screen. Adjust the graphics card settings.
Do thin lines appear on the background screen?	D-Sub analog signal - Press the AUTO button in the remote control to automatically select an optimal screen status that fits into the current mode. If adjustment is not satisfactory, select PICTURE → Screen → Size in OSD menu.
Horizontal noise appears or the characters look blurred.	D-Sub analog signal - Press the AUTO button in the remote control to automatically select an optimal screen status that fits into the current mode. If adjustment is not satisfactory, select PICTURE → Screen → Phase in OSD menu.
The screen is displayed abnormally.	The proper input signal is not connected to the signal port. Connect the signal cable that matches with the source input signal.

After-image appears on the product.

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

Screen color is abnormal.

Problem	Action
Screen has poor color resolution (16 colors).	• Set the number of colors to more than 24 bits (true color). Select [Control Panel] → [Display] → [Settings] → [Color Table] in Windows. (The settings may differ depending on your operating system.)
Screen color is unstable or mono-colored.	• Check the connection status of the signal cable. Or, re-insert the PC graphics card.
Do black spots appear on the screen?	• Several pixels (red, green, blue, white, or black color) may appear on the screen, which can be attributable to the unique characteristics of the LCD panel. This is not a malfunction of the LCD.

The operation does not work normally.

Problem	Action
The power suddenly turned off.	• Is the Timer set? • Check the power control settings. Power interrupted.

⚠ CAUTION

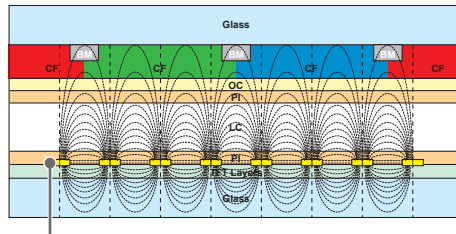
- Image sticking does not occur when using constantly changing images but may occur when using a fixed image for an extended period of time. Therefore, it is recommended that you use the instructions below to decrease the likelihood of image sticking occurring when using a fixed image. It is recommended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

Recommended operating conditions

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



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



ITO or MoTi Pixel Layer

- 2 Change the image using the same time interval.



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

What is image sticking?

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

PRODUCT SPECIFICATIONS

The product specifications below may be changed without prior notice due to upgrade of product functions.
“~” refers to alternating current (AC), and “—” refers to direct current (DC).

LCD screen	Screen type	139 cm (54.7 inches) Wide TFT (Thin Film Transistor) LCD (Liquid Crystal Display) Panel Visible diagonal size : 139 cm (54.7 inches)	
	Pixel Pitch	0.630 mm (H) x 0.630 mm (V) (0.02 inches (H) x 0.02 inches (V))	
Video signal	Maximum resolution	1920 x 1080 @ 60 Hz - This may not be supported on some OS or graphics card types.	
	Recommended resolution	1920 x 1080 @ 60 Hz - This may not be supported on some OS or graphics card types.	
	Horizontal frequency	RGB: 30 kHz to 83 kHz HDMI/ DVI-D/ DisplayPort: 30 kHz to 83 kHz	
	Vertical frequency	RGB: 50 Hz to 75 Hz HDMI/ DVI-D/ DisplayPort: 56 Hz to 60 Hz	
	Synchronization	Separate Sync, Digital	
Input/output ports		IR IN, RS-232C IN/OUT, HDMI IN, DVI-D IN, DP IN/OUT, USB2.0 IN, RGB IN, AUDIO IN/OUT, LAN IN	
Embedded battery		Applied	
Environmental Conditions	Operating Temperature	0 °C to 40 °C (32 °F to 104 °F)	
	Operating Humidity	10 % to 80 %	
	Storage Temperature	-20 °C to 60 °C (-4 °F to 140 °F)	
	Storage Humidity	5 % to 85 %	
Power	Rated power	55LV75D	AC 100-240 V ~ 50/60 Hz, 2.1 A
		55LV77D	AC 100-240 V ~ 50/60 Hz, 3.1 A
	Power consumption	55LV75D	On Mode: 160 W (Typ.) Sleep Mode: ≤ 0.5 W Off Mode: ≤ 0.5 W
		55LV77D	On Mode: 230 W (Typ.) Sleep Mode: ≤ 0.5 W Off Mode: ≤ 0.5 W
Dimensions (Width x Height x Depth) / Weight	55LV75D	1213.4 mm x 684.2 mm x 88.5 mm / 23 kg (47.7 inches x 26.9 inches x 3.4 inches / 50.7 lbs)	
	55LV77D	1213.4 mm x 684.2 mm x 88.5 mm / 23.2 kg (47.7 inches x 26.9 inches x 3.4 inches / 51.1 lbs)	

RGB (PC) Support Mode

Resolution	Horizontal frequency (kHz)	Vertical frequency (Hz)
640 x 480	31.469	59.94
720 x 400	31.468	70.8
800 x 600	37.879	60.317
1024 x 768	48.363	60
1152 x 864	57.717	59.934
1280 x 720	44.772	59.855
1280 x 960	60	60
1280 x 1024	63.981	60.02
1920 x 1080	67.5	60

DVI-D/HDMI/DisplayPort (PC) Support mode

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

HDMI/DisplayPort (DTV) Support 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

! NOTE

- When the cable is connected to the DVI-D, HDMI or the DisplayPort, you can select the PC/DTV mode optionally. It is recommended that you select PC mode when connecting to a PC and select DTV mode when connecting to other devices. The DTV mode refers to all modes excluding the PC mode.
- Vertical frequency: The product display functions by the screen image changing dozens of times every second like a fluorescent lamp.
The vertical frequency or refresh rate is the number of image displays per second. The unit is Hz.
- Horizontal frequency: The horizontal interval is the time taken to display one horizontal line. When 1 is divided by the horizontal interval, the number of horizontal lines displayed every second can be tabulated as the horizontal frequency. The unit is kHz.



Supplier's Declaration of Conformity

Trade Name	LG
Responsible Party	LG Electronics USA, Inc.
Address	111 Sylvan Avenue, North Building, Englewood Cliffs, NJ 07632
E-mail	lg.environmental@lge.com

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

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

MODEL _____
SERIAL _____



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

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

Refer to ENERGYSTAR.gov for more information on the ENERGY STAR® program.

 NOTE

- 55LV77D is not certified with EPA's ENERGY STAR.

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

USER GUIDE

LG Digital Signage (MONITOR SIGNAGE)

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

L15

TABLE OF CONTENTS

USING THE MONITOR.....3

- Using the Input List3
- Adjusting Aspect Ratio.....3

ENTERTAINMENT5

- Using the Network5
 - Connecting to a Network
 - Network Status
- Using the My Media9
 - Connecting USB storage devices
 - Browsing Files
 - Viewing Movies
 - Viewing Photos
 - Listening to Music
 - Viewing the Contents List

CUSTOMIZING SETTINGS 23

- Accessing Main Menus23
 - PICTURE Settings
 - AUDIO Settings
 - TIME Settings
 - OPTION Settings
 - NETWORK Settings
- PICTURE ID Settings.....34

IR CODES 35

TO CONTROL MULTIPLE PRODUCTS..... 36

- Connecting the Cable.....36
- RS-232C Configurations.....37
 - 4P Cable
 - RS-232C Cable
- Communication Parameter37
- Command Reference List.....38
- Transmission / Receiving Protocol.....40

Open Source Software Notice Information

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.

This offer is valid for a period of three years after our last shipment of this product. This offer is valid to anyone in receipt of this information.

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**.
 - RGB-PC
 - HDMI
 - HDMI2
 - DVI-D
 - USB
 - Display Port
 - OPS

 **NOTE**

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

Adjusting Aspect Ratio

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

MODE Aspect Ratio	RGB	HDMI		DVI-D		Display Port		OPS	
	PC	DTV	PC	DTV	PC	DTV	PC	DTV	PC
16:9	☐	☐	☐	☐	☐	☐	☐	☐	☐
Just Scan	☒	☐	☒	☐	☒	☐	☒	☐	☒
Set By Program	☒	☐	☒	☐	☒	☐	☒	☐	☒
4:3	☐	☐	☐	☐	☐	☐	☐	☐	☐
Zoom	☒	☐	☒	☐	☒	☐	☒	☐	☒
Cinema Zoom1	☒	☐	☒	☐	☒	☐	☒	☐	☒

 **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).
- **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.
- **Set By Program** : Depending on the input signal, screen aspect ratio changes to 4:3 or 16:9.
- **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.
- **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.
- **Cinema Zoom1** : 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

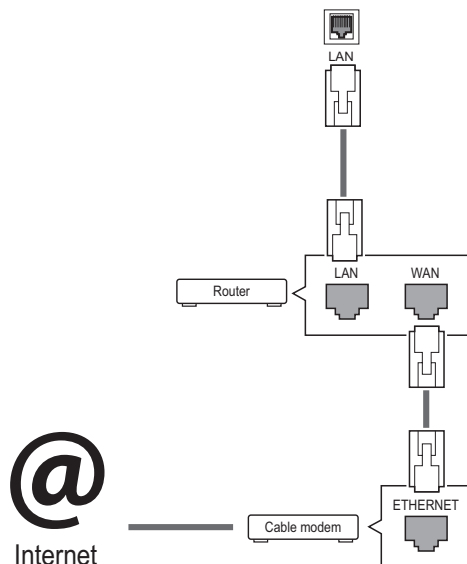
Using the Network

Connecting to a Network

For wired network connections, connect the display to a local area network (LAN) via the LAN port as shown on the following diagram. Then, set up the network settings. For wireless network connections, connect the Wi-Fi USB module to the USB port. Then, set up the network settings.

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),

Connecting to a wired network

- 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**.
 - **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**.

Connecting to a wireless network

- 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 Select Setting from the **AP list** or **Simple setting (WPS-button mode)**.
 - **Setting from the AP list**
Select an AP to connect to a wireless network.
 - **Simple setting (WPS-button mode)**
Press the button on the wireless router that supports PBC to easily connect to the router.
- 5 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.
- When a Wi-Fi dongle is used with a model that has only one USB input port, the distribution or content schedule via the SuperSign software is not available.



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.
- When connected to a network that supports IPv6, you can select IPv4/IPv6 in the advanced wired/wireless network setting. But, IPv6 connection only supports automatic connection.

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.

Tips for Wireless Network Setting

- Wireless networks can be subject to interference from other devices operating at a frequency of 2.4 GHz (wireless phones, Bluetooth devices, or microwave ovens). There may also be interference from devices with a frequency of 5 GHz, same as other Wi-Fi devices.
- The surrounding wireless environment can cause the wireless network service to run slowly.
- For an AP connection, an access point device that supports wireless connection is required and the wireless connection feature must be enabled on the device. Contact your service provider regarding availability of wireless connection on your access point.
- Check the SSID and security settings of the AP for AP connection. Refer to the appropriate documentation for SSID and security settings of the AP.
- Invalid settings on network devices (wired/wireless line sharer, hub) can cause the monitor to run slowly or not operate properly. Install the devices correctly according to the appropriate manual and set the network.
- Connection method may differ according to the AP manufacturer.

Network Status

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

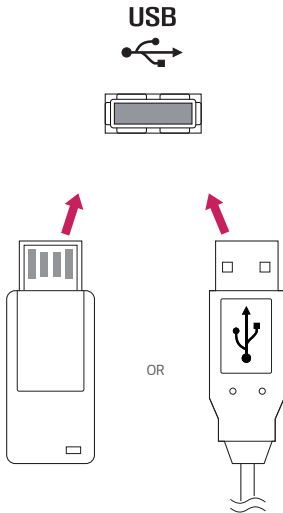
Option	Description
Setting	Return to the network setting menu.
Test	Test the current network status after setting the network.
Close	Return to the previous menu.

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 only use USB storage devices formatted using the FAT32 file system. Storage devices formatted with utility programs that are not supported by Windows 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 an 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.
- A USB 3.0 storage device may not work.
- Data on some USB storage devices may be damaged in a high temperature environment.
- It is recommended that you avoid playing contents using more than two USB ports simultaneously.

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**.

Supported file format

Type	Supported file format			
Movie		Codec	Media Container	Profile
	Video	MPEG1 / MPEG2	DAT, MPG, MPEG, TS, TP	1080P @ 30 fps
		MPEG4 (DivX 3.11, DivX 4, DivX 5, DivX 6, Xvid 1.01, Xvid 1.02, Xvid 1.03, Xvid 1.10-beta1/2)	AVI, DIVX, MP4, MKV, TS, TRP	1080P @ 30 fps
		H.264	AVI, MP4, MKV, TS, TRP, TP	1080P @ 60 fps
	Audio	MP3	MP3	8 kbps - 320 kbps(Bit rate) 16 kHz - 48 kHz(Sample rate)
		AC3	AC3	32 kbps - 640 kbps(Bit rate) 32 kHz, 44.1 kHz, 48 kHz(Sample rate)
		MPEG	MP3	32 kbps - 448 kbps(Bit rate) 16 kHz - 48 kHz(Sample rate)
		AAC, HEAAC	MP4	8 kHz - 48 kHz(Sample rate)
		LPCM	AVI, WAV	64 kbps - 1.5 Mbps(Bit rate) 8 kHz - 48 kHz(Sample rate)
	Bit rate : within 8 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)			

- 49SH7DB-B*.*UD, 43/49/55SL5B-B*.*UD, 43/49/55SL5B-B*.*CD, 43/49/55SL5KC-B*.*CD do not support DivX.

Type	Supported file format
Photo	Min : 64 x 64 Max : Normal Type: 15360 (W) x 8640 (H) Progressive Type: 1920 (W) x 1440 (H) BMP Min : 64 x 64 Max : 9600 x 6400 PNG Min : 64 x 64 Max : Interlace: 1200 x 800 Non-Interlace: 9600 x 6400 • Non-supported files are displayed in the form of predefined icon.
Music	mp3 [Bit rate] 32 kbps ~ 320 kbps [Sample freq] 16 kHz ~ 48 kHz [Support] MPEG1, MPEG2, Layer2, Layer3 AAC [Bit rate] Free Format [Sample freq.] 8 kHz ~ 48 kHz [Support] ADIF, ADTS M4A [Bit rate] Free Format [Sample freq.] 8 kHz ~ 48 kHz [Support] MPEG-4 OGG [Bit rate] Free Format [Sample freq.] ~ 48 kHz [Support] Vorbis WMA [Bit rate] 128 kbps ~ 320 kbps [Sample freq.] 8 kHz ~ 48 kHz [Support] WMA7, 8, 9 Standard WMA 10 Pro [Bit rate] ~768 kbps [Channel / Sample freq.] M0 : Up to 2 / 48 kHz M1 : Up to 5.1 / 48 kHz M2 : Up to 5.1 / 96 kHz [Support] WMA 10 Pro

Content (when using SuperSign software)	File Extensions : *.cts/ *.sce
	Movie
	File Extensions: *.mpg/*.mpeg/*.dat/*.ts/*.trp/*.tp/*.mp4/*.mkv/*.avi/*.avi(motion JPEG)/*.mp4(motion JPEG)/*.mkv(motion JPEG)
	Video format: MPEG1, MPEG2, MPEG4,H.264, DivX 3.11, DivX 4, DivX 5, DivX 6, Xvid 1.00,Xvid 1.01, Xvid 1.02, Xvid 1.03,Xvid 1.10-beta1/2, JPEG
	Audio format: MP3, Dolby Digital, LPCM, AAC, HE-AAC

- 49SH7DB-B*.*UD, 43/49/55SL5B-B*.*UD, 43/49/55SL5B-B*.*CD, 43/49/55SL5KC-B*.*CD do not support DivX.

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**.
 - **Change Device** : Selects the USB storage device. (Depending on model)
 - **Go to root folder** : Returns to the home screen of My Media.
 - **Go to upper folder** : Returns to the previous screen.
 - **Exit** : Exits My Media.
- 6 During movie playback, press **OK** to access the following settings.

Remote button	Description
	Stops the playback.
	Plays a video.
	Pauses or resumes the playback.
	Scans backward in a file.
	Scans forward in a file.
	Adjusts the screen brightness to save energy.
SETTINGS	Show the Option menu.
 BACK	Hide the menu on the full-sized screen.
EXIT	Returns to Movie List.
	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 1920 x 1080 @ 25/30p or 1280 x 720 @ 50/60p are supported, depending on the frame.
- Videos with resolutions higher than 1920 x 1080 @ 25/30p or 1280 x 720 @ 50/60p may not work properly depending on the frame.
- Movie files other than the specified types and formats may not work properly.
- Max 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. (49SH7DB-B*.*UD, 43/49/55SL5B-B*.*UD, 43/49/55SL5B-B*.*CD, 43/49/55SL5KC-B*.*CD do not support DivX.)
- 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.

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

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

! 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.

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**.
 - **Change Device** : Selects the USB storage device. (Depending on model)
 - **Go to root folder** : Returns to the home screen of My Media.
 - **Go to upper folder** : Returns to the previous screen.
 - **Exit** : Exits My Media.
- 6 While viewing photos, you can access the following settings.

Menu	Description
Slideshow	Starts or stops a slideshow with selected photos. If there are no selected photos, all photos saved in the current folder display during a slideshow. To set a slideshow speed, select Option.
BGM	Turns the background music on or off. To set the background music folder, select Option. You can adjust option by SETTINGS button on the remote control.
	Rotates photos clockwise (90 °, 180 °, 270 °, 360 °).  NOTE • The supported photo size is limited. You cannot rotate a photo if the resolution of the rotated width is larger than the supported resolution size.
	Enlarges the photo by 100 %, 200 % or 400 %.
	Adjusts the brightness of the screen for energy saving.
Option	To display the options.
Hide	Hides the option window.
Exit	Return to Photo List .

Photo options

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

 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
Slide Speed	Select a slideshow speed. (Options: Fast, Medium, or Slow.)
BGM	Selects a music folder for the background music.
Repeat	Plays background music on repeat.
Random	Plays background music in random order.

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**.
 - **Change Device** : Selects the USB storage device. (Depending on model)
 - **Go to root folder** : Returns to the home screen of My Media.
 - **Open Music Player** : Opens the settings window for music. This feature is activated only during playback.
 - **Go to upper folder** : Returns to the previous screen.
 - **Exit** : Exits My Media.
- 6 During music playback, press **OK** to access the following settings.

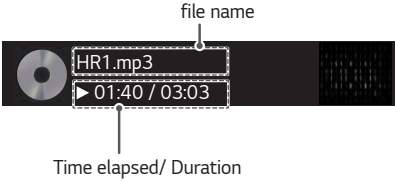
Remote button	Description
	Stops playing back the file and moves back to the Music List.
	Plays a music file.
	Pauses or resumes playback.
	Skips to the previous file. The previous track of the current music is played. If there is no previous track, the music currently playing will be played from the beginning.
	Skips to the next file.
	Adjusts the brightness of the screen for energy saving (Off and Screen Off work only.)
SETTINGS	Show the Option menu.
 BACK	Hides the option window.
EXIT	Return to Music List.
	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 file does not play but displays 00:00 in playtime.
- A music downloaded from a paid service with copyright protection does not start but displays inappropriate information in playtime.
- If you press **OK**,  buttons, screen saver is stopped.
- The , , , ,  buttons on the remote control are also available in this mode.
- You can use the  button to select the next music and the  button to select the previous music.



Music options

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

NOTE

- 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
Repeat	Repeats the music playback.
Random	Plays random music tracks.

Viewing the Contents List

You can play the files saved using the **Export** function to an external file in the SuperSign Software.

- 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**.
 - **Change Device** : Selects the USB storage device. (Depending on model)
 - **Go to root folder** : Returns to the home screen of My Media.
 - **Go to upper folder** : Returns to the previous screen.
 - **Exit** : Exits My Media.



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**.
- When you use the distribution feature which utilizes SuperSign Software, the storage device used to store contents is determined based on the size of the remaining memory space. (Note: If USB ports 1 and 2 have the same memory space, contents will be saved on the storage device connected to USB port 1.(Depending on model))
- 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.
- It is recommended that you avoid playing contents using more than two USB ports simultaneously.
- With respect to the playback of distribution or contents schedules through SuperSign Software, the schedule executed last time is played.

Supported Video Codec

Extension	Codec	
.asf .wmv	Videos	VC-1 Simple and Main Profiles
	Audio	WMA Standard, WMA 10 Professional
.divx .avi	Videos	DivX3.11, DivX4, DivX5, DivX6, XViD, H.264/AVC, Motion Jpeg, MPEG-4 Part2
	Audio	MPEG-1 Layer I, II, MPEG-1 Layer III (MP3), Dolby Digital, LPCM, ADPCM, DTS
.mp4 .m4v .mov	Videos	H.264/AVC, MPEG-4 Part2
	Audio	AAC, MPEG-1 Layer III (MP3)
.3gp .3g2	Videos	H.264/AVC, MPEG-4 Part2
	Audio	AAC, AMR-NB, AMR-WB
.mkv	Videos	H.264/AVC
	Audio	HE-AAC, Dolby Digital
.ts .trp .tp .mts .m2ts	Videos	H.264/AVC, MPEG-2
	Audio	MPEG-1 Layer I, II, MPEG-1 Layer III (MP3), Dolby Digital, Dolby Digital Plus, AAC, PCM
.mpg .mpeg	Videos	MPEG-1, MPEG-2
	Audio	MPEG-1 Layer I, II, MPEG-1 Layer III (MP3), AAC
.vob	Videos	MPEG-1, MPEG-2
	Audio	Dolby Digital, MPEG-1 Layer I, II, DVD-LPCM

- 49SH7DB-B*.UD, 43/49/55SL5B-B*.UD, 43/49/55SL5B-B*.CD, 43/49/55SL5KC-B*.CD do not support DivX.

Tips for Playing Video Files

- A damaged movie file may not play correctly, or some player features may not be usable.
- Movie files produced with some encoders may not be played correctly.
- Movie files other than the specified types and formats may not work properly.
- Max bit rate of playable movie file is 20 Mbps. (For Motion JPEG: 10 Mbps only)
- We do not guarantee smooth playback of profiles encoded level 4.1 or higher in H.264 / AVC.
- Video files larger than 50 MB may not upload properly from mobile devices. We recommend that you play such files via USB/SD storage devices.
- [For Ultra HD models only] Ultra HD image: 3840 X 2160
Some HEVC-encoded Ultra HD videos other than the content officially provided by LG Electronics may not be played.

Extension	Codec	
.mkv .mp4 .ts	Video	H.264/AVC, HEVC
	Audio	Dolby Digital, Dolby Digital Plus, AAC, HE-AAC

- Some codecs can be used after upgrading software.

CUSTOMIZING SETTINGS

Accessing Main Menus

- 1 Press **SETTINGS** to access the main menus.
- 2 Press the navigation buttons to scroll to one of the following menus and press **OK**.
- 3 Press the navigation buttons to scroll to the setting or option you want and press **OK**.
- 4 When you are finished, press **EXIT**. When you return to the previous menu, press **BACK**.
 - **PICTURE** : Adjusts the image size, quality, or effect.
 - **AUDIO** : Adjusts the sound quality, effect, or volume level.
 - **TIME** : Sets the time, date, or timer feature.
 - **OPTION** : Customizes the general settings.
 - **NETWORK** : Sets up the network setting.
 - **MY MEDIA** : Display and play movie, photo and music contents stored on your USB or signage device (Internal storage device).

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
Energy Saving	reduces power consumption by adjusting peak screen brightness.
	Level
	Off Disables Energy Saving function.
	Minimum/Medium/Maximum Selects the brightness level of the backlight.
	Screen Off The screen turns off in 3 seconds.
Smart Energy Saving	Adjusts the backlight and contrast depending on the screen brightness.
	Level
	Off Disables the Smart Energy Saving function.
	On Enables the Smart Energy Saving function to save power consumption as much as the value set in the smart energy saving rate.
Picture Mode	Selects the picture mode optimized for the viewing environment or the program.
	Mode
	Vivid Heightens contrast, brightness, and sharpness to display vivid images.
	Standard Displays images in standard levels of contrast, brightness, and sharpness.
	APS APS (Auto power saving) mode reduces power consumption by dimming control.
	Cinema Optimizes the video image for a cinematic look to enjoy movies as if you are in a movie theater.
	Sport Optimizes the video image for high and dynamic actions by emphasizing primary Colors such as white, grass, or sky blue.
	Game Optimizes the video image for a fast gaming screen such as PCs or games.
	Calibration Applies user-customized white balance based on Standard.
	Expert1·2 Menu for adjusting picture quality that allows experts and amateurs to enjoy the best Monitor viewing.
Aspect Ratio	Changes the image size to view images at its optimal size.

Setting	Description	
Screen (In RGB Mode Only)	Customizes the PC display options in RGB mode.	
	Option	
	Resolution	Selects a proper resolution.
	Auto Configure	Sets to adjust the screen position, clock, and phase automatically. The displayed image may be unstable for a few seconds while the configuration is in progress.
	Position/Size/Phase	Adjusts the options when the picture is not clear, especially when characters are shaky, after the auto configuration.
	Reset	Restores the options to the default setting.

Basic image options

Setting	Description
Backlight	Adjusts the brightness of the screen by controlling the LCD backlight. If you decrease the brightness level, the screen becomes darker and the power consumption will be reduced without any video signal loss.
Contrast	Increases or decreases the gradient of the video signal. You may use Contrast when the bright part of the picture is saturated.
Brightness	Adjusts the base level of the signal in the picture. You may use Brightness when the dark part of the picture is saturated.
Sharpness	Adjusts the level of crispness in the edges between the light and dark areas of the picture. The lower the level, the softer the image.
Color	Adjusts intensity of all colors.
Tint	Adjusts the balance between red and green levels.
Color Temp.	Set to warm to enhance hotter Colors such as red, or set to cool to make picture bluish.
Advanced Control/Expert Control	You can adjust the picture for each Picture Mode, or adjust the picture settings according to a specific picture image. First, select a desired Picture Mode. * This option is unavailable if Picture Mode is set to Vivid.
Picture Option	Sets additional picture option.
Picture Reset	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.

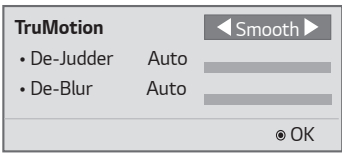
Advanced Control - Picture Mode (Standard/ APS/ Sport/ Game/ Calibration)

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

Picture Option - HDMI(DTV) Mode

Setting	Description
Noise Reduction	Reduces screen noise in the video.
MPEG Noise Reduction	Reduces noise caused by compressing digital video.
Black Level	Adjusts the black level of the picture to correct the brightness and contrast of the picture.(Recommended settings according to input signal: RGB 0-255: High, RGB 16-235: Low, YCbCr: Low)
Real Cinema	Optimizes the screen for movie viewing.
TruMotion (This feature is supported by 65SE3B and 65SE3KB only.)	Corrects images to display smoother motion sequences. • Off : Turn off the TruMotion. • Smooth/ Clear : De-Judder / De-Blur can be set Auto. • User : De-Judder / De-Blur can be set manually. - De-Judder : This function adjusts juddering of the screen. - De-Blur : This function adjusts and eliminates blurring of the screen. 

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
Sound Mode	Allows optimized sound for custom Monitor installation.
	Level
	Standard Suitable for all types of video.
	News/ Music/ Cinema/ Sport/ Game Sets audio optimized for a specific genre.
Sound Effect	The user can select various sound effects. -Sound Effect function is available only for Standard mode in Sound Mode menu.
	Level
	Clear Voice II Boosts voice clarity.
	Virtual Surround LG's proprietary audio processing technology allows 5.1ch-like surround sound from two speakers. - If Clear Voice II is set to On, Virtual Surround will not be chosen.
	Equalizer Adjusts the volume to a level of your choice using the Equalizer.
	Balance Adjusts left/right audio balance.
	Reset You can reset the settings under the Sound Effects menu.
AV Sync. Adjust	Synchronizes video and audio directly when they do not match. If you set AV Sync. to ON, you can adjust the sound output to the screen image. • Speaker: Adjusts the synchronization of the sound from the speakers. The “-” button makes the sound output faster and the “+” button slower than the default value. • Bypass : 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.

! 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
Clock	Sets the time feature.
	Level
	Auto The current time is entered according to the selected country when connected to a network.
	Manual The current time needs to be entered manually.
On/Off Time	Sets the time to turn on or off the monitor set.
Auto Off (15Min.)	If Auto-off is active and there is no input signal, the set switches to off mode automatically after 15 minutes. - It is recommended that you set this feature to [Off] if you intend to use the product for long periods of time as the feature turns the power of the product off.
Automatic Standby	If the monitor is left unattended for a set period of time, it automatically goes into standby mode - It is recommended that you set this feature to [Off] if you intend to use the product for long periods of time as the feature turns the power of the product off.
Daylight Saving Time	Set the start and end times for Daylight Saving Time. The DST start/end times function only when you set them more than one day apart from each other.

! 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.
- If port 123 is blocked by a firewall, your monitor cannot receive the current time from the network.

OPTION Settings

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

The available option settings are described in the following:

Setting	Description
Language	Selects a language for the display text.
Country	Select your country.
DivX(R) VOD	Registers or releases DivX. Checks DivX Registration Code for playing DivX-protected videos. Register at http://vod.divx.com . Uses Registration Code to rent or purchase movies at www.divx.com/vod . * 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.
Initial Setting	Deletes all optional settings and returns to initial default mode.
Set ID	You can assign a unique Set ID NO (name assignment) to each product when several products are connected for display. Specify the number (1 to 255 or 1 to 1,000) using the button and exit. Use the assigned Set ID to individually control each product using the Product Control Program.
Tile Mode	Tile Mode To use this function - Must be displayed with various other products. - Select Tile Mode, set rows and columns, and then enter the tile ID to set the location. - Tile Mode: row x column (row = 1-15, column = 1-15). - 15 x 15 available.
	Auto Config. Sets to adjust the screen position, clock, and phase automatically. The displayed image may be unstable for a few seconds while the configuration is in progress.
	Position Moving the screen position horizontally and vertically.
	Size Adjust the horizontal and vertical size of the screen taking into account the size of the bezel.
	Natural The image is omitted by the distance between the screens to be naturally shown.
	Reset Function to initialize and release Tile. All Tile setting are released when selecting Tile recall and the screen returns to Full screen.

- 49SH7DB-B*.UD, 43/49/55SL5B-B*.UD, 43/49/55SL5B-B*.CD, 43/49/55SL5KC-B*.CD do not support DivX.

Setting	Description	
Contents Schedule	Creates simple schedules and sets playback using files in My Media.	
	Level	
	Add Schedule	Creates a contents schedule. - Media: Select the file to which you want to apply the contents schedule. - Select [Create] to register the contents schedule.
	Play	Plays a contents schedule .
	Delete All	Deletes all registered schedules.
	 NOTE - Information about registered schedules is stored on your USB storage device. This feature does not work when your USB storage device has been removed. - The picture size is 1920 x 1080. - You can use photo and video files only. - You can add up to 50 files (photo files + video files = 50). - Only photos whose resolution is 1920 x 1080 or below are supported. - The default display time for photos is 1 minute. Playback time for movies differs depending on the running time. - You can create up to 7 schedules. - You cannot register a schedule when no file has been selected. - Contents schedules that have had information forcibly modified using a PC, etc. may not function properly. - With respect to the playback of distribution or contents schedules through SuperSign Software, the schedule executed last time is played.	
Fan Control (support for only for some models)	Option	
	Mode	Displays the interior temperature information of the product and controls the mounted fan. - Auto: the fan operates according to the default temperature set for the product. - On: the fan always operates. - Customizable: the fan operates according to the user preferences.
	Fan Operation Difference	Shows the difference between the temperatures at which the fan operates or stops.
	Temperature Setting	Sets the temperature of the operating fan mounted inside the product.
	Current Temperature	Shows the interior temperature of the product.
	 NOTE - It is recommended to use the auto setting as the incorrect fan settings may cause the product to malfunction. - When the interior temperature of the set exceeds 80 °C, the set is automatically turned off for protection.	

Tile Mode

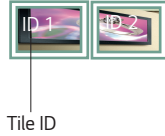
This monitor can be tiled with additional monitors to create a large tiled display.

Off

When the Tile Mode option is disabled

1X2

When using 2 monitors
Tile ID



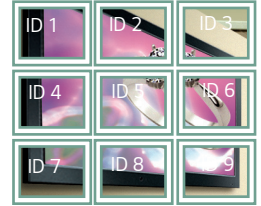
2X2

When using 4 monitors



3X3

When using 9 monitors



4X4

When using 16 monitors



5X5

When using 25 monitors



Tile Mode - Natural mode

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

Before



After



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
Network Setting		Configure the network settings.
	Network setting	When the Wi-Fi dongle is connected, you can view and connect to any available wireless network.
Network Status		Display the network status.

Network Connection Options

Setting	Description
Setting from the AP list	Select an AP to connect to a wireless network.
Simple setting (WPS-button mode)	Press the button on the wireless router that supports PBC to easily connect to the router.

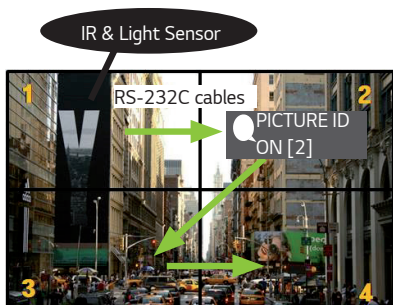
PICTURE ID Settings

- Only applies to certain models.

PICTURE ID is used to change the settings of a specific set (display) using a single IR receiver for multi-vision.

Communication is possible between a monitor with an IR receiver and other monitors using RS-232C cables. Each monitor is identified by a **Set ID**. If you assign the **PICTURE ID** using the remote control, only displays with matching **PICTURE ID** and **Set ID** can be controlled remotely.

- 1 Assign the **Set ID** to the installed monitors as shown below.



- 2 Press the red **ON** button on the remote control to assign the **PICTURE ID**.
 - 3 Assign the **Set ID** to the selection of your choice.
- A set with a different **Set ID** from the **PICTURE ID** cannot be controlled by IR signals.

! NOTE

- If **PICTURE ID** is set to 2, only the upper right monitor, which has a **Set ID** of 2, can be controlled by IR signals.
- If you press the green **OFF** button for **PICTURE ID**, the PICTURE IDs for all monitors are turned off. If you then press any button on the remote control, all monitors can be controlled by IR signals regardless of **Set ID**.

IR CODES

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

Code (Hex)	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 ()	R/C BUTTON
DC	3D	R/C BUTTON
10 to 19	Number Key 0 to 9	R/C BUTTON
32	1/a/A	R/C BUTTON
2F	CLEAR	R/C BUTTON
02	 (+)	R/C BUTTON
03	 (-)	R/C BUTTON
79	ARC	R/C BUTTON
99	AUTO	R/C BUTTON
09	MUTE	R/C BUTTON
E0	BRIGHTNESS 	R/C BUTTON
E1	BRIGHTNESS 	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		R/C BUTTON
7B	TILE	R/C BUTTON
B1		R/C BUTTON
B0		R/C BUTTON
BA		R/C BUTTON

Code (Hex)	Function	Note
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

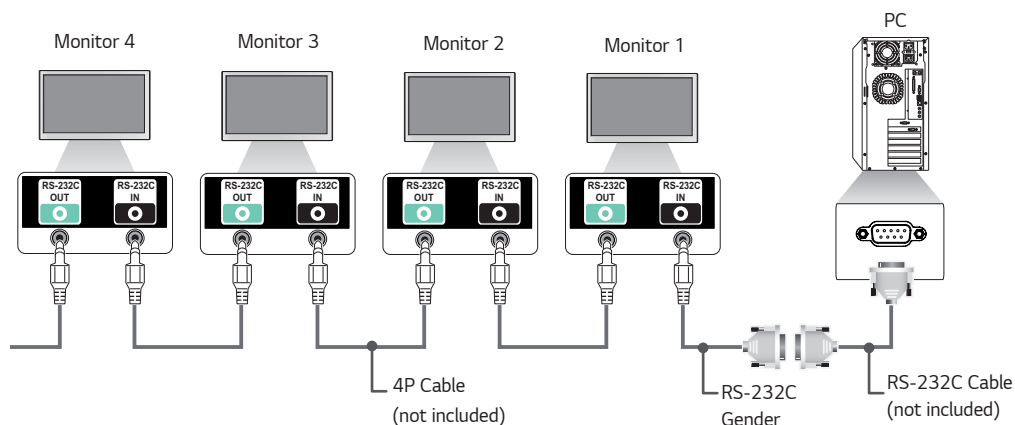
TO CONTROL MULTIPLE PRODUCTS

- 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 (or from 1 to 1,000) 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 or off, select an input source or adjust the OSD menu from your PC.



RS-232C Configurations

4P Cable

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

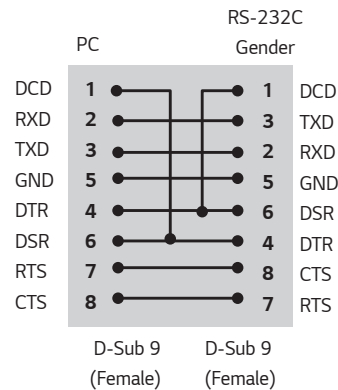


! NOTE

- When using three-wire connections (non-standard), an IR daisy chain cannot be used.
- If you want to control multiple units simultaneously, use 3.5 mm 4-pole cables (sold separately).

RS-232C Cable

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



Communication Parameter

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

Command Reference List

		COMMAND		DATA (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 32
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	Reset	f	k	00 to 02
31	Current temperature	d	n	FF
32	Key	m	c	See [Key]
33	Time elapsed	d	l	FF

		COMMAND		DATA (Hexadecimal)
		1	2	
34	Product serial number	f	y	FF
35	Software version	f	z	FF
36	White balance red gain	j	m	00 to FE
37	White balance green gain	j	n	00 to FE
38	White balance blue gain	j	o	00 to FE
39	White Balance Red Offset	s	x	00 to 7F
40	White Balance Green Offset	s	y	00 to 7F
41	White Balance Blue Offset	s	z	00 to 7F
42	Backlight	m	g	00 to 64
43	Screen off	k	d	00 to 01
44	Tile Mode	d	d	See [Tile Mode]
45	Tile Mode Check	d	z	FF
46	Tile ID	d	i	Refer to 'Tile ID'.
47	Tile H Position	d	e	00 to 32
48	Tile V Position	d	f	00 to 32
49	Tile H Size	d	g	00 to 32
50	Tile V Size	d	h	00 to 32
51	Natural Mode (In Tile mode)	d	j	00 to 01

! NOTE

- During USB operations such as DivX or EMF, all commands except Power (k a) and Key (m c) are not executed and treated as NG. (49SH7DB-B*.UD, 43/49/55SL5B-B*.UD, 43/49/55SL5B-B*.CD, 43/49/55SL5KC-B*.CD do not support DivX.)
- Some commands are not supported depending on the model.
- The 'f f' command which shows the status of a certain command does not display the OSD as the result in order to be compatible with SuperSign program.

Transmission / Receiving Protocol

Transmission

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

- * [Command1] Identifies the factory setting and the user setting modes.
- * [Command2] Controls monitors.
- * [Set ID] Used for selecting a set you want to control. A Set ID can be assigned to each set from 1 to 255 (from 01H to FFH), or from 1 to 1,000 (from 001H to 3e8H) in certain models, under OPTION in the OSD menu. Selecting '00H' or '000H' for Set ID allows the simultaneous control of all connected monitors. (It may not be supported depending on the model.)
- * [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) or '000' (=0x000), the data is reflected to all monitor sets and they do send any acknowledgement (ACK).
- * If the data value 'FF' is sent in control mode via RS-232C, the current setting value of a function can be checked (only for some functions).
- * Some commands 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 20: AV

40: Component

60: RGB

90: HDMI (HDMI1) (DTV)

A0: HDMI (HDMI1) (PC)

91: HDMI2/OPS (DTV)

A1: HDMI2/OPS (PC)

70: DVI-D(PC)

80: DVI-D(DTV)

C0:DP(DTV)

D0:DP(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
11 : Calibration

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]

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]

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]

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]

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]

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)

20: AV

40: Component

60: RGB

70: DVI-D

90: HDMI (HDMI1) (DTV)

91: HDMI2/OPS (DTV)

C0: DISPLAYPORT (DTV)

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: On (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: Japanese
 12: Chinese (Mandarin)
 13: Arabic

Acknowledgement

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

* This may not be supported on some models.

30. 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]

31. 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.

32. 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.

33. 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.

34. 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.

35. 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]

36. 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]

37. 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]

38. 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]

39. White Balance Red Offset (Command: s x)

Adjusts the white balance red offset value.

Transmission

[s][x][][Set ID][][Data][Cr]

Data 00 to 7F: Red offset 0 to 127

FF: Confirms red offset value

Acknowledgement

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

40. White Balance Green Offset (Command: s y)

Adjusts the white balance green offset value.

Transmission

[s][y][][Set ID][][Data][Cr]

Data 00 to 7F: Green offset 0 to 127

FF: Confirms green offset value

Acknowledgement

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

41. White Balance Blue Offset (Command: s z)

Adjusts the white balance blue offset value.

Transmission

[s][z][][Set ID][][Data][Cr]

Data 00 to 7F: Blue offset 0 to 127

FF: Confirms blue offset value

Acknowledgement

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

42. 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.

43. 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]

44. Tile Mode (Command: d d)

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

Transmission

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

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

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

* It may not be supported depending on the model.

Acknowledgement

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

45. Tile Mode Check (Command: d z)

To check Tile Mode status.

Transmission

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

Data FF: Check Tile Mode status.

* It may not be supported depending on the model.

Acknowledgement

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

Data1 00: Tile Mode Off

01: Tile Mode On

Data2 00 to 0F: Tile Row

Data3 00 to 0F: Tile Column

46. Tile ID (Command: d i)

To set Tile ID.

Transmission

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

Data 01 to E1: Tile ID 01 to 225**
FF: Check Tile ID

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

* It may not be supported depending on the model.

Acknowledgement

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

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

47. Tile H Position (Command: d e)

To adjust the Tile Horizontal position.

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

Transmission

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

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

* Left/Right values depend on Tile H size.

* It may not be supported depending on the model.

Acknowledgement

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

48. Tile V Position (Command: d f)

To adjust the Tile Vertical position.

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

Transmission

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

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

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

Acknowledgement

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

49. Tile H Size (Command: d g)

To adjust the Tile Horizontal Size.

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

Transmission

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

Data 00 to 32: 0 to 50

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

Acknowledgement

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

50. Tile V Size (Command: d h)

To adjust the Tile Vertical size.

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

Transmission

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

Data 00 to 32: 0 to 50

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

Acknowledgement

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

51. Natural Mode (In Tile Mode) (Command: d j)

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

Transmission

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

Data 00: Off

01: On

Acknowledgement

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



INSTALLATION MANUAL

LG Digital Signage (MONITOR SIGNAGE)

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

L15

TABLE OF CONTENTS

ACCESSING INSTALLATION MENU4

INSTALLATION MENU5

- LG Digital Signage Setup menu5

Signage Mode Operation

Power On Status

Key Operation

IR Operation / Local Key Operation

Limited Mode

Input Source Change

Menu Display

OSD Display

Power On Default (Input Source, A/V Setting, Aspect Ratio)

Input Source

A/V Setting

Aspect Ratio

Wake On LAN

DPM

Digital Audio Input

Speaker

Power On Delay

Pivot Mode

OSD Portrait Mode (Off, 90, 270)

Intelligent Auto

Master/Slave Mode

Time Sync Clock

Sync Mode

DPM Wakeup Control

Still Image Detecting

PM Mode

Factory Reset

OPS/PC Power Control

Interface Selection

Check Screen

Factory Reset VS Initial Setting

- USB Cloning.....13

Ez Download

Receive from USB

Send to USB

Logo Image Download

Send to DaisyChain

- Password Change.....18

- Set ID Setup.....19

Set ID Lock

Set ID

Auto Set ID

Reset ID

- Configuration Setup.....20

Splash Offset Time

USB Auto Playback

15 Min Auto Off

Automatic Standby

Screen Saver Cube

- Lock Mode.....22

USB

Initial Setting

- External Speaker / Audio out.....23

Output Control

- Fail Over24

You can set Mode to Off, Auto, or Manual.

You can set USB to Off, Movie, or Photo.

Fail Over priority when set to Auto

- ISM Method26
 - Mode
 - Timer
 - Period
 - Time
 - Still Image Detecting and ISM Method
 - Bar Image
 - Bar Color
 - Bar Transparency
 - Bar Direction
 - User Image
- Easy Brightness Control30
- SuperSign Server Setup.....31
 - Player Name
 - Server IP Setting
 - Server IP Status
- Holiday Schedule.....32
- No Signal Image.....33
- Crestron.....34
- Digital Signage Media Player34
 - Executable content
 - Using the My Media menu to play files
 - Auto-play on USB insertion
 - Distributing and playing content via SuperSign
- W

ACCESSING INSTALLATION MENU

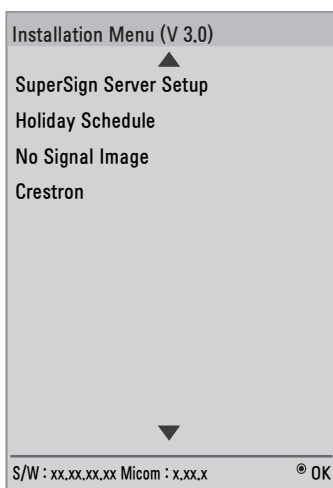
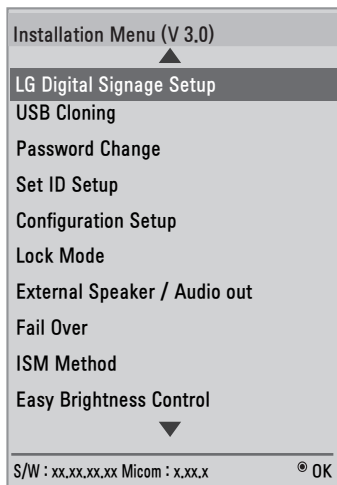
- 1 Press and hold the SETTINGS button for more than 5 seconds.



- 2 Enter the correct password (default: 0000) and press the OK button.



- 3 When the Installation Menu is displayed, select the desired item.



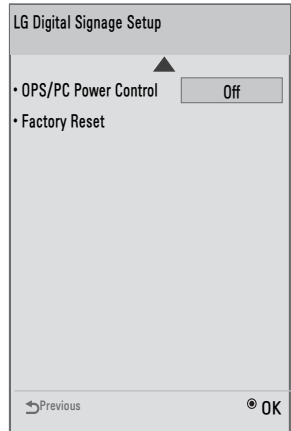
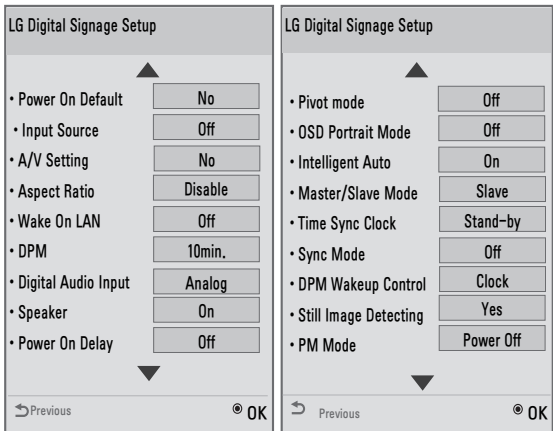
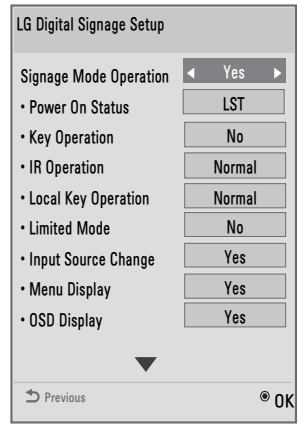
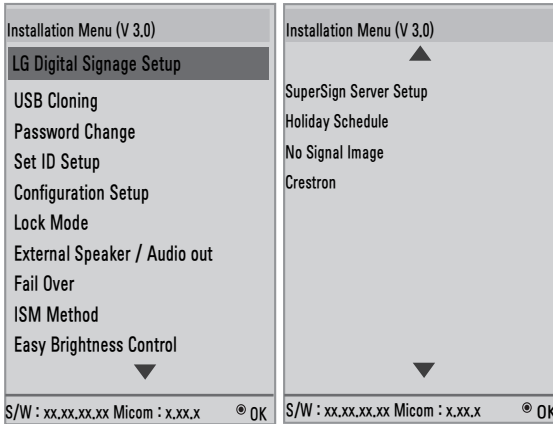
INSTALLATION MENU

! NOTE

- Default values may differ by region.

LG Digital Signage Setup menu

- Use this menu to configure the Digital Signage after in stallation.



Signage Mode Operation

- Enable or disable all Signage Mode Operation functions by setting the feature to Yes or No.
- If you set Signage Mode Operation to Yes, all Signage Mode functions are enabled.
- If you set Signage Mode Operation to No, all Signage Mode functions are disabled, and the product operates with its default settings.
(Depending on the model, this feature may not be supported.)

Power On Status

- You can select the operating status of the monitor when the main power is turned on.
- You can choose PWR, STD, or LST.
- PWR sets the monitor status to On whenever the main power is turned on.
- STD sets the monitor status to Standby when the main power is turned on.
- LST sets the monitor status back to its previous status. As in Power Backup mode, if you turn off the main power while the monitor is turned on, the monitor status changes back to On. Also, if you turn off the main power while the monitor is in standby mode, the monitor goes into standby mode.
(This feature may not be available with some models.)

Key Operation

- This feature allows you to manage the usability and operation of the local/front keys and your remote control. It works according to the "IR Operation" settings.
(This feature may not be available with some models.)

IR Operation / Local Key Operation

- This feature allows you to set how the product operates after receiving a signal from a LG remote control or local key.
(0 - Normal, 1 - Use PWR Only, 2 - Block All)
- Selecting 'Block All' blocks any signal coming from a LG remote control/local key. (Power On feature is available.)
- Selecting 'Use PWR Only' blocks any signal coming from a LG remote control/local key, except the Power button.
- Selecting 'Normal' enables signals from any LG remote control/local key to be received normally.
- There are keys that must be operated in 'Service mode' when 'Use PWR Only' or 'Block All' is selected: In-Start, In-Stop, Power-Only, ADJ, Installation Menu, P-Check, and S-check.
(This feature may not be available with some models.)

! NOTE

- When all IR key signals or all local key signals are blocked, the "Power On Status" value switches to "PWR". Changing this value is not impossible to ensure the correct powering on operation. (To prevent mistakes by the user)

Limited Mode

- This feature allows you inhibit the operations of particular Signage functions. This feature works according to the 'Input Source Change', 'Menu Display', or 'OSD Display' settings.
(This feature may not be available with some models.)

Input Source Change

- Enable or disable input source changes by setting this feature to Yes or No.
- If you set this feature to No (changes disabled), the INPUT key is disabled.
- If you set this feature to Yes (changes enabled), the input source can be changed.
(This feature may not be available with some models.)

Menu Display

- Setting this feature to Yes will display the menu. Setting this feature to No will hide the menu.
- However, even if you have set this feature to No, you can easily open the Installation Menu by pressing and holding the Menu button for more than 5 seconds.
(This feature may not be available with some models.)

OSD Display

- Enable or disable OSDs by setting this feature to Yes (displayed) or No (not displayed).
- If you set this feature to No (not displayed), OSDs other than Installation Menu are not displayed.
(This feature may not be available with some models.)

Power On Default (Input Source, A/V Setting, Aspect Ratio)

- You can configure 'Input Source', 'A/V Setting', and 'Aspect Ratio' after the monitor is turned on.
- You can set this feature to Yes (enabled) or No (disabled).
- If you set 'Power On Default' to No, the settings for 'Input Source', 'A/V Setting', and 'Aspect Ratio' are not applied.
- If you set 'Power On Default' to Yes, the settings for the menus above are applied.
(This feature may not be available with some models.)

Input Source

- This feature allows you to set whether to use a new input source or a pre-existing input source.
- Set 'Input Source' to Off to use the pre-existing input source.
- You can use any of the sources supported by the given model as the input source.
- If both 'Input Source' and 'On Time' have been set, 'Input Source' takes priority.
(This feature may not be available with some models.)

A/V Setting

- When your monitor is powered on, you can set certain video options.
- If you set this feature to Yes, the video settings configured before entering the Installation Menu are saved. In addition, even if you changed the video settings before turning off the monitor, the saved settings are restored when you turn the monitor on again.
- Saves video settings: Picture Mode, DPM Select, Smart Energy Saving, Backlight, Contrast, Brightness, Sharpness, Color, Tint, and Color Temp.
- Saves audio settings: Sound Mode and Balance.
(This feature may not be available with some models.)

Aspect Ratio

- This feature allows you to set the screen aspect ratio applied to your monitor when turned on.
- Selecting 'Disable' sets the screen aspect ratio to 'Aspect Ratio' when the monitor is turned on.
- Selecting 'Set By Program' sets the screen aspect ratio to 'Set By Program' when the monitor is turned on.
- Selecting '4:3' sets the screen aspect ratio to '4:3' when the monitor is turned on.
- Selecting '16:9' sets the screen aspect ratio to '16:9' when the monitor is turned on.
(This feature may not be available with some models.)

Wake On LAN

- Set whether to use the 'Wake On LAN' feature.
- You can set 'Wake On LAN' to On or Off.
- If you set this feature to On, 'Wake On LAN' is enabled and you can turn the product on remotely via a LAN.
- If you set this feature to Off, 'Wake On LAN' is disabled.
(This feature may not be available with some models.)

DPM

- Set whether to use 'Display Power Management (DPM)'.
- You can set this feature to Off, 5 sec, 10 sec, etc.
- If this feature is not set to Off, the monitor will enter Power Saving Mode when there is no input signal.
- If you set this feature to Off, DPM is disabled.
(This feature may not be available with some models.)

Digital Audio Input

- You can set the audio for each input as 'Analog' or 'Digital'.
- In the case of RGB input, audio is fixed as 'Analog'.
- In the case of digital input, you can select 'Analog' or 'Digital' for audio.
(This feature may not be available with some models.)

Speaker

- You can restrict the audio settings by choosing whether or not to use the speakers.
- If you set this feature to Off, audio output is disabled, and you cannot enter the 'Audio' menu.
- If you set this feature to On, audio output is enabled, and the 'Audio' menu is accessible.
(This feature may not be available with some models.)

Power On Delay

- When multiple monitors are connected, this feature enables the monitors to turn on at specified time intervals to prevent overload. You can choose an interval value between 1 and 250 seconds.
(This feature may not be available with some models.)

Pivot Mode

- This feature allows you to rotate the screen 180 degrees.
- Both the input signal and OSD rotate.
- You can set this feature to On or Off.
- If you set this feature to Off, the function is disabled.
- If you set this feature to On, the screen rotates 180°.
- If any changes are made, they are applied after reboot.
(This feature may not be available with some models.)

OSD Portrait Mode (Off, 90, 270)

- This feature allows you to rotate the OSD clockwise.
- You can set this feature to Off/90/270.
- If you set this feature to Off, the function is disabled.
- If you set this feature to 90, the OSD rotates clockwise 90 degrees.
- If you set this feature to 270, the OSD rotates clockwise 270 degrees.
(This feature may not be available with some models.)

Intelligent Auto

- You can set this feature to On (enabled) or Off (disabled).
- If you change the screen resolution after setting this feature to 'Yes,' the display is automatically adjusted to the new resolution.
(This feature may not be available with some models.)

Master/Slave Mode

- This feature allows you to sync monitors connected via RS-232C.
- When various monitors are connected via RS-232C, the forefront monitor becomes the Master.
- Once the Master is selected, the rest become Slaves.
- If you want to change the Master monitor, you must change it in Master/Slave Mode.
(This feature may not be available with some models.)

NOTE

- The Master/Slave Mode menu is only enabled when Picture ID is set to Off.
- When entering or editing Master/Slave Mode, the menu cursors on the Slave monitors may not be moved.

Time Sync Clock

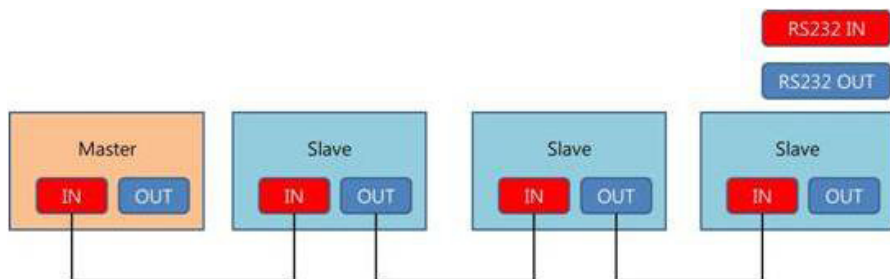
- This feature syncs the Slave monitors' clocks to the Master monitor's at a specified time via RS-232C.
- On the Master monitor, you can set the sync time as well as setting Time Sync Clock to Off .
- You can select a sync time between 0:00 - 23:00.
- While Time Sync Clock is performed, RS-232C control of other commands may not work.
(This feature may not be available with some models.)

NOTE

- To synchronize Time Sync Clock, be sure to set each slave monitor's clock so that they are at least one minute later than the master monitor's clock.
- If the Clock setting is Auto, the setting is changed to Manual when Time Sync Clock runs.

Sync Mode

- This feature allows you to sync the start times of contents (videos or images that have been distributed by SuperSign Software) played back on the Master and Slave monitors.
- If you set Sync Mode to Off, the sync feature is disabled.
- A Slave monitor plays contents at the same time as the Master monitor.
- While Sync Mode is performed, RS-232C control of other commands may not work.
(This feature may not be available with some models.)



DPM Wakeup Control

- This feature sets conditions for releasing the DPM status according to the DVI/HDMI's processing of digital signals.
- Clock: Checks the clock signal of the digital signal and, if the clock signal exists, releases the DPM status.
- Sync: Releases the DPM status when both the clock signal and data of the digital signal are entered.

Still Image Detecting

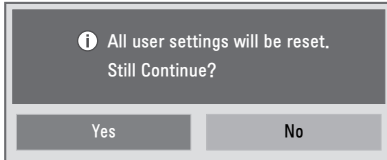
- This feature detects still images.
- If you set this feature to Yes, you can use the RS-232C command for detecting still images.

PM Mode

- This feature activates some of the monitor's functions after it enters Off status, allowing the monitor to remain practically the same as when it is turned on.
- Power Off: All functions remain turned off except some functions (Power, Time, etc.) when the monitor turns off. (Extended Display Identification Data (EDID) may be sustained depending on the input and model.)
- Sustain Aspect Ratio: Sustains Extended Display Identification Data (EDID) even when the monitor is turned off.
- Screen Off: Only turns off the screen and audio when the monitor enters Auto Off/Automatic Standby/DPM. Network-based control is possible.
- Screen Off Always: Has the same function as PM Mode's Screen Off. Entering and releasing the Screen Off status using a remote control is also possible.

Factory Reset

- This feature allows you to restore all set values to their factory default values.
- If you set this feature to Yes, all Signage settings except UTT setting (the Signage panel's operational hours) are restored to their factory default settings.
(This feature may not be available with some models.)



OPS/PC Power Control

- You can control the power of the OPS (media player) by turning the display power on or off.
- Disable: Disables the PC Power Control.
- Sync (on): Synchronizes the power status of the OPS (media player) only when the monitor is turned on.
- Sync (on/off): Synchronizes the power status of the OPS (media player) with the monitor.
- The PC Power Control feature can be used with the external RS-232C connection of the media player.
(This feature may not be supported in certain models.)

Interface Selection

- You can configure serial communication with the connected OPS.
- RS-232C: Enables communication with external devices via the serial port.
- OPS: Enables communication via the OPS connected to the product.
- Interface Selection is enabled only when the OPS kit is connected.
(This feature may not be supported in certain models.)

Check Screen

- The Check Screen feature judges whether there are abnormalities on the edges of the screen. R, G, and B OSDs are formed on the screen at one second intervals and an RGB sensor tests the areas.
- If set to On, the Check Screen feature is enabled.
- If set to Off, the Check Screen feature is disabled.
- If the Portrait mode is set to 90 or 270, the Check Screen feature is off and deactivated.
- If the Pivot mode is On, the Check Screen feature is off and deactivated.
- When the Portrait mode and Pivot mode is off, the Check Screen feature is activated.
(This feature may not be supported in certain models.)

LG Digital Signage Setup		Initial setting / Factory Reset
DPM	Off/5sec/10sec/15sec/1min/3min/5min/10min	10min
Power On Status	LST, STD, PWR	LST
Key Operation	Yes/no	No
IR Operation	Normal/Use PWR Only/Block All	Normal
Local Key Operation	Normal/Use PWR Only/Block All	Normal
Limited Mode	Yes/No	NO
Input Source Change	Yes/No	Yes
Menu Display	Yes/No	Yes
OSD Display	Yes/No	Yes
Power On Default	Yes/No	No
Input Source	Variable	Off
A/V Setting	Yes/No	No
Aspec Ratio	Disable/4:3/16:9/Set By Program	Disable
Wake On LAN	On/Off	Off
Digital Audio Input	Digital/Analog	Digital
Speaker	On/Off	On
Power on Delay	Off/1~250sec	Off
Pivot Mode	On/Off	Off
OSD Portrait Mode	Off/90/270	Off
Intelligent Auto	On/Off	On
Master / Slave Mode	Master / Slave	Slave
Time Sync Clock	Off / Standby	Stand-by
Sync Mode	Off / On	Off
DPM Wakeup Control	Clock/Sync	Clock
Still Image Detection	On/Off	Yes
PM mode	Power Off/Sustain aspect ratio/Screen off/Screen Off always	Power Off
OPS/PC Power Control	Disable/Sync(On)/Sync(On/Off)	Disable
Factory Reset	Confirm	

** User: User settings

Factory Reset VS Initial Setting

Item	Factory Reset	Initial Setting
Set ID	1	User
IP	Reset to default value "0"	User

** The rest are the same as each other.

USB Cloning

The administrator can configure a monitor more quickly via USB and configure multiple monitors simultaneously. All monitors that have been configured this way operate according to the settings of the same master monitor. Using this method reduces installation time compared to the standard RS-232C method.

CAUTION

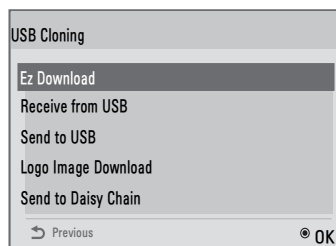
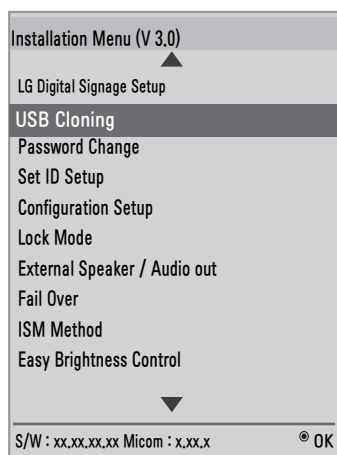
- To use the USB function, make sure to use only USB storage devices formatted as FAT32. USB storage devices formatted as other file systems may not work.

Ez Download

Items such as EPK, TLL, Splash Image, and Micom need to be downloaded.

Because there are many items to download and many downloading methods, users can experience difficulty and inconvenience when downloading. Ez Download was created to facilitate the download process.

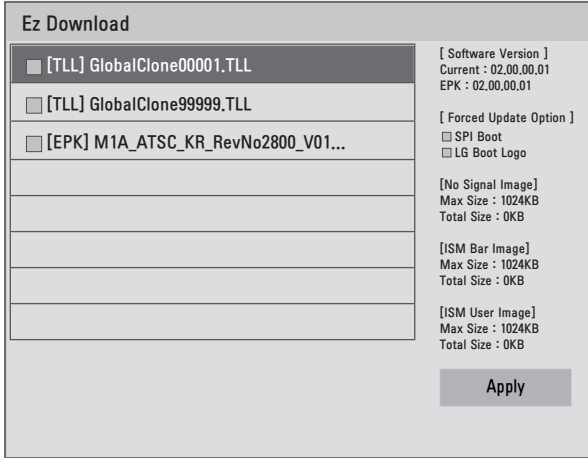
- 1 Select 'Ez Download' using the $\wedge$ or $\vee$ buttons and press the OK button.



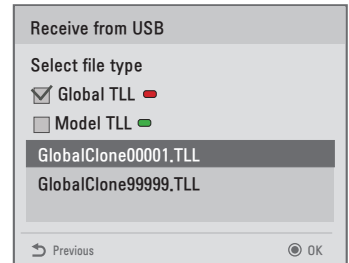
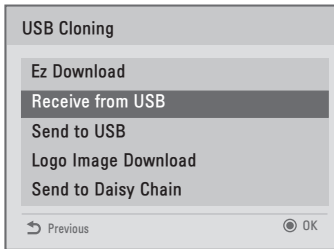
- 2 Select the items you wish to download from the list and select Apply.
 - If you check the EPK item, the Display EPK Version , SPI Boot, and LG Boot Logo items are enabled.
 - If you check both the EPK and JPG items, the LG Boot Log item is disabled; if you uncheck the JPG item afterwards, LG Boot Log item is enabled.
 - If both the Global TLL and Model TLL files exist, only the Global TLL file is displayed.
- 3 The selected TLL, JPG, and EPK items are downloaded in that order. During the download, the Downloading Percent UI for each item is displayed. When the download is complete, the monitor turns off.

NOTE

- No Signal Image Download's UI only displays one language (English) correctly.
- When you download files, only files with English names are displayed correctly.
- An item list for Ez Download can include up to 255 items.

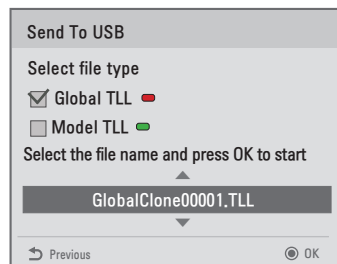
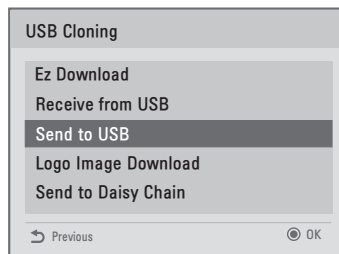


Receive from USB



- 1 Select the desired files using the $\wedge$ or $\vee$ buttons and press the OK button.
- 2 When the download is complete, the monitor goes into standby mode. When the download fails, the screen switches to the initial installation screen.

Send to USB



- 1 Select the desired files using the $\wedge$ or $\vee$ buttons and press the OK button.
- 2 When the download is complete, the screen switches to the initial installation screen.

! NOTE

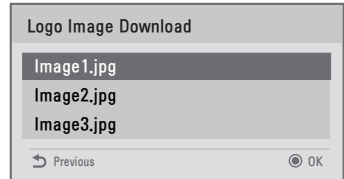
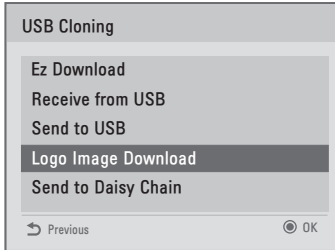
- **Model TLL:** Appears under the top-level folder on your USB drive in the form of an xx(model name)xxxxx .TLL. The 'xxxxx' refers to a number. Model TLL files appear only when they are compatible with the given model, and they are transferrable only when the model names match.
For example, if the model is 43SE3B-5DC, its Model TLL file is saved as a file with any name between xxSE3B-5DC00001.TLL and xxSE3B-5DC99999.TLL.)
- **Global TLL:** Appears under top-level folder on your USB drive in the form of a GlobalClonexxxxx.TLL. The 'xxxxx' refers to a number.
For example, if the model is 43SE3B-5DC, its Global TLL file is saved as a file with any name between GlobalClone00001.TLL and GlobalClone99999.TLL.)
(* For a Global TLL file to be cloned, the Model TLL file located in the same folder needs to be deleted or moved to a different folder.)
- When Global TLL and Model TLL files are both present in the top-level folder, press the red button to display the Global TLL file or the green button to display the Model TLL file.

Logo Image Download

This feature allows you to download splash image files onto your monitor.

Create a 'LG_MONITOR' folder on your USB flash drive and copy a splash image file into the folder.

- 1 Select the desired image file using the $\wedge$ or $\vee$ buttons and press the OK button.



- 2 Wait until the download is complete. When the download is complete, the monitor turns off and on again.
- 3 When the monitor turns on, you can see your new splash image.

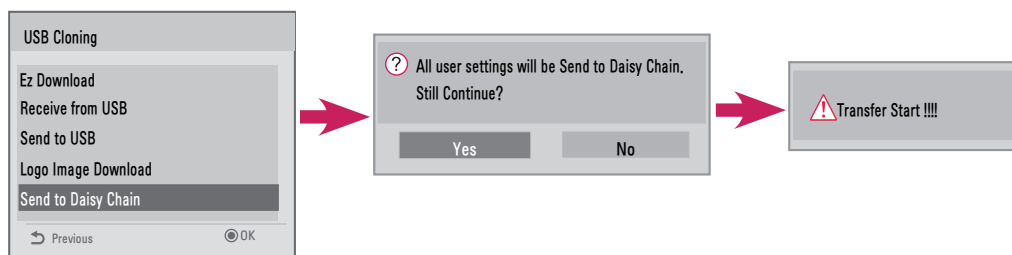
! NOTE

- Only JPEG files 1 MB or smaller can be used as splash images.
- Progressively encoded JPEG files are not applicable.
- Make sure that splash images have a resolution suitable for the screen resolution of the monitor.
- The maximum resolution for a splash image is Full HD, 1920 x 1080 and HD, 1360 x 768. The minimum resolution for a splash image is 64 x 64.

Send to DaisyChain

This feature allows you to copy the settings of a monitor to other monitors using RS-232C.

- 1 Transfer the settings of your current monitor to other linked monitors via RS-232C outputs.
- 2 The settings of the foremost monitor are copied, while the settings for other monitors in the RS-232C daisy-chain are not.
- 3 Select Send to DaisyChain, then select Yes to transfer the data or select No to go back to the previous menu.
- 4 Repeat this until all monitors that are connected to the current monitor's RS-232C output port turn off. After the monitors turn off, turn them on and check if the settings have been copied.
(This feature may not be available with some models.)

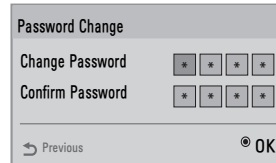
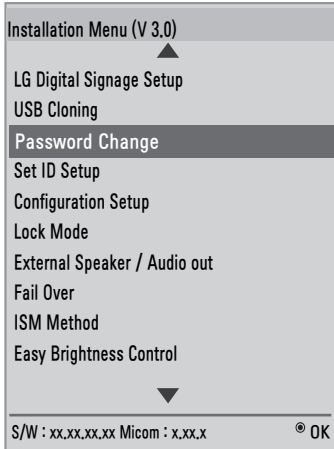


Password Change

You can change your password for security purposes.

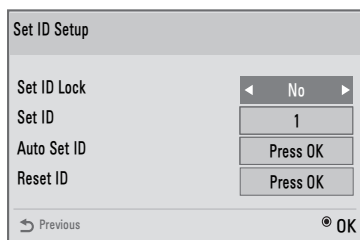
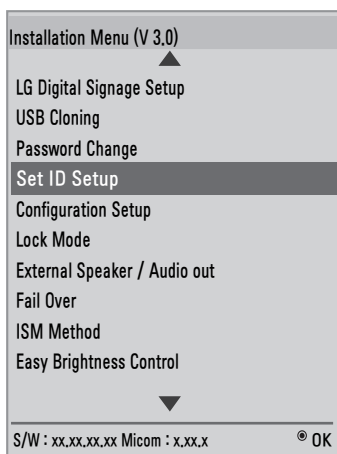
Enter a new 4-digit number in Change Password.

Enter the same number again in Confirm Password to confirm the password.



Set ID Setup

This feature allows you to set an ID for the product.



Set ID Lock

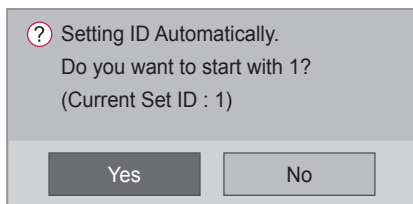
- You can enable Set ID Lock by selecting "Yes" or cancel Set ID Lock by selecting "No".

Set ID

- Pick and enter a number between 1 - 255 (1 - 1000, with some models) for the Set ID.

Auto Set ID

- This feature sets an ID for the product automatically.



- If you set this feature to Yes, all monitor in the RS-232C daisy-chain are assigned a sequential Set ID, starting with 1.
- If you set this feature to No, Set IDs are assigned to the monitor sequentially, starting with the foremost set.
- A Set ID cannot be decreased from its current value. Therefore, it is recommended that you execute Reset ID before using this feature.
- Execution time may vary depending on the installation environment.
- If the Auto Set ID operation is not completed normally, turn the product off and on, and then try again.
- The Yes/No options only work on the foremost monitor in the daisy-chain.
(This feature may not be available with some models.)

Reset ID

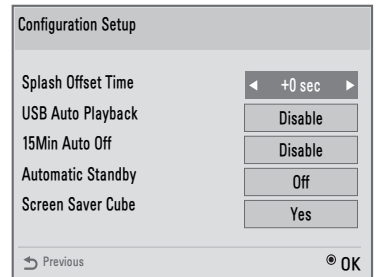
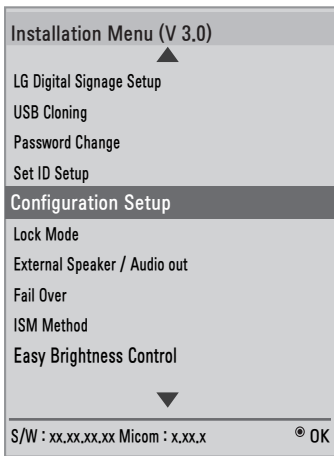
- This feature initializes the Set ID of the product.
- After execution, the Set IDs of all monitor in the RS-232C daisy chain are reset to 1.
(This feature may not be available with some models.)

! NOTE

- Be sure to execute Auto Set ID/Reset ID when Picture ID is set to Off.

Configuration Setup

- This feature enables a detailed configuration of the product.

**Splash Offset Time**

- This feature controls the amount of time a splash image is displayed.
- You can select a time between 0 and 10 seconds.

USB Auto Playback

- This is a feature that automatically plays video or photo files from your USB storage device.
- This feature is activated when you connect a USB device to your monitor or when you turn on your monitor with a USB device connected to it.
- Video and photo files must be located in the root folder, in the first partition of your USB storage device.
- Video or photo files located here will play back repeatedly.

! NOTE

- Contents stored on the USB storage device connected to USB 1 are played back if USB storage devices are connected to both USB 1 and USB 2.

15 Min Auto Off

- Sets whether to use the 15 Min Auto Off feature.
- It can be set to Enable or Disable.
- Enable: If there is no signal for 15 minutes, the product turns off.
- Disable: 15 Min Auto Off is not used.
- It is recommended that you set this feature to Off if you intend to use the product for long periods of time as the feature turns the power of the product off.

Automatic Standby

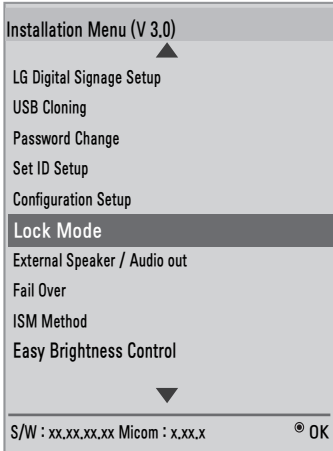
- Sets whether to use the 4 hour/6 hour/8 hour automatic standby feature.
- The option can be set to Off, 4 Hours, 6 Hours, or 8 Hours.
- If you set this feature to a setting other than Off, the product turns off if there is no input from the remote control for 4 hours, 6 hours, or 8 hours.
- If you set this option to Off, the Automatic Standby feature is disabled.

Screen Saver Cube

- This Screen Saver feature lets you enable/disable the 360-degree-rotating LG Cube which appears on the screen when there is no signal.

Lock Mode

- This feature allows you to select an input that you want to restrict. The selected input is automatically restricted according to your settings.



USB

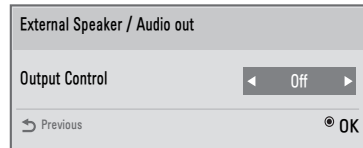
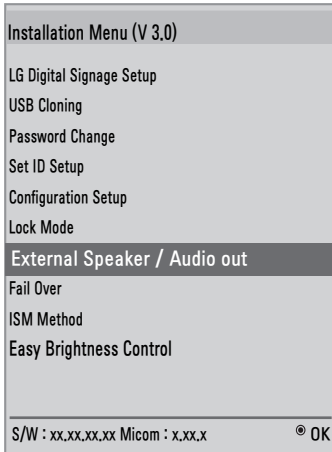
- Enables/disables USB input. The following will happen when USB input is disabled:
- The pop-up window that appears when a USB disk is connected to your monitor is blocked.
- You cannot enter 'My Media' in the menu.
- You cannot enter 'USB Input' in the Input List.
- 'USB Auto Playback' is set to No, and input is not possible. (* However, you can download software updates and Welcome Screens.)

Initial Setting

- Sets Initial Setting use to Enable or Disable.
- If set to Disable, the Initial Setting item is deactivated in the menu.

External Speaker / Audio out

- This feature enables the transfer of analog/digital audio signals from your monitor to external devices.



Output Control

- Off: Does not transfer audio signals to external devices.
- Fixed: Outputs the volume at a fixed level.
(The volume of an external audio device cannot be muted.)
- Variable: The Volume level can be changed to a value between 0 and 100.
(This feature may not be supported on some models.)

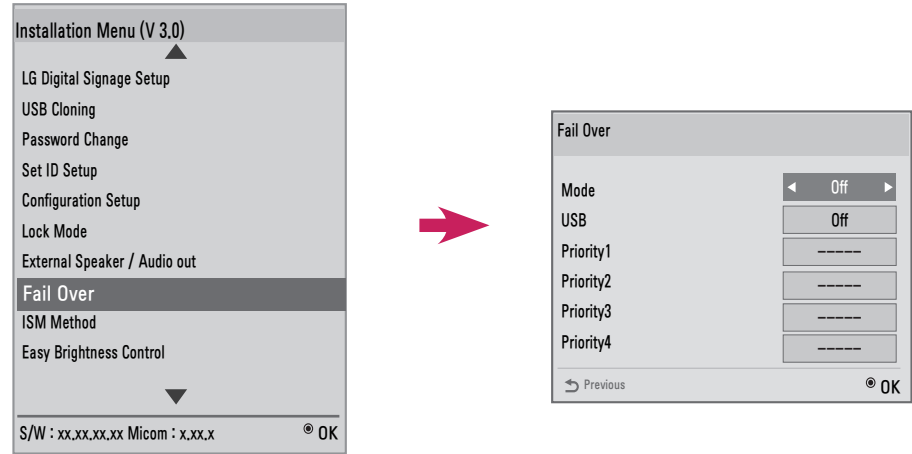


NOTE

- When connecting an external audio device to your monitor, be sure to use one with a built-in audio amplifier.

Fail Over

- This feature enables automatic switching to another input signal when there is no signal from the current input.



You can set Mode to Off, Auto, or Manual.

- Off: Fail Over is disabled.
- Auto: If there is no signal from the current input, the product input switches to a different input that has a video signal following a specified order (*see table).
- Manual: You can set switching priorities for inputs when there is no signal. If there are a multiple video signals, the current input switches to the input with the highest priority.

You can set USB to Off, Movie, or Photo.

- Off: Fail Over USB is disabled.
- Movie: If you set this feature to Auto, a movie is played back when there is no input signal. If you set this feature to Manual, a movie is played back when there is no signal from any of the prioritized inputs.
- Photo: If you set this feature to Auto, a photo slideshow is played back when there is no input signal. If you set this feature to Manual, a photo slideshow is played back when there is no signal from any of the prioritized inputs.

Fail Over priority when set to Auto

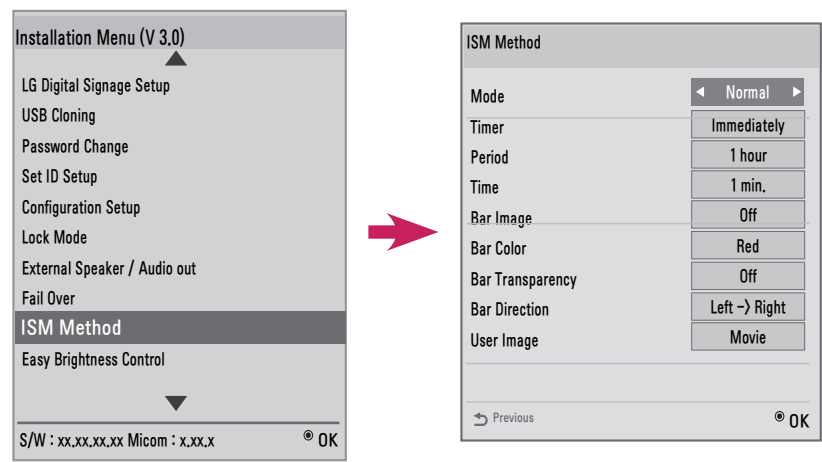
Current source	1st change	2st change	3st change	4st change	5st change
RGB	HDMI	DVI-D	OPS	USB Auto play	RGB NO SIGNAL
DVI-D	HDMI	OPS	RGB	USB Auto play	DVI NO SIGNAL
HDMI	DVI-D	OPS	RGB	USB Auto play	HDMI NO SIGNAL
OPS	HDMI	DVI-D	RGB	USB Auto play	OPS NO SIGNAL

 NOTE

- The number of priorities may vary depending on the model.
- If you set Mode to Off, all of its sub-options are disabled.
- If you set Mode to Auto, the Priority menus are disabled.
- If you set USB to Movie or Photo, the USB Auto Playback option in Configuration Setup is disabled, and the corresponding function is also disabled.
- If you set the USB Auto Playback option in Configuration Setup to Movie or Photo, the USB option in Fail Over is disabled, and the corresponding function is also disabled.
- When the USB option in Lock Mode is disabled, both the USB Auto Playback option and Fail Over's USB option are disabled, and the corresponding functions are also disabled.
- For the Fail Over USB function to work, your USB drive must have a FAIL_OVER or fail_over folder, as well as valid contents (movies and images).
- If your USB drive does not have either a FAIL_OVER/fail_over folder or contents, the default USB pop-up menu appears when the Fail Over USB function is performed.
- The USB Fail Over function does not work after the distribution of contents (or the playback of a contents schedule). However, if a Fail Over event occurs (input signal connection/change to Fail Over USB option/USB reconnection), the Fail Over USB function works.
- USB Fail Over does not work during playback of a contents file or while in standby for the playback of a contents schedule.
- USB Fail Over does not work during software updates, including EZ Download.
- Contents stored on the USB storage device connected to USB 1 are played back if USB storage devices are connected to both USB 1 and USB 2.

ISM Method

If a still image is displayed on the screen for an extended period of time, image sticking can occur. The ISM method is a feature that prevents image sticking.



Mode

- Normal: Disables the ISM method.
- Inversion: Inverts screen colors to remove image sticking.
- Orbiter: Moves the image's position on the screen a certain number of pixels at regular intervals in a certain order to remove image sticking.
- White Wash: Displays a white pattern to remove image sticking.
- Color Wash: Alternately displays a white pattern and a color pattern to remove image sticking.
- Washing Bar: Displays a bar on the screen to make the image move smoothly.
(If you select Washing Bar, Bar Image, Bar Color, or Bar Transparency is enabled.)
- User Image: Plays your photos or movies using a USB storage device.

Timer

- Immediately: Performs the ISM function immediately after the ISM Method menu window disappears. The Period/Time option is disabled.
 - a) Inversion: Inverts the screen every 30 minutes.
 - b) Orbiter: The image moves 3 pixels every 2 minutes in a certain order.
 - c) User Image: Displays the image on repeat until you press the EXIT button on your remote control.
- Repeat: Performs the ISM function for a specified amount of time in each period. (Period and Time are only enabled when Repeat is selected.)
 - a) Inversion: Inverts the screen for a specified amount of time and then restores the screen to its original settings. The period will be calculated again after the screen is restored.
 - b) Orbiter: Moves the image 3 pixels at specified time intervals. In Repeat mode, the Orbiter function is terminated only when a movie is output or when there is a button input from the remote control. After the termination of the Orbiter function, the period will be calculated again.
 - c) User Image: You can terminate User Image by pressing the EXIT button on your remote control before a specified time passes. After termination of the User Image function, the period will be calculated again.

Period

- You can set the period between 1 and 24 hours.
- When there is a button input from your remote control, this function is terminated and the period is calculated again.

Time

- You can select from among 1 - 10 mins / 20 mins / 30 mins / 60 mins / 90 mins / 120 mins / 180 mins / 240 mins
- The ISM function is performed for a specified period.



NOTE

Still Image Detecting and ISM Method

- If you set Still Image Detecting to Yes, the ISM function starts when the amount of time the image has been still reaches a specified period. When a movie is output, the function is terminated and the period is recalculated.
- If you set Still Image Detecting to No, the ISM function starts when the amount of time no button input from the remote control is detected reaches a specified period.

Bar Image

- Off: Displays a bar with a fixed resolution of 300 x 1080, then moves the bar.
- On: Displays a user-downloaded image, and moves the image.

! NOTE

- Images can be displayed at your desired size without a size limit. (However, the image height is fixed at 1080.)
- If only one image is downloaded, the image is displayed alone and the bar moves.
- If multiple images are downloaded, the images move alternately fading in and out of each other.
- Each of the downloaded images is displayed once per cycle.

How to Download an ISM Bar Image in Ez Download.

- 1 In order to download an image in Ez Download, there must be an image file in an 'ism_bar' or 'ISM_BAR' folder on your USB storage device.
- 2 Delete the existing contents stored on internal memory before downloading a new image file.
- 3 Add [ISMBAR] as a prefix to the name of a file to distinguish the file from others (EPK, Logo, No Signal, etc.).
- 4 Download ISM photos or movies in Ez Download.

! NOTE

- You can download multiple images up to 5 MB combined.
- The total bit size of images must be under 50 MB.
For example, in the case of a 500 KB image with a resolution of 1920 x 1080, its bit size, as calculated by image decoding, is about 7.91 MB ($1920 \times 1080 \times 32 \text{ bit} / 1024 / 1024 / 8$).
Therefore, if you download 7 images of the same size, the total size of the images is about 3.5 MB, which falls within 5 MB, but because its total bit size is $7.91 \text{ MB} \times 7 = 55.3 \text{ MB}$, they cannot be downloaded.

Bar Color

- You can choose from six colors: red, green, blue, white, black, and gray.
- This feature is only applicable when Bar Image is set to Off.

Bar Transparency

- Off: Displays the bar opaquely.
- On: Displays the bar translucently.

Bar Direction

- Left -> Right: The bar moves from left to right.
- Right -> Left: The bar moves from right to left.

User Image

- This feature enables the playback of your desired photos and movies using your USB storage device.
(If you select User Image, the contents options of Movie and Photo are enabled.)
 - Movie: Plays movies stored in the ISM (or ism) folder on your USB storage device
 - Photo: Plays a slide show of images stored in the ISM (or ism) folder on your USB storage device.
- If both USB 1 and USB 2 are active, the User Image feature is performed on the device connected to USB 1.
- While User Image is performed, menus are not displayed until you press a key.
If you press a key, menus are displayed and you can change settings.
- The User Image feature is performed on the USB 1 device if USB storage devices are connected to both USB 1 and USB 2.
- While User Image is performed, USB 1 and USB 2 must be unoccupied for the playback of contents stored on internal memory.
- When there is no valid folder/contents, no action is performed.
- You can store movies and photos on internal memory using Ez Download.

How to Download an ISM Photo/Movie in Ez Download.

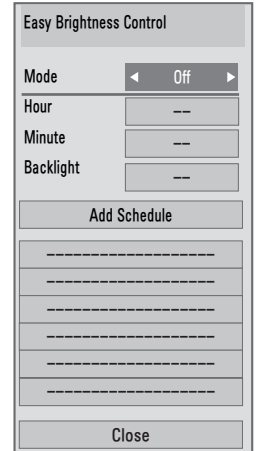
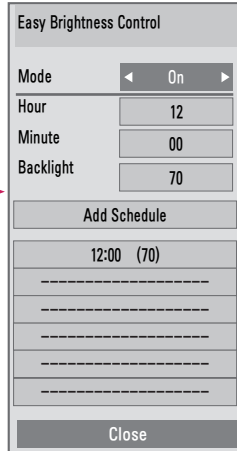
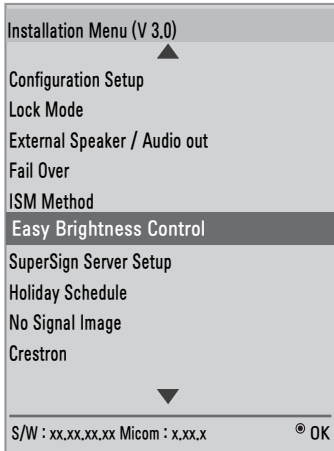
- 1 In order to download a user image in Ez Download, there must be a user image file in an 'ism' or 'ISM' folder on your USB drive.
- 2 Delete the existing contents stored on internal memory before downloading a new image file.
- 3 Add [ISMPHO] as a prefix to the name of a file for photos or [ISMMOV] if the file contains movies, to distinguish the file from others (EPK, Logo, No Signal, etc).
- 4 Download ISM photos or movies in Ez Download.

! NOTE

- You can download one movie file of up to 30 MB.
- You can download multiple photos of up to 5 MB combined.

Easy Brightness Control

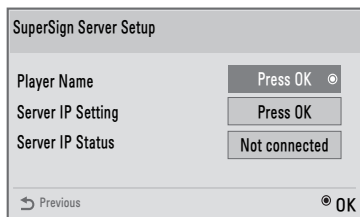
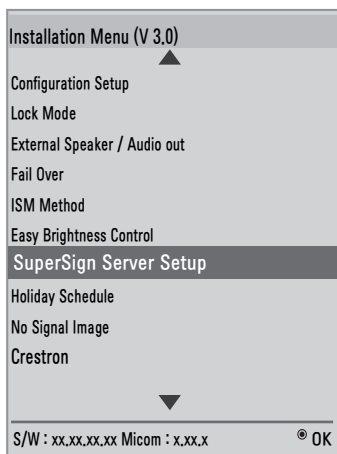
The backlight is adjusted according to your schedule(s).



- The backlight is adjusted according to your schedule(s).
- You can set this feature to On (enabled) or Off (disabled).
- Easy Brightness Control is disabled if the current time is not set.
- Easy Brightness Control is disabled if Energy Saving is set to Maximum.
- You can add up to six schedules, and they are sorted in ascending order by time.
- If more than six schedules are added, the latest schedule is automatically deleted.
- You can delete a schedule by selecting it from the list and pressing the OK button.
- Duplicate schedules are not added. However, the backlight value is renewed.
(This feature may not be available with some models.)
- Return to default settings by clicking [General] -> [Reset to Initial Settings].

SuperSign Server Setup

- This feature is used to link with the SuperSign software.



Player Name

- You can set the name of the player you want controlled in the SuperSign software. (You can enter up to 20 characters.)

Server IP Setting

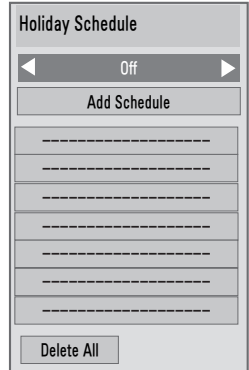
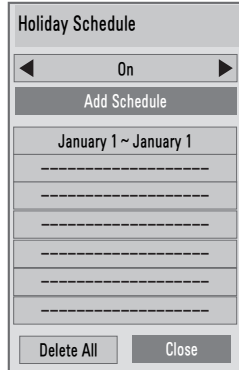
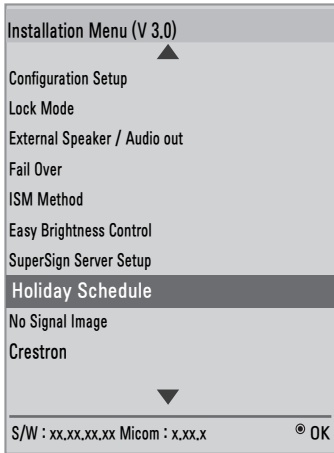
- You can set the IP address of the computer (server) on which the SuperSign software is installed.

Server IP Status

- This feature displays the status of the connection between your monitor and the SuperSign server.
 - Not connected: Your monitor is not connected to the SuperSign server.
 - Waiting for Approval: Your monitor is connected to the SuperSign server but has not yet been approved.
 - Rejected: Your monitor is connected to the SuperSign server but has been rejected.
 - Connected: Your monitor is connected to the SuperSign server and has been approved.

Holiday Schedule

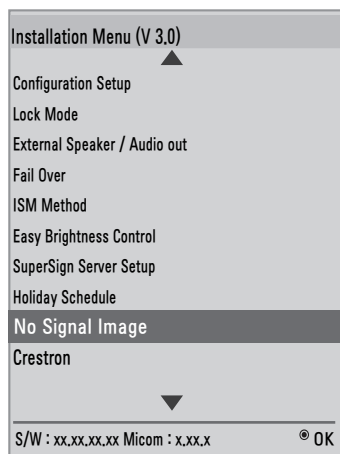
This feature allows you to specify holidays (unit: day) when the product will not be used.



- Holidays are specified according to your schedule(s).
- You can set this feature to On (enabled) or Off (disabled).
- Holiday Schedule is disabled if the current time is not set.
- You can add up to seven schedules.
- Duplicate schedules cannot be added.

No Signal Image

This feature allows the screen image to be changed when there is no signal.



- You can use the default image of "No Signal" or a new image by disabling or enabling the No Signal Image feature.
- You can change the image size to Full, Original, or Fit in the Mode option.
- You can set Slide Time if you download multiple images. (5 / 10 / 15 / 20 sec)

How to Download a No Signal Image in Ez Download

- 1 In order to download an image in Ez Download, there must be an image file in an 'lg_sig' or 'LG_SIG' folder on your USB drive.
- 2 Delete the existing contents stored in internal memory before downloading a new image file.
- 3 Select the image(s) you want to download. Please make sure that the Total Size in the right-hand corner of the Ez Download menu does not exceed the Max Size 10240 KB (10 MB).
- 4 Download the image file for No Signal Image in EZ Download.

! NOTE

- Only JPEG files 1 MB or smaller in size can be used as No Signal Image update.
- Progressively encoded JPEG files are not applicable.
- The maximum file resolution for a No Signal Image is Full HD, 1920 x 1080 and HD, 1360 x 768. The minimum file resolution for a No Signal Image is 64 x 64.
- No Signal Image files with a resolution of Full HD, 1920 x 1080 can cause image sticking.
- Only No Signal Image files with English names are displayed correctly.

Crestron

- This function allows synchronization with an application provided by Crestron.
- Server: This menu sets the IP for the network connection with the server (equipment provided by Crestron).
- Port: This menu sets the port for the network connection with the server. The default port number is 41794.
- IP ID: This menu sets a unique ID for synchronizing with the application.

Digital Signage Media Player

Content produced and distributed by SuperSign W can be played.

Supported content types include external input, text, and music, as well as photographs, videos, and Signage Monitors.

Executable content

*.cts: These files can be played at any time.

*.sce: These files can be played at any time like *.cts files or they can be played to a specific schedule.

Using the My Media menu to play files

- After inserting the USB storage device, access the My Media menu and select an executable content file under the "All Media" tab or the "Contents List" tab to play the file.

Auto-play on USB insertion

- Turning on the main power or inserting a USB device when the main power is on will automatically play executable content in a specific folder.
- If a USB device has already been inserted when the main power is turned on, executable content in the "normal" folder is played by default. If the "normal" folder does not exist, executable content in the "AutoPlay" folder is played.
- If a USB device is inserted some time after the main power has been turned on, executable content in the "AutoPlay" folder is played by default. If the "AutoPlay" folder does not exist, executable content in the "normal" folder is played.
- Autoplay for an inserted USB device is only supported on USB port 1.

Distributing and playing content via SuperSign W

- If a USB storage device is inserted in USB port #1, the LAN cable is connected, and the SuperSign Server settings are configured, content can be distributed from the SuperSign W server to the player.
- Schedules can be set to play a combination of various content or media in SuperSign W at the time the user wants.
- Messages created by the user can be sent to the player via SuperSign W.
- For more information, see the SuperSign W manual.

