

OWNER'S MANUAL MONITOR SIGNAGE

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

MONITOR SIGNAGE MODELS

84WS70BS 84WS70MS

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

LICENSES

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



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



This DivX Certified® 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 one or more of the following U.S. patents:

7,295,673; 7,460,668; 7,515,710; 7,519,274.



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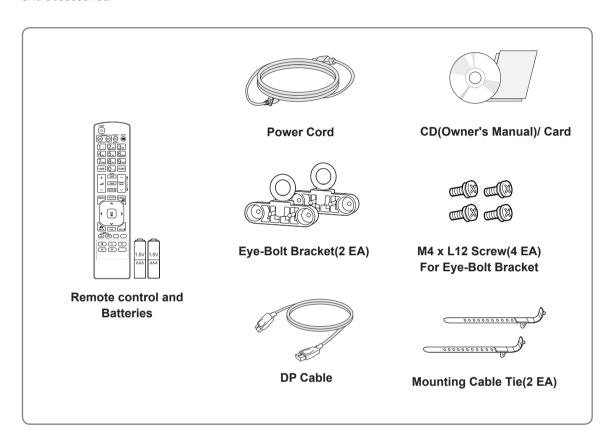


 The warranty will not cover any damages caused by using the product in an excessively dusty environment.

ASSEMBLING AND PREPARING

Accessories

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





CAUTION -

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

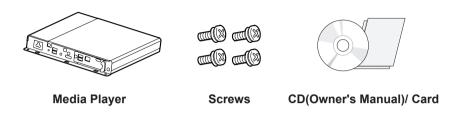


NOTE -

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

Optional Accessories

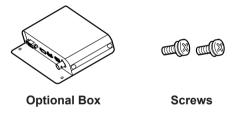
Without prior notice, optional accessories are subject to change to improve the performance of the product, and new accessories may be added. The illustrations in this manual may differ from the actual product and accessories.



Media Player Kit

84WS70MS

Only supported for 84WS70MS.

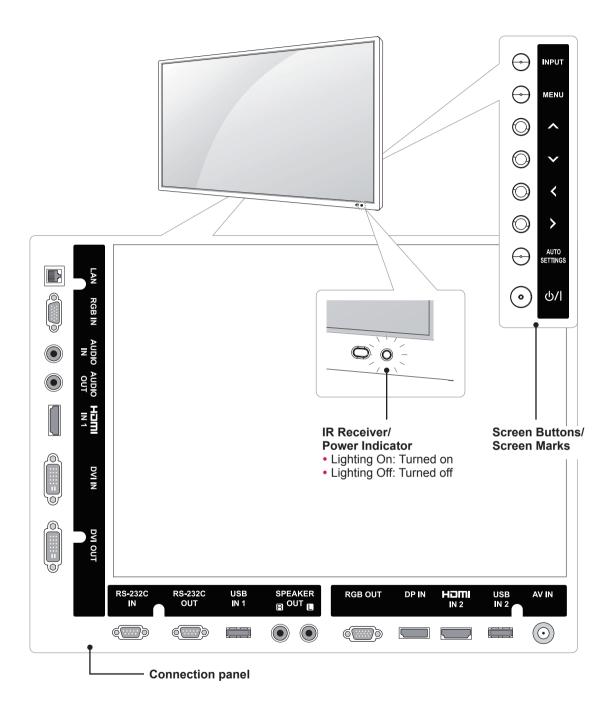


Optional Box Kit



- · Optional accessories are not included for all models.
- The Optional Box Port may be used for future devices. It is currently not supported.

Parts and buttons





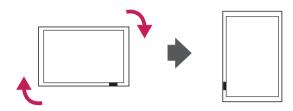
• You can set the Power indicator to on or off by selecting **OPTION** in the main menu.

Screen Marks	Description
INPUT	Changes the input source.
MENU	Accesses the main menus, or saves your input and exits the menus.
^	Moves the selection up and down.
<>	Adjusts the volume level.
AUTO/SET	Displays the current signal and mode. Press this button to adjust the screen automatically (available only in RGB mode)
ტ/I	Turns the power on or off.
IR Receiver	This is where the unit receives signals from the remote control.
Power Indicator	This Indicator lights up red when the display operates normally(on mode). If the display In sleep mode (In Power Saving mode), this indicator color changes to amber.

Portrait Layout

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

84WS70MS

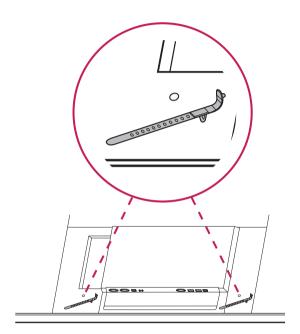


84WS70BS

Installing in Portrait Position is not supported.

Using the Mounting Cable Tie

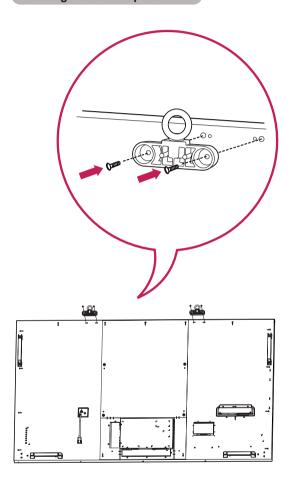
Insert the two cable ties into the bottom hole on the back of the set as shown in the figure to organize cables.



Connecting the Eye-Bolt Bracket

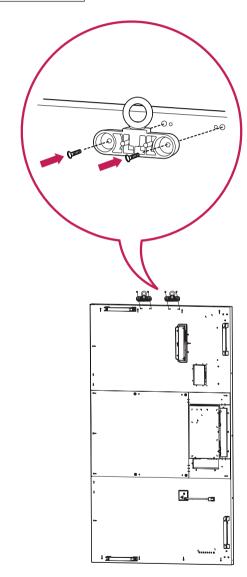
The Eye-bolt bracket is designed to be used to lift the set up. Attach the bracket to the product using the two screws provided.

Installing in Landscape Position



Installing in Portrait Position

84WS70MS

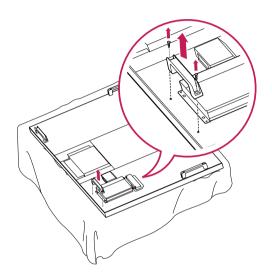


84WS70BS

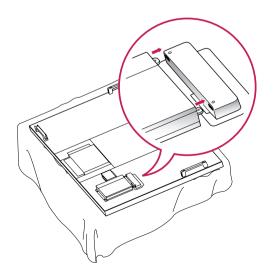
Installing in Portrait Position is not supported.

Connecting the Media Player

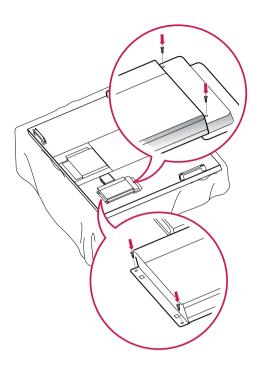
1 Place a soft cloth on the table and put the set with the screen facing downward. Remove the handle at the bottom of the section where the Media Player is mounted on the set.



2 To mount the Media Player, push it into the special compartment located on the back of the monitor.



3 Attach the Media Player using the four provided screws.





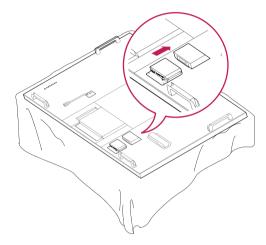
NOTE

 Use the screws provided with the product (diameter 3.0 mm x pitch 0.5 mm x length 6.0 mm).

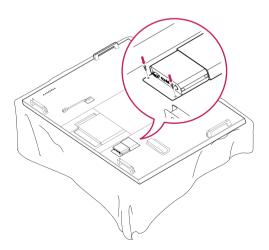
Connecting an Optional Box

84WS70MS

1 Place a soft cloth on the table and put the set with the screen facing downward. To mount the box, push it into the special compartment located on the back of the monitor.



2 Attach the box using the two provided screws.

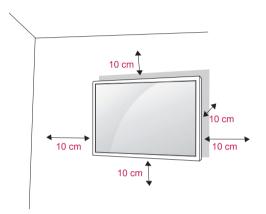




• Only supported for 84WS70MS.

Mounting on a wall

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



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

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

- 1 Please, use a wall mount and screws in accordance with VESA Standards.
- 2 If you use screws longer than standard, the monitor might be damaged internally.
- 3 If you use improper screws, the product might be damaged and drop from mounted position. In this case, LG Electronics is not responsible for damage.
- 4 Please use VESA standard as below.
- 785mm or greater
 - * Fastening screw: Diameter 8.0 mm x Pitch 1.25 mm x Length 16 mm



CAUTION

- Disconnect the power before installing or moving the monitor. Otherwise electric shock may occur.
- · If you install the Monitor on a ceiling or slanted wall, it may fall and result in severe injury. Use an authorized LG wall mount and contact the local dealer or qualified personnel.
- Do not over tighten the screws as this may cause damage to the Monitor and void your warrantv.
- · Use screws and wall mounts that meet the VESA standard. Any damages or injuries by misuse or using an improper accessory are not covered by the warranty.

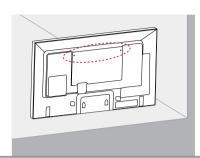


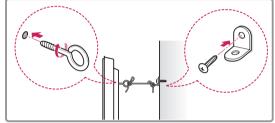
NOTE

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

Securing the product to a wall (optional)

(Depending on model)





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



CAUTION

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



NOTE

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



WARNING

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

REMOTE CONTROL

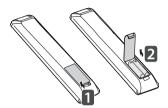
The descriptions in this manual are based on the buttons of the remote control. Please read this manual carefully and use the Monitor correctly.

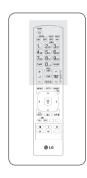
To replace batteries, open the battery cover, replace batteries (1.5 V AAA) matching \oplus and \bigcirc ends to the label inside the compartment, and close the battery cover.

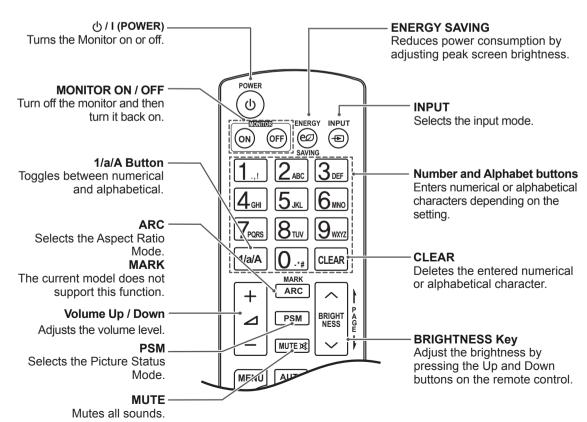
To remove the batteries, perform the installation actions in reverse.



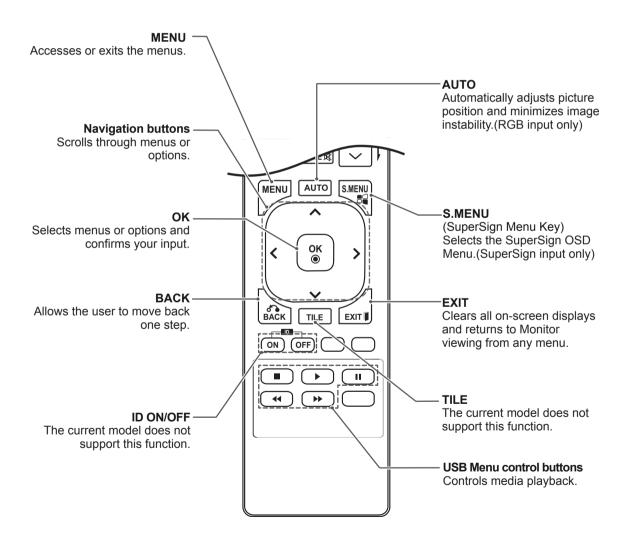
- Do not mix old and new batteries, as this may damage the remote control.
- Make sure to point the remote control at the remote control sensor on the Monitor.







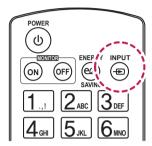




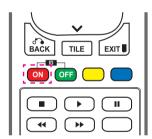
Change Device Name

You can edit the name of the external device connected to the input port to display which device is connected to the port.

1 Press INPUT to access Input List.



2 In the **Input List** screen, press the **ID ON** (red) on the remote control.



3 You can select any option for Input Label except USB.

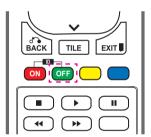
SimpLink Setting

SimpLink allows you to control various multimedia devices to enjoy the multimedia simply by using the remote control through the SimpLink menu.

1 Press INPUT to access Input List.



In the Input List screen, press the ID OFF (green) on the remote control.





- External inputs supported: AV, RGB, HDMI1, HDMI2, DVI-D, Display Port and SuperSign
- Input labels available: Blu-ray, DVD, VCR, Home theater, AV Receiver, Set-top Box, Cable Box, Satellite, IPTV, TV, Smart Box, Game, PC, Notebook, Smart phone, Camera, and Camcorder.
- The set Input Label is displayed on the Input List, or when switching the input.
- If DTV/PC compatible signals are output, the screen settings change according to the **Input Label** setting. If Input Label is set to PC, the screen's aspect ratio is automatically set to Just Scan.

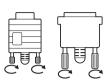
USING THE MONITOR

Connecting to a PC

Your Monitor supports the Plug & Play* feature.

* Plug & Play: This is the function that allows a PC to use the monitor without installing a driver.





- Connect the signal input cable and tighten it by turning the screws clockwise.
- Do not press the screen with your finger for a long time as this may result in temporary distortion on the screen.
- Avoid displaying a fixed image on the screen for a long period of time to prevent image burn. Use a screensaver if possible.

○ NOTE

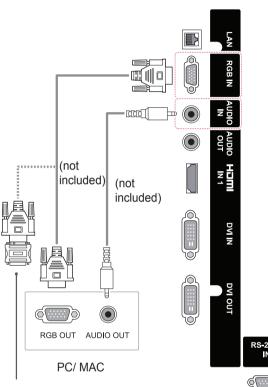
- It is recommended you use an HDMI connection for the best image quality.
- Use a shielded signal interface cable, such as D-sub 15 pin signal cable and DVI cable, with a ferrite core to maintain standard compliance for the product.
- If you turn the Monitor on when the set is cold, the screen may flicker. This is normal.
- Some red, green, or blue spots may appear on the screen. This is normal.
- For some graphic cards, the screen may not display properly when you use dual monitors.

RGB connection

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

Select RGB input source on the monitor.

Back of the product.



Macintosh Adapter (not included)





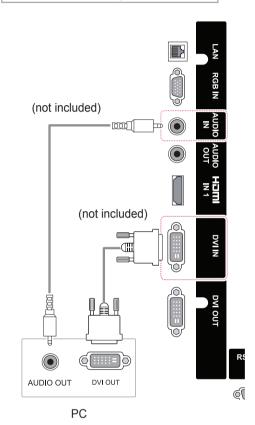
- Use the standard Macintosh adapter since an incompatible adapter is available in the market. (Different signaling system)
- Apple computers may require an adapter to connect to this monitor. Call or visit their web site for more information.

DVI-D connection

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

Select DVI-D input source on the monitor.

Back of the product.



HDMI connection

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

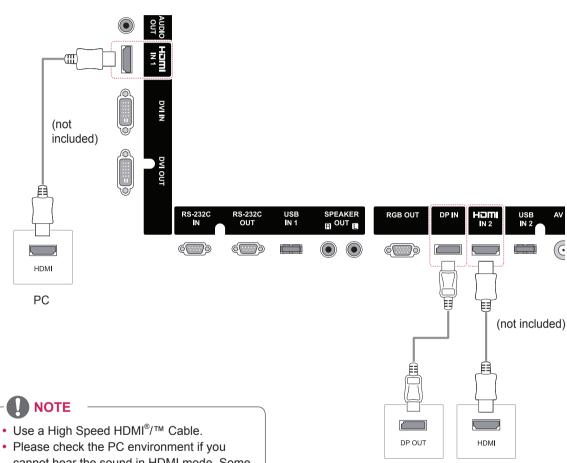
Select HDMI input source.

Display Port connection

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

Select Display Port input source.

Back of the product.



- cannot hear the sound in HDMI mode. Some PCs require you to manually change the default audio output to HDMI.
- If you want to use HDMI-PC mode, you must set the input label to PC mode.
- · When HDMI PC is used, a compatiblity problem could occur.
- · Use a certified cable with the HDMI logo attached. If you do not use a certified HDMI cable, the screen may not display or a connection error may occur.
- Recommended HDMI cable types
 - -High-Speed HDMI[®]/™ Cable
 - -High-Speed HDMI[®]/™ Cable with Ethernet



- It is recommended to use the following specifications to play 3840 x 2160 video seamlessly in HDMI or DP modes.
 - » Recommended PC specifications CPU: Intel core i7 or higher, graphic card: NVIDIA GTX TITAN or higher, AMD HD7000 series or higher.

PC

» Recommended video - For H.264, 140 Mbps or lower data transmission rate.

Using the Input List

1 Press INPUT to access the INPUT LIST.



2 Press the Navigation buttons to scroll to one of the input sources and press **OK**.

Input source	Description
AV	Watch video from a VCR or other external devices.
RGB	View a PC display on the screen.
HDMI1	Watch contents in a PC, DVD of Digital set-top box other high definition devices.
HDMI2	Watch contents in a PC, DVD of Digital set-top box other high definition devices.
Display Port	Watch contents in a PC, DVD of Digital set-top box other high definition devices.
DVI-D	View a PC display on the screen.
SuperSign	Views the Media Player display on the screen.

ENTERTAINMENT

Connecting to a wired network

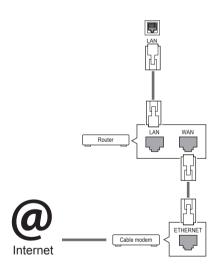
(Depending on model)

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

This monitor only supports a wired network connection.

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

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





- 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.

Follow the steps below to set up the network settings. (Even if your display is already connected automatically, running setup again will not harm anything.)

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



CAUTION

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



NOTE

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

Tips for Network setting

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

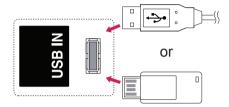
- required when using a wired connection to this display. If your internet service does not allow for such a connection, you will not be able to connect the display.
- A DSL modem is required to use DSL service and a cable modem is required to use cable modem service. Depending on the access method of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

Network Status

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

Connecting USB storage devices

Connect a USB storage device (external HDD, USB memory) to the USB port of Monitor to enjoy the content files stored in the USB device on your Monitor.





 Back up your files saved on a USB storage device frequently, as you may lose or damage the files and this may be not covered by the warranty.

Tips for using USB storage devices

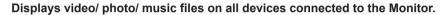
- Only a USB storage device is recognizable.
- If the USB storage device is connected through a USB hub, the device is not recognizable.
- A USB storage device using an automatic recognition program may not be recognized.
- A USB storage device which uses its own driver will not be recognized.
- The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

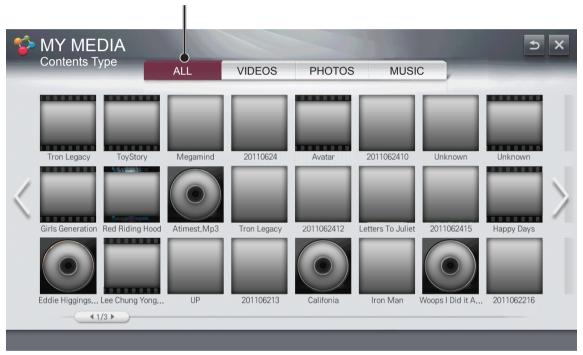
- If the USB HDD does not have an external power source, the USB device may not be detected. So be sure to connect the external power source.
 - Please use a power adaptor for an external power source.
- If your USB memory device has multiple partitions, or if you use a USB multi-card reader, you can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

Using My Media

Provides video/ photo/ music files on your Monitor by connecting to a USB device

- 1 Connecting a USB device.
- 2 Press INPUT to access the INPUT LIST.
- 3 Press the Navigation buttons to scroll to USB device and press OK.
- 4 Press the Navigation buttons to scroll to the VIDEO/ PHOTO/ MUSIC you want and press OK.





Supported File Formats

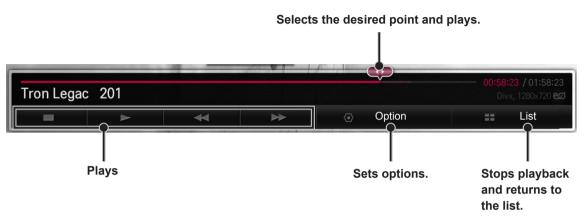
Supporting file	Maximum data transfer rate :			
	20 Mbps (megabits per second)			
	External subtitle formats supported :			
	*.smi, *.srt, *.sub (MicroDVD, SubViewer 1.0/2.0), *.ass, *.ssa,			
	*.txt (TMPlayer), *.psb (PowerDivX)			
	Internal subtitle formats supported :			
	XSUB (supports internal subtitles generated from DivX6)			

Type	Supporting file						
Video	Maximum: 1920 x 108	0 @30p					
	Extension		Codec				
	.asf	Video	VC-1 Advanced Profile, VC-1 Simple and Main Profile				
	.wmv	Audio	WMA Standard, WMA 9 Professional				
	.divx	Video	DivX3.11, DivX4, DivX5, DivX6, XViD, H.264/AVC, Motion Jpeg				
	.avi	Audio	MPEG-1 Layer I, II, MPEG-1 Layer III (MP3), Dolby Digital, Dolby Digital Plus, LPCM, ADPCM, DTS				
	.mp4	Video	H.264/AVC, MPEG-4 Part 2				
	.m4v .mov	Audio	AAC				
	.mkv	Video	H.264/AVC				
	JIIIKV	Audio	HE-AAC, Dolby Digital				
	.ts	Video	H.264/AVC, MPEG-2, VC-1				
	.trp	Audio	MPEG-1 Layer I, II, MPEG-1 Layer III (MP3) Dolby Digital, Dolby Digital Plus, AAC				
		Video	MPEG-1, MPEG-2				
	.vob	Audio	Dolby Digital, MPEG-1 Layer I, II, DVD-LPCM				
	.mpg	Video	MPEG-1				
	.mpeg	Audio	MPEG-1 Layer I, II				
Music	File type	Item	Info				
		Bit rate	32 Kbps - 320 Kbps 16 kHz - 48 kHz				
	mp3	Sample freq.					
		Support	MPEG1, MPEG2, Layer2, Layer3				
Photo	File type	Item	Profile				
		Available file type	SOF0: baseline SOF1: Extend Sequential SOF2: Progressive				
	jpeg, jpg, jpe		Minimum: 64 x 64				
		Photo size	Maximum: Normal Type: 15360 (W) x 8640 (H) Progressive Type: 1920 (W) x 1440 (H)				

Playing video

Controls playback and sets options while viewing videos.

- 1 In the MY MEDIA screen, press the Navigation button to scroll to Video and press OK.
- 2 Press the Navigation buttons to scroll to the file you want and press **OK**.



Remote Button	Description
	Stops the playback
•	Plays a video
II	Pauses or resumes the playback
4	Scans backward in a file
>	Scans forward in a file
MENU	Show the Option menu.
o o o o o o o o o o o o o o o o o o o	Return to Movie List.
< or >	Skips to specific points in a file during playback. The time of a specific point will appear on the status
\ OI /	bar. In some files, this function may not work properly.
ENERGY ED SAVING	Reduces power consumption by adjusting peak screen brightness.



NOTE

- Only 10,000 of sync blocks are supported within a 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.



CAUTION

- Some subtitles created by users may not work properly.
- The video and subtitle files should be placed in the same folder. For subtitles to display correctly, the video and subtitle files must have the same name.
- We do not support any stream that contains GMC (Global Motion Compensation) or Qpel (Quarterpel Motion Estimation).
- Only H.264 / AVC profile level 4.1 and lower is supported.
- The file size limit is dependent on the encoding environment.
- Video files created by some encoders may not be played back.
- Video files in formats other than the ones specified here may not be played back.
- Playback of video files stored on the USB device that do not support High Speed, may not work properly.
- DTS audio codec is only support with USB video file playback.

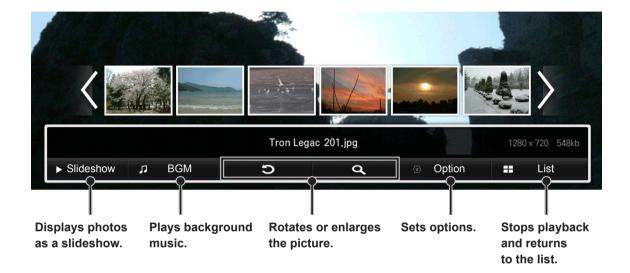
Tips for using playing video files

- 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.
- 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
 ② 25/30 P or 1280 x 720 ② 50/60 P are supported, depending on the frame.
- Videos with resolutions higher than 1920 X 1080 @ 25/30 P or 1280 x 720 @ 50/60 P may not work properly depending on the frame.
- Max bitrate of playable movie file is 20 Mbps. (only, Motion JPEG: 10 Mbps)
- A movie file more than 30 GB in file size is not supported for playback.

Viewing photos

Controls playback and sets options while viewing pictures in full screen.

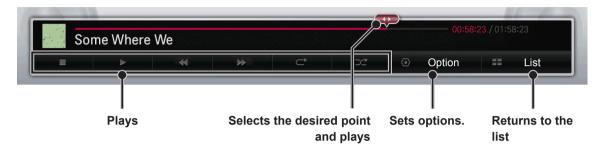
- 1 In the MY MEDIA screen, press the Navigation button to scroll to PHOTO and press OK.
- 2 Press the Navigation buttons to scroll to the file you want and press **OK**.



Listening to music

Controls playback and sets options while playing music.

- 1 In the MY MEDIA screen, press the Navigation button to scroll to MUSIC and press OK.
- 2 Press the Navigation buttons to scroll to the file you want and press **OK**.



Remote Button	Description
	Stops playback
•	Plays a music file
II	Pauses or resumes playback
••	Skips to the next file
4	Skips to the previous file
4 OL >>	When playing, When you press the doubton, the previous music file will be played. When you press the button, the next music file will be played.
ENERGY eØ SAVING	Reduces power consumption by adjusting peak screen brightness.
MENU	Show the Option menu.
< or >	When using the < or > button during playback a cursor indicating the position can be played.

CUSTOMIZING SETTINGS

PICTURE settings

- 1 Press the Navigation buttons to scroll to **PICTURE**.
- 2 Press the Navigation buttons to scroll to the setting or option you want and press **OK**.
 - To return to the previous level, press BACK.
- 3 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					
eØ	Reduces power consumption by adjusting peak screen brightness.						
Energy Saving	Level						
	Auto	Monitor sensor detects the ambient lighting and automatically adjusts the screen brightness. • Min. Luminance: Select the minimum brightness for the screen under low ambient light. • Sensing Strength: Select the Monitor's range of brightness in the viewing environment.					
	Off	Turns off Energy Saving mode.					
	Minimum/ Medium/ Maximum	Applies the pre-set Energy Saving mode.					
	Screen off	Screen is turned off after 3 seconds and only sound is played. Press any button on the remote control to turn the screen back on.					
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.					

Setting	Description					
Picture Mode	Selects the picture mode optimized for the viewing environment or the programme.					
	Mode					
	Intelligent Sensor	Detects the ambient illumination and automatically adjusts the Monitor's brightness level to reduce power consumption. Automatically adjusts brightness, sharpness, color or tint for optimum picture quality.				
	Vivid	Heightens contrast, brightness and sharpness to display vivid images.				
	Standard	Displays images in standard levels of contrast, brightness and sharpness.				
	Cinema/ Game	Displays images that have been optimized for movies or games.				
	Expert1, 2	Menu for adjusting picture quality that allows experts and amateurs to enjoy t best Monitor viewing. This menu is ISF-certified and provided for picture tunir experts. (ISF logo can only be used on ISF-certified Monitor units.) ISFccc: Imaging Science Foundation Certified Calibration Control				
Aspect Ratio	Changes the image size to view images at its optimal size (See p.35).					
Picture Wizard	Use the remote control and follow the instructions of the Picture Wizard to calibrate and adjust for optimum picture quality without expensive pattern devices or help from a specialist. Follow the instructions to obtain the optimum picture quality.					
Screen	Adjusts picture in RGB-PC mode.					
(In RGB Mode Only)	Option					
,	Resolution	Selects a proper resolution. See "Customizing PC display options".				
	Auto Config.	Adjusts 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. Run Auto Config. before adjusting these.				
	Reset	Restores all options to the default setting.				



- · 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/ Maximum the Smart Energy Saving function is disabled.
- If Energy Saving is set to Auto/ Maximum/ Screen off the Backlight function is disabled.
- Depending on the input signal, the available range of picture modes may differ.
- Expert mode is for picture tuning professionals to control and fine-tune using a specific image. For normal images, the effects may not be dramatic.

Picture Mode options

Setting	Description
Backlight	Adjusts the display brightness by varying the brightness of the LCD panel.
Contrast	Adjusts the difference between bright and dark regions of the screen.
Brightness	Adjusts the overall screen brightness.
Sharpness	Adjusts the sharpness of the borders between bright and dark.
Color	Adjusts the color on the screen darker or lighter.
Tint	Adjusts the red/green color balance.
Color Temp.	Adjusts the overall tone of color to warm or cool.
Advanced Control	Adjusts the advanced options. Refer to the Advanced image options.
Picture Option	Adjusts detailed setting for images.
Picture Reset	Restores the options to the default setting. Each picture mode is reset. Select the picture mode you wish to reset.

Advanced image options

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.
Clear White	Enhances whites on screen to make the image brighter and sharper.
Preferred Color	 Skin Color: Skin Color spectrum can be separately set to implement the skin Color as defined by the user. Grass Color: Natural color spectrum (meadows, hills, etc.) can be separately set. Sky Color: Sky color is set separately.
Super Resolution	Provides a crystal-clear picture by improving the details in areas where the picture is blurry or unclear.
Gamma	Sets the gradation curve according to the output of the picture signal in relation to the input signal.
Color Gamut	Selects the range of colors that can be expressed.

Picture Option

Setting	Description
Noise Reduction	Reduces screen noise in the video.
MPEG Noise Reduction	Reduces noise caused by compressing digital video.
Black Level	Adjusts the brightness or darkness of the screen to suit the black level of the picture input using the degree of darkness (black level) of the screen.
Real Cinema	Optimizes the screen for movie viewing.
Eye Care	Adjusts screen brightness to prevent eye glare. (Depending on model)
LED Local Dimming	Brightens bright areas and darkens dark areas of the image for maximum contrast and minimum blur while reducing power consumption. • Off: Turns off LED Local Dimming. • Low: Expresses natural black tones. Uses this setting for viewing movies. • Medium: Deepens black tones compared to Low. • High: Deepens black tones and delivers clearer image than Medium. Perfect for viewing in brightly lit areas.
Trumotion	Corrects images to display smoother motion sequences. Off: Turns off LED Local Dimming. Smooth: De-Judder / De-Blur value is set to 3. Clear: De-Judder / De-Blur value is set to 7. Clear Plus: The screen appears clearer when Clear is selected. 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.



- Setting **LED Local Dimming** to **Medium / High** reduces power consumption.
- If the video signal is 60Hz, **TruMotion** may not work.

Using the additional options

Adjusting aspect ratio

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



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 retention" or "burn-in" and not covered by the warranty.
- If the aspect ratio is set to 4:3 for a long period of time, image burn may occur on the letterboxed area of the screen.
- When using the 84WS70BS model, do not display a static image on the screen for more than two hours.

MODE	AV	RGB	Display Port		DVI-D		HDMI	
ARC		PC	DTV	PC	DTV	PC	DTV	PC
16:9	0	0	0	0	0	0	0	0
Just Scan	Х	х	0	х	0	х	0	х
Original	0	x	0	х	0	х	0	х
4:3	0	0	0	0	0	0	0	0
Zoom	0	х	0	х	0	х	0	х
Cinema Zoom 1	0	х	0	х	0	Х	0	х

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



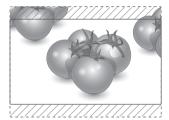
4:3: This selection will allow you to view a
picture with an original 4:3 aspect ratio, black
bars will appear on both the left and right of the
screen. This may cause image retention around
the border of the black bars.



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



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



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

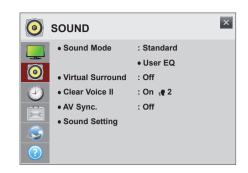


 Cinema Zoom 1: Choose Cinema Zoom when you want to enlarge the picture in correct proportion. Note: When enlarging or reducing the picture, the image may become distorted.



SOUND settings

- 1 Press the Navigation buttons to scroll to **SOUND**.
- 2 Press the Navigation buttons to scroll to the setting or option you want and press **OK**.
 - To return to the previous level, press BACK.
- 3 When you are finished, press EXIT.
 When you return to the previous menu, press BACK.



The available **SOUND** options are described in the following:

Setting		Description
Sound Mode	Allows optimized sound for custom Monitor installation.	
	Mode	
	Standard	Suitable for all types of video.
	Music/ Cinema/ Sport/ Game	Sets audio optimized for a specific genre.
	Vivid	Delivers distinct voices with rich bass and clear, high-pitched sounds.
	User Setting	Adjusts the volume to a level of your choice using the User EQ. • User EQ: - 100 Hz/ 300 Hz/ 1 kHz/ 3 kHz/ 10 kHz : Sets EQ by manual adjustment of sound bands.
		- Reset : Resets the equalizer value changed by the user.
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.	
Clear Voice II	Boosts voice clarity.	
AV Sync.	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.	
Sound Setting	Digital Audio Input: HDMI/Display Port: Outputs the sound of digital signal from HDMI and display ports through the monitor speaker. Audio In: Outputs the sound through the monitor speaker by connecting HDMI and display ports to the Audio In port. Balance: Adjusts balance between the left and right speakers according to your room environment. Speaker: *The external speaker is sold separately. On: Outputs the sound through the external speaker connected to the speaker out port of the monitor. Off: Does not output the sound through the external speaker connected to the speaker out port of the monitor. Use this option when using an external sound device.	



The remote control does not have hotkey to Sound Mode.

TIME settings

- 1 Press the Navigation buttons to scroll to TIME.
- 2 Press the Navigation buttons to scroll to the setting or option you want and press **OK**.
 - To return to the previous level, press BACK.
- 3 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	Checks or changes the time.
Off Time/ On Time	Sets the Off/On time.
Sleep Timer	Turns off the Monitor after a preset number of minutes.
Power On Delay	When connecting multiple monitors and turning the power on, the monitors are turned on individually to prevent overload.
Auto Off	If Auto off is active and there is no input signal, the set switches to off mode automatically after 15 minutes.
Automatic Standby	If you do not use the monitor for more than 4 hours, it will be in off mode automatically.

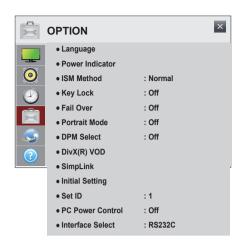


NOTE

- To use Off Time/ On Time, set the current time correctly.
- 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.
- The scheduled power-off function works properly only when the device time is set correctly.
- When the scheduled power-on and power-off times are the same, the power-off time has priority over the power-on time if the set is turned on, and vice versa if the set is turned off.
- The Automatic Standby and Auto off functions may not be available in some countries.
- The remote control does not have hotkey to Sleep Timer.

OPTION settings

- 1 Press the Navigation buttons to scroll to **OPTION**.
- 2 Press the Navigation buttons to scroll to the setting or option you want and press **OK**.
 - To return to the previous level, press BACK.
- 3 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.	
Power Indicator	Turns the standby light in the front panel of the Monitor on/off.	
ISM Method	This function remo	oves image sticking which is caused by prolonged display of static images.
	Setting	
	Normal	Minimizes image sticking by gradually lowering the brightness when displaying static images and by increasing the brightness when displaying moving images.
	Color Wash	Removes image sticking by moving every pixel in a certain pattern on the screen for a specific period of time. Please use this function to remove temporary image sticking.
Key Lock	Key input does not work. This prevents invalid key input.	
Fail Over	If there is no input	signal, it automatically switches to another input with signal.
	Setting	
	Off	Turns off Fail Over.
	Auto	Attempts to find another input source having video signal according to the defined input order if no video signal comes from the current input source.
	Manual	The input source changes according to the specified order. If there is no video signal from the specified input source, then the current input source remains.
Portrait mode	Rotate OSD clock	wise (90°,270°)
(Only 84WS70MS supports this	Option	
function.)	90°	Rotate OSD clockwise 90°.
	270°	Rotate OSD clockwise 270°.
	90	© ALDO Comment Comm
DPM Select	-	saving mode on/off.
2 00.000	io tilo ollolgy	55g555 55

Setting		Description
DivX(R) VOD	Register at http://v Uses Registration * Rented/purchase is used. Use only	stration Code for playing DivX-protected videos. od.divx.com. Code to rent or purchase movies at www.divx.com/vod. ed DivX files cannot be played if the DivX Registration Code of a different device the DivX Registration Code granted to this device. not conforming to the DivX Codec Standard may not play or may produce
SimpLink	SimpLink is a feature that enables you to control and manage various multimedia devices conveniently using the Monitor remote control.	
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) using the button and exit. Use the assigned Set ID to individually control each product using the Product Control Program.	
PC Power Control	Controls the power of the monitor with Media Player turned on. On: Turns on or off the monitor with Media Player on. Off: Turns on or off the whole system.	
Interface Select	Sets communication with Media Player and the connected PC.	
	Option	
	RS232C	Communicates with the connected PC in serial mode.
	SuperSign	Communicates with Media Player.



- The ISM Method function does not work properly in Portrait Mode.
- 84WS70BS does not support the **Portrait Mode** function.

NETWORK settings

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



The available **NETWORK** settings are described in the following:

Setting	Description
Network Connection	Configure the network settings.
Network Status	Display the network status.

SUPPORT settings

- 1 Press the Navigation buttons to scroll to **SUPPORT**.
- 2 Press the Navigation buttons to scroll to the setting or option you want and press **OK**.
 - To return to the previous level, press BACK.
- 3 When you are finished, press EXIT.
 When you return to the previous menu, press BACK.



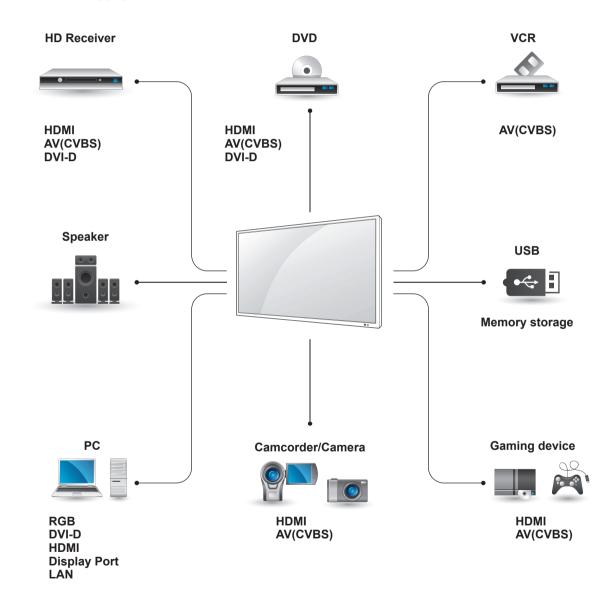
The available **SUPPORT** settings are described in the following:

Setting	Description
	Displays the model name, software version, serial number, used time, MAC address and homepage information.

MAKING CONNECTIONS

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

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





NOTE

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

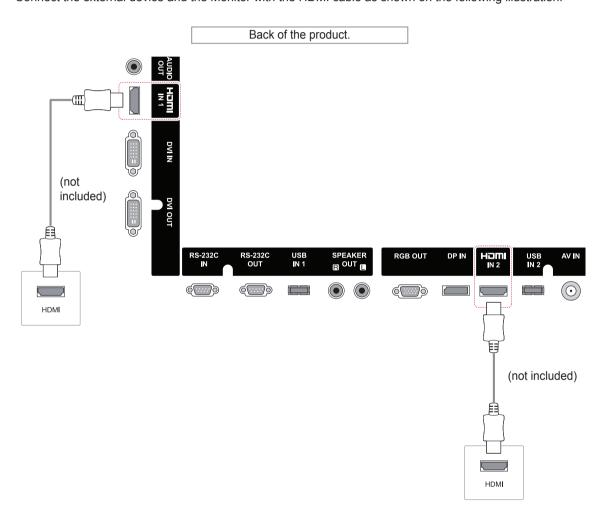
Connecting to a HD receiver, DVD, Camcorder, Camera, Gaming Device or VCR player

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

HDMI connection

Transmits the digital video and audio signals from an external device to the Monitor.

Connect the external device and the Monitor with the HDMI cable as shown on the following illustration.



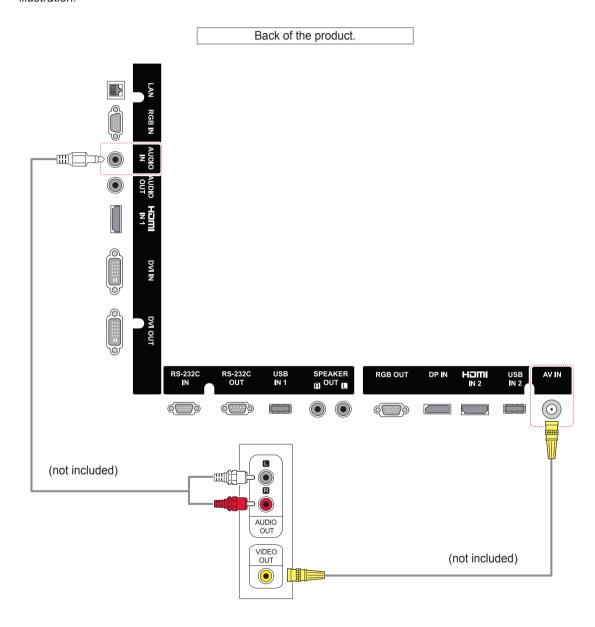
NOTE

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

AV(CVBS) connection

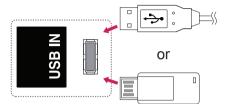
Transmits the analog video and audio signals from an external device to the Monitor.

Connect the external device and the Monitor with the 15 pin signal to RCA cable as shown on the following illustration.



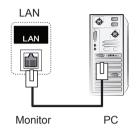
Connecting to a USB

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

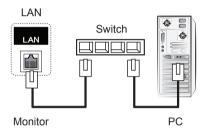


Connecting to the LAN

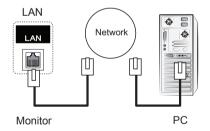
A Connect PC to Monitor directly.



B Using a router(Switch)



C Using the Internet.





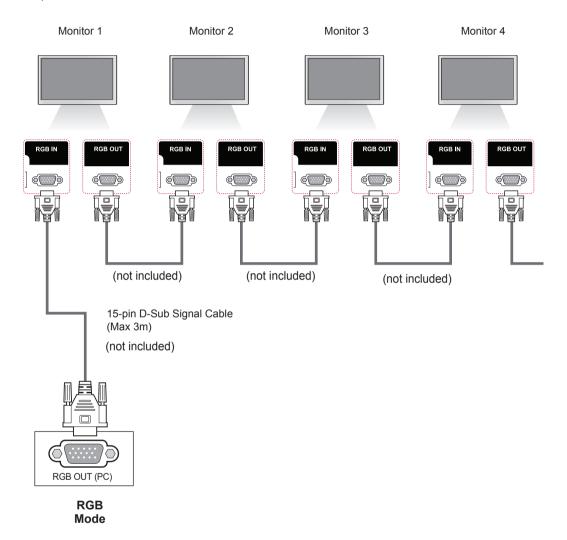
NOTE

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

Daisy Chain Monitors

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

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





NOTE

- The number of monitors that can be connected to one output may vary depending on signal status
 and cable loss. If the signal status is good, and there is no cable loss, it is possible to connect up to
 9 monitors. If you want to connect more than this number of monitors, it is recommended to use a
 distributor.
- When multi-connecting in/out cascade format, no loss cables are recommended.
- When using an HDMI DVI conversion cable or a gender, it may not be compatible with the product due to the characteristics of the signal.

TROUBLESHOOTING

No image is displayed

Problem	Resolution
Is the product power cord connected?	See if the power cord is properly connected to the outlet.
Is the power indicator light on?	See if the power switch is turned on.May need service.
Power is on, power indicator is red but the screen appears extremely dark.	Adjust brightness and contrast again.Backlight may need repair.
The power indicator amber?	 If the product is in power saving mode, move the mouse or press any key. Turn both devices off and then back on.
Does the 'Out of range' message appear?	The signal from the PC (video card) is out of the vertical or horizontal frequency range of the product. Adjust the frequency range by referring to the Specifications in this manual.
Does the 'Check signal cable' message appear?	 The signal cable between PC and product is not connected. Check the signal cable. Press the 'INPUT' menu in the remote Control to check the input signal.

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

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

'Key Lock On' message appears.

Problem	Resolution
The 'Key Lock On' message	The Lock function prevents the OSD settings from being changed
appears when pressing the	inadvertently. To release the lock, go to Menu and Option and disable
Menu button.	the Key Lock option.

The screen image looks abnormal.

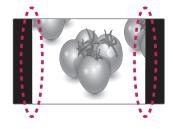
Problem	Resolution
Is the screen position wrong?	 D-Sub analog signal - Press the "AUTO" button in the remote control to automatically select the optimal screen status that fits into the current mode. If adjustment is not satisfactory, select [PICTURE] - [Screen] - [Position] in OSD menu. See if the video card resolution and frequency are supported by the product. If the frequency is out of range, set to the recommended resolution in the Control Panel "Display" Setting menu.
Do thin lines appear on the background screen?	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	Resolution
After-image appears when the	If you use a fixed image for a long time, the pixels may be damaged
product is turned off.	quickly. Use the screen-saver function.

PRECAUTIONS TO TAKE TO PREVENT IMAGE RETENTION ON THE 84WS70BS MODEL.

- If a static image is displayed for an extended period of time, the screen may be damaged and the image retention can last for a long time or could be permanent. Damage resulting from long-term static images is not covered by the product warranty.
- Do not display a static image on the screen for more than two hour. Displaying images in a 4:3 aspect
 ratio for an extended period of time may cause image retention around the border of the screen.
 Most third-party products have the same issue and this will not be accepted as a cause for refund or
 exchange.
- If you wish to display a static image for an extended period of time or install the screen in a portrait position, please use the 84WS70MS model.



The audio function does not work.

Problem	Resolution
No sound?	See if the audio cable is connected properly.
	Adjust the volume.
	See if the sound is set properly.
Sound is too dull.	Adjust the Clear Voice II, Treble and Bass appropriately.
Sound is too low.	Adjust the volume.

Screen color is abnormal.

Problem	Resolution
Screen has poor color resolution	Set the number of colors to more than 24 bits (true color) Select
(16 colors).	Control Panel - Display - Settings - Color Table menu in Windows.
Screen color is unstable or mono-colored.	 Check the connection status of the signal cable. Or, re-insert the PC video card.
Do black spots appear on the screen?	 Several pixels (red, green, white or black color) may appear on the screen, which can be attributable to the unique characteristics of the LCD panel. It is not a malfunction of the LCD.
When I set Input Label to PC in the Input List, some letters are displayed with a different color than the original color.	For Windows 7, go to Start -> 'Control Panel' -> 'Appearance and Personalization' -> 'Font' and select 'Adjust ClearType text'.

The operation does not work normally.

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

SPECIFICATIONS

I CD Panel	Screen Type	213.4 cm TFT (Thin Film Transistor)			
LOD I diloi	Обгост туро	LCD (Liquid Crystal Display) Panel.			
		Visible diagonal size : 213.4 cm			
		84" class (84.0" / 213.4 cm diagonal)			
		0.4845 mm (H) x 0.4845 mm (V)			
Video Signal	Max. Resolution	RGB, DVI-D : 1920 X 1080 @60 Hz			
		HDMI, Display Port : 3840 X 2160 @30 Hz			
		- It may not be supported depending on the OS or video card type.			
	Recommended Resolution	RGB, DVI-D : 1920 X 1080 @60 Hz			
		HDMI, Display Port : 3840 X 2160 @30 Hz			
		- It may not be supported depending on the OS or video card type.			
	Horizontal Frequency	RGB: 30 kHz to 83 kHz			
		HDMI,DVI-D, Display Port : 30 kHz to 83 kHz			
	Vertical Frequency	RGB: 56 Hz to 75 Hz			
		HDMI,DVI-D, Display Port : 56 Hz to 60 Hz			
	Synchronization Type	Separate Sync, Composite Sync, Digital			
Input Connector		15-pin D-Sub(RGB), HDMI, DVI-D, Composite(AV),			
		Display Port, RS-232C, LAN, USB, Audio			
Embedded batter		Applied			
Power	Rated Voltage	100-240 V~ 50/60 Hz 5.7 A			
	Power Consumption	On Mode: 350 W Typ.			
		Sleep Mode (RGB) : ≤ 1.5 W			
		Sleep Mode (HDMI, DVI-D, Display Port)			
		: ≤ 1.5 W (Set Only) / ≤ 2 W (With External Device)			
		Off Mode : ≤ 0.5 W			
Environmental	Operating Temperature	0 °C to 40 °C			
conditions	Operating Humidity	10 % to 80 %			
	Storage Temperature	-20 °C to 60 °C			
D :	Storage Humidity	5 % to 95 %			
Dimensions		.			
(Width x Height x Depth) / Weight					
Deptil) / Weight					
1	1923.4 mm x 1109.4 mm x	101 mm/ 72.9 kg			

* Applicable only for models that support the speakers

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

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

]"~" refers to alternating current (AC), and "__" refers to direct current (DC).

RGB (PC) supported mode

Resolution	Horizontal Frequency(kHz)	Vertical Frequency(Hz)
640 x 350	31.469	70.8
720 x 400	31.468	70.8
640 x 480	31.469	59.94
640 x 480	37.5	75
800 x 600	37.879	60.317
800 x 600	46.875	75
832 x 624	49.725	74.55
1024 x 768	48.363	60
1024 x 768	60.123	75.029
1280 x 768	47.7	60
1280 x 960	74.479	75
1360 x 768	47.72	59.799
1280 x 1024	63.981	60.02
1280 x 1024	79.98	75.02
1680 x 1050	65.290	59.954
1920 x 1080	67.5	60

HDMI/Display Port (PC) supported mode

Resolution	Horizontal Frequency(kHz)	Vertical Frequency(Hz)
640 x 480	31.469	59.94
800 x 600	37.879	60.317
1024 x 768	48.363	60
1280 x 720	44.772	59.855
1152 x 864	53.783	59.959
1280 x 960	60	60
1280 x 1024	63.981	60.02
1680 x 1050	65.290	59.954
1920 x 1080	67.5	60
3840 x 2160	67.5	30

DVI-D (PC) supported mode

Resolution	Horizontal Frequency(kHz)	Vertical Frequency(Hz)
640 x 480	31.469	59.94
800 x 600	37.879	60.317
1024 x 768	48.363	60
1366 x 768	47.7	60
1152 x 864	53.783	59.959
1280 x 960	60	60
1280 x 1024	63.981	60.02
1680 x 1050	65.290	59.954
1920 x 1080	67.5	60



NOTE

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

DTV Mode

Resolution	HDMI, Display Port (DTV)
480i	х
480p	0
576i	х
576p	0
720p	0
1080i	0
1080p	0
2160p	0

Power Indicator

Mode	Product
On Mode	Red
Sleep Mode	Amber
Off Mode	-



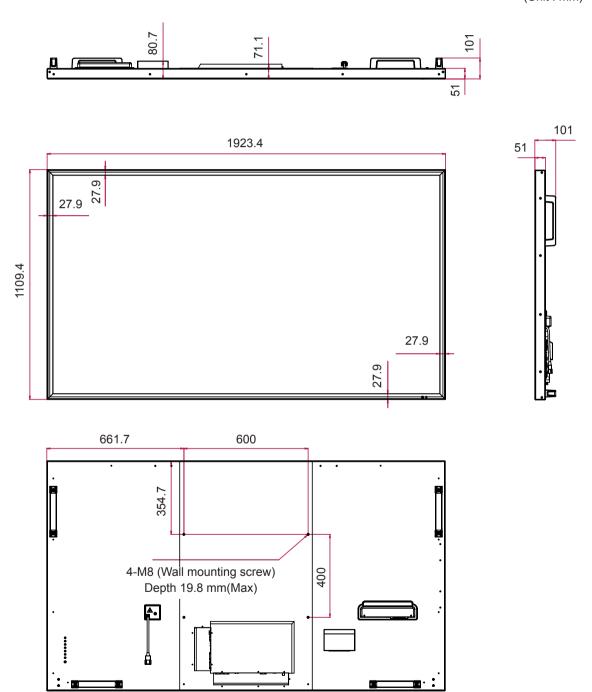
NOTE

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

Dimensions

The illustrations in this manual may differ from the actual product and accessories. Please see the "Mounting on a wall" section for sizes of screws. (See p.12)

(Unit: mm)



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

IR CODES

Code (Hexa)	Function	Note	
95	ENERGY SAVING (e\overline{\pi})	R/C BUTTON	
08	POWER (む) ON/OFF	R/C BUTTON	
0B	INPUT	R/C BUTTON	
C4	MONITOR ON	R/C BUTTON (Discrete IR Code)	
C5	MONITOR OFF	R/C BUTTON (Discrete IR Code)	
43	MENU	R/C BUTTON	
40	Up (^)	R/C BUTTON	
41	Down (V)	R/C BUTTON	
07	Left (<)	R/C BUTTON	
06	Right (>)	R/C BUTTON	
44	OK (®)	R/C BUTTON	
28	BACK (🍅)	R/C BUTTON	
5B	EXIT	R/C BUTTON	
4D	PSM	R/C BUTTON	
02	Volume (+)	R/C BUTTON	
03	Volume (-)	R/C BUTTON	
09	MUTE	R/C BUTTON	
E0	BRIGHTNESS ^ (PAGE UP)	R/C BUTTON	
E1	BRIGHTNESS ➤ (PAGE Down)	R/C BUTTON	
10 to 19	Number Key 0 to 9	R/C BUTTON	
72	Red Key (ID ON)	R/C BUTTON	
71	Green Key (ID OFF)	R/C BUTTON	
63	Yellow Key	R/C BUTTON	
61	Blue Key	R/C BUTTON	
7B	TILE	The current model does not support this function.	
76	ARC (4:3)	Discrete IR Code	
77	ARC (16:9)	Discrete IR Code	
AF	ARC (ZOOM,Cinema Zoom 1)	Discrete IR Code	
79	ARC (MARK)	R/C BUTTON (Discrete IR Code)	
99	Auto Config.	R/C BUTTON (Discrete IR Code)	
B1		R/C BUTTON	
В0	>	R/C BUTTON	
BA	II	R/C BUTTON	
8F	≪	R/C BUTTON	
8E	>	R/C BUTTON	

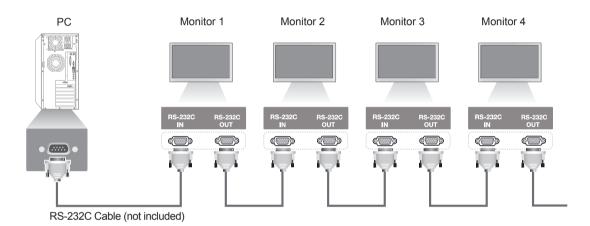
CONTROLLING THE MULTIPLE PRODUCT

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

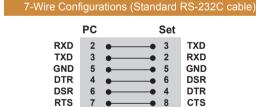
Connecting the cable

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

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



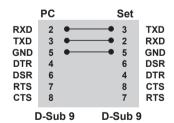
RS-232C Configurations



D-Sub 9 D-Sub 9

RTS

3-Wire Configurations (Not Standard)



Communication Parameter

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

CTS

Communication Code : ASCII code

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

Command reference list

		COMMAND		
		1 2		DATA
01	Power	k	а	00H to 01H
02	Aspect Ratio	k	С	01H to 1FH
03	Screen Mute	k	d	00H to 01H
04	Volume Mute	k	е	00H to 01H
05	Volume Control	k	f	00H to 64H
06	Contrast	k	g	00H to 64H
07	Brightness	k	h	00H to 64H
08	Color	k	i	00H to 64H
09	Tint	k	j	00H to 64H
10	Sharpness	k	k	00H to 32H
11	OSD Select	k	I	00H to 01H
12	Remote Lock/ key Lock	k	m	00H to 01H
13	Audio Balance	k	t	00H to 64H
14	Abnomal state	k	Z	FFH
15	White Balance Red Gain	j	m	00H to FEH
16	White Balance Green Gain	j	n	00H to FEH
17	White Balance Blue Gain	j	0	00H to FEH
18	ISM Method	j	р	20H, 08H
19	Energy Saving	j	q	00H to 05H
20	Auto configuration	j	u	01H
21	Remote Key	m	С	Refer to Remote Key code
22	Backlight	m	g	00H to 64H
23	Fail Over Select	m	i	00H to 02H
24	Fail Over Input Select	m	j	Refer 'Fail Over Input Select'
25	Automatic Standby	m	n	00H to 01H
26	PC Power Control	d	t	00H to 01H
27	PC Power	d	S	00H to 01H
28	Picture mode (PSM)	d	Х	00H to 07H
29	Sound mode	d	у	01H to 07H
30	Elapsed time return	d	I	FFH
31	Temperature value	d	n	FFH
32	Speaker	d	V	00H to 01H
33	Sleep Time	f	f	00H to 08H
34	Auto Sleep	f	g	00H to 01H
35	Power On Delay	f	h	00H to 64H
36	Language	f	i	00H to 12H
37	DPM Select	f	j	00H to 01H
38	Reset	f	k	00H to 02H
39	Power Indicator(Standby Light)	f	0	00H to 01H
40	Power Indicator(Power Light)	f	р	00H to 01H
41	Serial no.	f	у	FFH

		COMMAND		DATA	
		1	2	DAIA	
42	S / W Version	f	z	FFH	
43	Time 1(Years/ Months/ Days)	f	а	Refer to 'Time 1'	
44	Time 2(Hours/ Minutes/Seconds)	f	х	Refer to 'Time 2'	
45	Off Time Schedule	f	С	00H to 01H	
46	On Time Schedule	f	b	00H to 01H	
47	Off Timer(Repeat mode/ Time)	f	е	Refer to 'Off Timer'	
48	On Timer(Repeat Mode/ Time)	f	d	Refer to 'On Timer'	
49	On Timer Input	f	u	Refer to 'On Timer Input'	
50	H Position	f	q	00H to 64H	
51	V Position	f	r	00H to 64H	
52	H Size	f	s	00H to 64H	
53	Input Select	х	b	20H to D0H	
54	Color Temperature	х	u	00H to 64H	

Note: When using the product with a USB DivX player, all commands except for Power (k a), Key (m c),
Abnormal state (k z), Elapsed time return (d l), Temperature value (d n), Serial no.Check (f y) and S/W
Version (f z) are not executed and handled as errors.

Transmission/ Receiving protocol

Transmission

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

- * [Command 1]: First command. (k, j, m, d, f, x)
- * [Command 2]: Second command.(a to z)
- * [Set ID]: Set up the Set ID number of product. range: 01H to 63H. by setting '0', server can control all products.
- * In case of operating with more than 2 sets using set ID as '0' at the same time, it should not be checked the ack message. Because all sets will send the ack message, so it's impossible the check the whole ack messages.
- * [DATA]: To transmit command data.

Transmit 'FF' data to read status of command.

- * [Cr]: Carriage Return (ASCII code '0 x 0 D')
- * []: ASCII code Space (0 x 20)

OK Acknowledgement

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

- * The Product transmits ACK (acknowledgement) based on this format when receiving normal data. At this time, if the data is data read mode, it indicates present status data. If the data is data write mode, it returns the data of the PC computer.
- * Note: In this mode, display will send the acknowledgement after power on processing completion.

There might be a time delay between command and acknowledgement.

* No acknowledgement signal will be sent from display, if Set ID in transmission signal is set to '00' (=0x00).

Error Acknowledgement

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

* If there is error, it returns NG

* Real data mapping

Hexadecimal Num. (Setting Value)	Decimal Num. (Real Value)
0	0
Α	10
F	15
10	16
20	32
64	100
FE	254
FF	255

03. Screen Mute(Command: k, d) To select screen mute on / off.

Transmission

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

00: Screen on 01: Screen off

Acknowledgement

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

01. Power(Command: k, a)

To control Power On/Off of the set.

Transmission

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

Data

00: Power Off 01: Power On

Acknowledgement

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

- * The normal acknowledgement signal returns after the power of the set is turned on completely.
- * There might be a time delay between the transmission and acknowledgement signals.

04. Volume Mute(Command: k, e)

To control On/Off of the Volume Mute.

Transmission

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

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

Acknowledgement

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

02. Aspect Ratio(Command: k, c)

To adjust the screen format.

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

Transmission

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

Data

01: Normal Screen(4:3)

02: Wide Scran(16:9)

04: Zoom(AV, Component, HDMI/ Display Port DTV)

06: Original

09: Just Scan(HDMI1/ HDMI2/ DVI/ Display Port

-DTV)

* Available only with 720p or higher.

10 to 1F: Cinema Zoom 1 to 16(AV, HDMI1/HDMI2/

DVI/Display Port -DTV)

Acknowledgement

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

05. Volume Control(Command: k, f)

To adjust Volume.

Transmission

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

Min. 00H to Max. 64H: 0~100

* Refer to 'Real data mapping'.

Acknowledgement

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

06. Contrast(Command: k, g)

To adjust screen contrast.

You can also adjust the contrast in the Picture menu.

Transmission

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

Data

Min. 00H to Max. 64H: 0~100

* Refer to 'Real data mapping'.

Acknowledgement

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

09. Tint(Command: k, j)

To adjust the screen tint.

You can also adjust the tint in the Picture menu.

Transmission

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

Data

Min. 00H to Max. 64H

00H: Step R50

64H: Step G50

* Refer to 'Real data mapping'.

Acknowledgement

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

07. Brightness(Command: k, h)

To adjust screen brightness.

You can also adjust the brightness in the Picture menu.

Transmission

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

Data

Min. 00H to Max. 64H: 0~100 * Refer to 'Real data mapping'.

Acknowledgement

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

10. Sharpness(Command: k, k)

To adjust the screen Sharpness.

You can also adjust the sharpness in the Picture menu.

Transmission

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

Data

Min. 00H to Max. 32H: 0~50

* Refer to 'Real data mapping'.

Acknowledgement

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

08. Color(Command: k, i)

To adjust the screen color.

You can also adjust the color in the Picture menu.

Transmission

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

Data

Min. 00H to Max. 64H: 0~100

* Refer to 'Real data mapping'.

Acknowledgement

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

11. OSD Select(Command: k, I)

To control OSD on/off to the set.

Transmission

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

Data

00: OSD Off 01: OSD On

Acknowledgement

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

12. Remote Lock /Key Lock(Command: k, m)

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

Transmission

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

Data 00: Off 01: On

Acknowledgement

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

15. White Balance Red Gain(Command: j, m)

To adjust white balance red gain.

Transmission

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

00~FE: Red gain 0~254

Acknowledgement

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

13. Balance(Command: k, t)

To adjust the sound balance.

Transmission

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

Min. 00H to Max. 64H 00H: Step L50 64H: Step R50

* Refer to 'Real data mapping'.

Acknowledgement

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

16. White Balance Green Gain(Command: j, n)

To adjust white balance green gain.

Transmission

[i][n][][Set ID][][Data][Cr]

00~FE: Green gain 0~254

Acknowledgement

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

14. Abnormal state(Command: k, z)

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

Transmission

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

Data

FF: Check the status

Acknowledgement

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

00: Normal (Power on and signal exist)

01: No signal (Power on)

02: Turn the monitor off by Remote Control 03: Turn the monitor off by Sleep Timer function

04: Turn the monitor off by RS-232C function

08: Turn the monitor off by Off Time function

09: Turn the monitor off by Auto Off function

17. White Balance Blue Gain(Command: j, o)

To adjust white balance blue gain.

Transmission

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

00~FE: Blue gain 0~254

Acknowledgement

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

18. ISM Method(Command: j, p)

Used to select the afterimage preventing function.

Transmission

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

Data

20: Color Wash 08: Normal

Acknowledgement

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

21. Remote Key(Command: m, c)

To send IR remote key code.

Transmission

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

Data: Refer to 'IR CODES'.

Acknowledgement

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

19. Energy Saving(Command: j, q)

To reduce the power consumption of the Monitor.

Transmission

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

Data

04: Auto

00: Off

01: Minimum

02: Medium

03: Maximum

05: Screen Off

Acknowledgement

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

22. Backlight(Command: m, g)

To adjust light of the Backlight.

Transmission

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

Data

Min. 00H to Max. 64H: 0~100

* Refer to 'Real data mapping'.

Acknowledgement

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

* If Energy Saving is set to Auto/ Maximum/ Screen off the Backlight function is disabled.

20. Auto Config.(Command: j, u)

To adjust picture position and minimize image shaking. Automatically.

* Only applies to RGB(PC) mode.

Transmission

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

Data 01: To set

Acknowledgement

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

23. Fail Over Select(Command: m, i)

To select Fail Over mode.

Transmission

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

Data 00: Off

01: Auto 02: Manual

Acknowledgement

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

24. Fail Over Input Select(Command: m, j)

To select fail over mode.

* Only available in Fail Over is Manual mode.

Transmission

[m][j][][Set ID][][Data1][][Data2][][Data3][] [Data4][][Data5][Cr]

Data1~5(Priority 1~5)

60: RGB

70: DVI-D

90: HDMI1

91: HDMI2

C0: Display Port

* Use 0x70 as data for DVI-D input, 0x90 as data for HDMl1 input, 0x91 as data for HDMl2 input, 0xC0 as data for DisplayPort input, regardless their input labels.

Acknowledgement

[j][][Set ID][][OK/NG][Data1][Data2]

[Data3][Data4][Data5][x]

27. PC Power(Command: d, s)

To control the PC power when the PC and the monitor are not synchronized.

Transmission

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

Data

00: PC it turned off.

01: PC is turned on.

Acknowledgement

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

25. Automatic Standby(Command: m, n)

To set the Automatic Standby function.

Transmission

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

Data

00: Off (The Automatic Standby function is not used)

01: 4 hours (The set is turned off after four hours)

Acknowledgement

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

28. Picture Mode(Command: d, x)

To adjust the picture mode.

Transmission

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

Data Structure

Data (Hex)	Mode	
00	Vivid	
01	Standard	
02	Cinema	
04	Game	
05	Expert1	
06	Expert2	
07	Intelligent Sensor	

^{*} If you select Intelligent Sensor, you cannot adjust Contrast, Brightness, Color, Tint, Sharpness, and Color Temp.

Acknowledgement

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

26. PC Power Control(Command: d, t)

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

Transmission

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

Data

00: Synchronized (When the monitor is off, the PC is also turned off.)

01: Not synchronized (The monitor is off but the PC is on.)

Acknowledgement

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

^{*} If you select Cinema, Expert1, or Expert2, you cannot adjust Color Temp.

29. Sound Mode(Command: d, y)

To adjust the Sound mode.

Transmission

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

Data Structure

Data(Hex)	Mode		
01	Standard		
02	Music		
03	Cinema		
04	Sport		
05	Game		
06	Vivid		
07	User Setting		

Acknowledgement

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

30. Elapsed time return(Command: d, l)

To read the elapsed time.

Transmission

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

Data

FF: Read the elapsed time

Acknowledgement

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

32. Speaker(Command: d, v)

Turn the speaker on or off.

Transmission

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

Data

00: Off

01: On

Acknowledgement

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

33. Sleep Timer(Command: f, f)

Set Sleep Timer.

Transmission

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

Data

00: Off

01: 10 minutes

02: 20 minutes

03: 30 minutes

04: 60 minutes

05: 90 minutes

06: 120 minutes

07: 180 minutes

08: 240 minutes

Acknowledgement

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

31. Temperature value(Command: d, n)

To read the inside temperature value.

Transmission

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

Data

FF: Check the temperature

Acknowledgement

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

34. Auto Sleep(Command: f, g)

To set Auto Sleep.

Transmission

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

Data

00: Off (The Auto Off function is not used)

01: 15 min. (If there is no signal for 15 minutes, the

set is turned off)

Acknowledgement

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

35. Power On Delay(Command: f, h)

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

Transmission

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

Min. 00H to Max. 64H: 0~100 seconds

* Refer to 'Real data mapping'.

Acknowledgement

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

36. Language(Command: f, i)

Set the OSD language.

Transmission

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

Data

00: Czech

01: Danish

02: German

03: English

04: Spanish(EU)

05: Greek

06: French

07: Italian

08: Dutch

09: Norwegian

0a: Portuguese(EU)

0b: Portuguese(Brazil)

0c: Russian

0d: Finnish

0e: Swedish

Of Korean

10: Simplified Chinese

11: Japanese

12: Traditional Chinese

Acknowledgement

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

38. Reset(Command: f. k)

Execute the Picture, Screen and Factory Reset functions.

Transmission

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

00 : Picture Reset

(Reset the values set in the PICTURE menu.)

01: Screen Reset

(Reset the values set in under the Screen option.)

02 : Factory Reset

(Reset the values set in the OPTION menu.)

03: Audio Reset

(Reset the values set in the AUDIO menu.)

Acknowledgement

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

39. Power Indicator(Standby Light)(Command: f,

To set the Standby Light.

Transmission

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

Data 00: Off 01: On

Acknowledgement

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

40. Power Indicator(Power Light)(Command: f, p) To set the Power Light.

Transmission

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

Data 00: Off 01: On

Acknowledgement

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

37. DPM Select(Command: f, j)

Set the DPM (Display Power Management) function.

Transmission

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

Data 00: Off 01: On

Acknowledgement

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

41. Serial no.Check(Command: f, y)

Check the Serial no.

Transmission

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

Data

FF: Check the Serial no.

Acknowledgement

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

44. Time 2(Hours/Minutes/Seconds)(Command: f, x)

To set Time 2 (Hours/ Minutes/ Seconds).

Transmission

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

Data

00 - 17: 00 - 23 hours

Data2

00 - 3B: 00 - 59 minutes

Data3

00 - 3B: 00 - 59 seconds

* To check the settings of the Time 2, enter "fx [Set

** If the Time 1 is not set, this command does not work.

Acknowledgement

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

42. S/W Version(Command: f, z)

Check the software version.

Transmission

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

Data

FF: Check the software version.

Acknowledgement

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

45. Off Time Schedule(Command: f, c)

To set whether to activate the Off Time schedule.

Transmission

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

Data 00: Off 01: On

Acknowledgement

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

43. Time 1(Year/ Month/ Day)(Command: f, a)

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

Transmission

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

Data1

00 to 1E: 2010 to 2040

Data2

01 to 0C: January to December

Data3

01 to 1F: 1th to 31th

* Enter "fa [Set ID] ff" for checking Time 1 values.

Acknowledgement

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

46. On Time schedule(Command: f, b)

To set whether to activate the On Time schedule.

Transmission

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

Data 00: Off 01: On

Acknowledgement

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

47. Off Timer(Repeat mode/Time)(Command: f, e)

To set Off Time (Repeat mode/Time).

Transmission

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

Data1

- 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 - 17: 00 - 23 hours

Data3

00 - 3B: 00 - 59 minutes

* If Time 1, 2 are not set, this command does not work.

Acknowledgement

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

To check Off Time (Repeat mode/Hours/Minutes).

Transmission

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

Data 1

f1-f7: The first to the seventh index number of the Off Time list

Acknowledgement

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

[Data4][x

Data1

f1-f7: The first to the seventh index number of the Off

Time list

Data2

- 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

Data3

00 - 17: 00 - 23 hours

Data4

00 - 3B: 00 - 59 minutes

To delete Off Time (Repeat mode/Hours/Minutes).

Transmission

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

Data

e0: Delete all

e1 - e7: Delete from the first to the seventh index of the Off Time list

Acknowledgement

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

Data

e0: Delete all

e1 - e7: Delete from the first to the seventh index of

the Off Time list

48. On Timer(Repeat mode/Time)(Command: f, d)

To set On Time (Repeat mode/Time).

Transmission

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

Data1

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 - 17: 00 - 23 hours

Data3

00 - 3B: 00 - 59 minutes

* If Time 1, 2 are not set, this command does not work.

Acknowledgement

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

To check On Time (Repeat mode/Hours/Minutes).

Transmission

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

Data1

f1-f7: The first to the seventh index number of the On Time list

Acknowledgement

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

[Data4][x]

Data1

f1-f7: The first to the seventh index number of the On

Time list

Data2

01: Once

02. Daily

03: Mon. - Fri.

04: Mon. - Sat.

05: Sat. - Sun.

06. Every Sunday 07. Every Monday

08. Every Tuesday

oo. Every ruesuay

09. Every Wednesday

0A. Every Thursday

0B. Every Friday

0C. Every Saturday

Data3

00 - 17: 00 - 23 hours

Data4

00 - 3B: 00 - 59 minutes

To delete On Time (Repeat mode/Hours/Minutes).

Transmission

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

Data

e0: Delete all

e1 - e7: Delete from the first to the seventh index of the Off Time list

Acknowledgement

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

Data

e0: Delete all

e1 - e7: Delete from the first to the seventh index of

the On Time list

49. On Timer Input(Command: f, u)

Select the video input when using On Timer.

Transmission

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

Data

20: AV

60: RGB

70: DVI-D

90: HDMI1

91: HDMI2

C0: Display Port

B0: SuperSign

* If the Time 1, 2, and On Time (Repeat mode/Time) are not set, this command does not work.

* To set the On Time schedule correctly, the On Timer (Repeat mode/Time) command must be executed prior to this command.

Acknowledgement

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

To check the On Timer Input settings.

Transmission

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

Data1

f1-f7: The first to the seventh index number of the On Time Input list

Acknowledgement

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

Data1

The first to the seventh index number of the On Time Input list

Data2

20: AV

60. RGB

70: DVI

90: HDMI1

91: HDMI2

C0: Display Port

B0: SuperSign

50. H Position(Command: f, q)

To set the horizontal position.

* Only available when Tile Mode is off.

Transmission

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

Data

Min. 00H to Max. 64H: Min. -50 (Left) - Max. 50 (Right) * Data input range may vary depending on the resolution.

Acknowledgement

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

51. V Position(Command: f, r)

To set the vertical position of the screen.

* This function is only available when there is RGB input signal.

Transmission

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

Data

Min. 00H to Max. 64H: Min. -50 (down) - Max. 50 (up)

* Data input range may vary depending on the resolution

Acknowledgement

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

52. H Size(Command: f, s)

To set the horizontal size of the screen.

* This function is only available when there is RGB input signal.

Transmission

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

Data

Min. 00H to Max. 64H: Min. -50 (Zoom out) - Max. 50 (Zoom in)

* Data input range may vary depending on the resolution.

Acknowledgement

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

53. Input Select(Command: x, b)

To select input source for the Set.

Transmission

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

Data

20: AV

60: RGB-PC

70: DVI-D(PC)

80: DVI-D

90: HDMI1

91: HDMI2

A0: HDMI1(PC)

A1: HDMI2(PC)

B0: SuperSign(PC)

C0: Display Port

D0: Display Port(PC)

Acknowledgement

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

54. Color Temperature(Command: x, u)

To adjust the screen color temperature.

Transmission

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

00~64: Warm 50 ~ Cool 50

Acknowledgement

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



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

Keep the Owner's Manual(CD) in an accessible place for future reference.

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

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

WARNING -This is a class A product. In a domestic

environment this product may cause radio

interference in which case the user may be required

to take adequate measures.

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MODEL		
SERIAL		





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

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USING THE MONITOR

Using the Input List

- 1 Press **INPUT** to access the input source list.
- 2 Press the navigation buttons to scroll to one of the input sources and press **OK**.
 - AV: Watch video from a VCR or other external devices.
 - Component: Watch the content from a DVD or other external devices, or through a digital set-top box.
 - **RGB**: View a PC display on the screen.
 - HDMI: Watch contents from a PC, DVD of digital set-top box other high definition devices.
 - **USB**: Plays the multimedia file saved in the USB.
 - **DVI-D**: View a PC display on the screen.

Adjusting Aspect Ratio

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

MODE	AV	Commonant	RGB	HDI	MI	DV	I-D
ARC	AV	Component	PC	DTV	PC	DTV	PC
16:9	0	О	0	0	0	0	О
Just Scan	х	О	х	0	х	0	х
Set By Program	0	х	х	0	х	0	х
4:3	0	О	0	0	0	0	0
Zoom	0	0	х	0	х	0	х
Cinema Zoom	0	0	х	0	х	0	х



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 Zoom** 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.

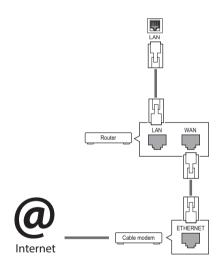
ENTERTAINMENT

Connecting to a Wired Network

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

Only supports wired network connection.

After making a physical connection, a small number of networks may require the display network settings to be adjusted. For most networks, the display will connect to automatically without any adjustments. For detail information, contact your internet provider or router manual.



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

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



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

! CAUTION

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

NOTE

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

Tips for Network Setting

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

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

Network Status

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

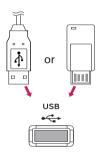
Option	Description
Setting	Return to the network setting menu.
Test	Test the current network status after setting the network.
Close	Return to the previous menu.

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

Tips for Using USB Storage Devices

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

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

Browsing Files

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 or Content List that you want, and press OK.

Supported file format

Туре	Supported file format			
Movie		Codec	Media Container	Profile
	Video	MPEG1 / MPEG2	DAT, MPG, MPEG, DVD, 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
	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)			
Photo	JPEG Baseline: 64 x 64 to 15360 x 8640 Progressive: 64 x 64 to 1920 x 1440 PNG Interlace: 1200 x 800 BMP 9600 x 6400 • Non-supported files are displayed in the form of predefined icon.			
Content	File Extensions : *.cts/ *.cse			
(when using	Movie			
SuperSign	File Extensions: *.mpg/*.mpeg/*.dat/*.ts/*.trp/*.tp/*.mp4/*.mkv/*.avi/*. avi(motion JPEG)/*.mp4(motion			
Manager)	Video format: MPEG1, MPEG2, MPEG4,H.264, DivX 3.11, DivX 4, DivX 5, DivX 6,			
				DivX 6,
	Xvid 1.00,Xvid	l 1.01, Xvid 1.02, Xvid 1.03,Xvid	d 1.10-beta1/2, JPEG	

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**.
 - 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.	
Ш	Pauses or resumes the playback.	
•	Scans backward in a file.	
•	Scans forward in a file.	
eØ	Adjusts the screen brightness to save energy.	
SETTINGS	Show the Option menu.	
5	Hide the menu on the full-sized screen.	
BACK		
EXIT	Returns to Movie List .	
∢or▶	Skips to specific points in a file during playback. The time of a specific point will appear on the status bar. In	
	some files, this function may not work properly.	

Tips for using playing video files

- Some user-created subtitles may not work properly.
- Some special characters are not supported in subtitles.
- HTML tags are not supported in subtitles.
- Subtitles in languages other than the supported languages are not available.
- 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 structure of recorded file is not interleaved, video 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.
- A movie file more than 30 GB in file size is not supported for playback.
- A DivX movie file and its subtitle file must be located in the same folder.
- A video file name and its subtitle file name must be identical for it to be displayed.
- Playing a video via a USB connection that doesn't support high speed may not work properly.
- Files encoded with GMC(Global Motion Compensation) may not be played.

Video options

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



- The option values changed in Movie List do not affect Photo List. Therefore, they are not affected by option values changed in Photo List.
- The option values changed in **Photo 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.	
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 synchronisation of the subtitle from -10 secs to +10 secs by steps of 0.5 secs during	
	movie play.	
Position	Changes the position of the subtitle either up or down during movie play.	
Size	Selects your desired Subtitle size during movie play.	
Repeat	Turn on/off repeat function of movie playback. When turned on, the file within the folder will be played	
	back repeatedly. Even when the repeated playback is turned off, it can run the playback if the file name	
	is similar to the previous file.	



- 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**.
 - 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 .
υ	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.
Q	Enlarges the photo by 100 %, 200 % or 400 %. NOTE • Photos with a resolution of 100 x 100 or less cannot be enlarged.
eØ	Adjusts the screen brightness to save energy.
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.** and press **OK**.



- The option values changed in **Movie List** do not affect **Photo List**. Therefore, they are not affected by option values changed in **Photo List**.
- The option values changed in **Photo 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.)

Viewing the Contents List

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

- 1 Press **SETTINGS** to access the main menu.
- 2 Press the navigation button to scroll to **MY MEDIA** and press **OK**.
- 3 Press the navigation button to scroll to **Contents List** and press **OK**.
- 4 Press the navigation buttons to scroll to a folder you want and press **OK**.
- 5 Press the navigation buttons to scroll to a file you want and press **OK**.
 - 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.



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

DivX® VOD Guide

DivX® VOD Registration

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

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

NOTE

- While you are checking the registration code, some buttons may not work.
- If you use the DivX registration code of another device, you cannot play the rented or purchased DivX file.

 Make sure to use the DivX registration code assigned to your product.
- The video or audio files that are not converted by the standard DivX codec may be corrupted or not be played.
- The DivX VOD code allows you to activate up to 6 devices under one account.

DivX® VOD Deregistration

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

- 1 Press **SETTINGS** to access the main menus.
- 2 Press the navigation buttons to scroll to MY MEDIA and press OK.
- 3 Press the Blue button.
- 4 Press the navigation buttons to scroll to **Deactivation** and press **OK**.
- 5 Press the navigation buttons to select **Yes** to confirm.
- 6 When you are finished, press **EXIT**. When you return to the previous menu, press **BACK**.



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

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.
 - TIME: Sets the time, date, or timer feature.
 - **OPTION:** Sets the functions of OPTION.
 - **NETWORK**: Sets the functions of NETWORK.
 - **INPUT**: Selects the input mode.
 - MY MEDIA: Display and play movie, photo content stored on your USB.

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			
e∅ Energy Saving	Reduces power consumption by adjusting peak screen brightness. * Return to default settings by clicking General -> Reset to Initial Settings .			
	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		light and contrast depending on the screen brightness. It settings by clicking General -> Reset to Initial Settings .		
	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		re mode optimized for the viewing environment or the programme. It settings by clicking General -> Reset to Initial Settings .		
	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.		
	Expert1-2	Menu for adjusting picture quality that allows experts and amateurs to enjoy the best Monitor viewing. This menu is ISF-certified and provided for picture tuning experts. (ISF logo can only be used on ISF-certified Monitor units.) ISFccc: Imaging Science Foundation Certified Calibration Control		
Aspect Ratio	Changes the image size to view images at its optimal size.			

Setting	Description		
Screen	Customizes the PC	display options in RGB mode.	
(In RGB Mode Only)	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.



- 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.
- Return to default settings by clicking General -> Reset to Initial Settings.

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

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

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	Setting Description		
Clock	Sets the time feature.		
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.		



NOTE

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

OPTION Settings

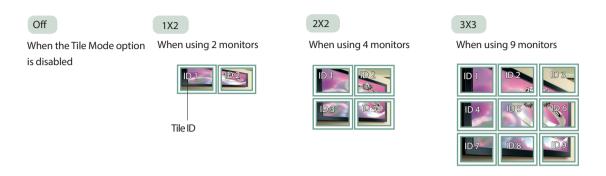
- 1 Press **SETTINGS** to access the main menus.
- 2 Press the navigation buttons to scroll to **OPTION** and press **OK**.
- 3 Press the navigation buttons to scroll to the setting or option you want and press **OK**.
 - To return to the previous level, press **BACK**.
- 4 When you are finished, press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

The available option settings are described in the following:

Setting	Description			
Language	Selects a language for the display text.			
ISM Method	A frozen or still picture from a PC/Video game displayed on the screen for prolonged periods could result in a ghost image remaining even when you change the image. Avoid allowing a fixed image to remain on the screen for a long period of time.			
	Option			
	Normal	Minimizes image sticking by gradually lowering the brightness when displaying static images and by increasing the brightness when displaying moving images.		
	Color Wash	Removes image sticking by moving every pixel in a certain pattern on the screen for a specific period of time. Please use this function to remove temporary image sticking.		
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 option	Deletes all optional settings and returns to initial default mode.		
Set ID	connected for disp	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. - Must be operating by connecting to an RGB/DVI-D cable and a distributor. - Select Tile Mode, set rows and columns, and then enter the tile ID to set the location. * Only after pressing the SET button the adjustments made to the settings will be saved. - Tile Mode: row x column (row = 1 to 15, column = 1 to 15). - 15 x 15 available. - Configuration of an integration screen is also available as well as		
	Auto Config.	Adjusts the Tile Mode automatically. This function is available for analog signals only.		
	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.		

Tile Mode

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



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.





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 Status	twork Status Display the network status.	

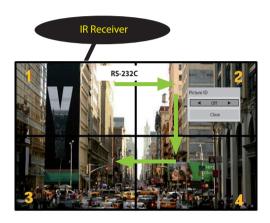
IR CODES

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

Code (Hexa)	Function	Note
08	ტ (Power)	R/C BUTTON
OB	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	Volume (+)	R/C BUTTON
03	Volume (-)	R/C BUTTON
79	ARC	R/C BUTTON
99	AUTO	R/C BUTTON
09	MUTE	R/C BUTTON
EO	BRIGHTNESS ^ (Page UP)	R/C BUTTON
E1	BRIGHTNESS ∨ (Page Down)	R/C BUTTON
4D	PSM	R/C BUTTON
AA	INFO (i)	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	ОК	R/C BUTTON
28	BACK	R/C BUTTON
5B	EXIT	R/C BUTTON
7E	SIMPLINK	R/C BUTTON
7B	TILE	R/C BUTTON
B1		R/C BUTTON
ВО	>	R/C BUTTON
BA	II	R/C BUTTON
8F	4	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

PICTURE ID

Picture ID is used to change the settings of a specific display using a single IR receiver for multi-vision. The set receiving the IR signal communicates with another set via an RS-232C connection. Each set is identified by a Set ID. If you assign the Picture ID using the remote control, only displays with the same Picture ID and Set ID can be controlled remotely.



2X2 Multi-Vision Set IDs are assigned as shown in the picture.

- 1 Press the red **ON** button on the remote control to assign the Picture ID.
- 2 To change the Picture ID, press the **ON** button, or the left and right arrow buttons continuously. Assign the ID you want.
 - If you assign the Set ID to each set with multivision, and then assign the Picture ID using the red button on the remote control, the key command is displayed for the set with the same Set ID and Picture ID. A set with different Set IDs and Picture IDs cannot be controlled by IR signals.



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

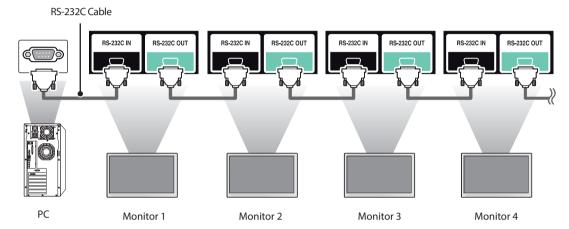
CONTROLLING THE MULTIPLE PRODUCT

- Use this method to connect several products to a single PC. You can control several products at one time by connecting them to a single PC.
- In the Option menu, Set ID must be between 1 and 255 (or from 1 to 1000) without being duplicated.

Connecting the cable

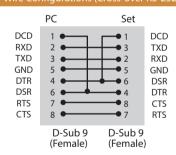
Connect the RS-232C cable as shown in the picture.

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



RS-232C Configurations

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



NOTE

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

Communication Parameter

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

· Communication Code: ASCII code

Use a crossed (reverse) cable

Command Reference List

		COMMAND		DATA
		1	2	(Hexadecimal)
)1	Power	k	a	00 to 01
)2	Select input	х	b	See [Select input]
)3	Aspect ratio	k	С	See [Aspect ratio]
)4	Energy saving	j	q	See [Energy saving]
)5	Picture mode	d	х	See [Picture mode]
06	Contrast	k	g	00 to 64
)7	Brightness	k	h	00 to 64
08	Sharpness	k	k	00 to 32
)9	Color	k	i	00 to 64
10	Tint	k	j	00 to 64
11	Color temperature	х	u	00 to 64
12	H position	f	q	00 to 64
13	V position	f	r	00 to 64
14	H size	f	S	00 to 64
15	Auto Config.	j	u	01
16	Balance	k	t	00 to 64
17	Sound Mode	d	у	See [Sound mode]
8	Mute	k	е	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	х	See [Clock 2]
22	Off time schedule	f	С	00 to 01
23	On time schedule	f	b	00 to 01
24	Off timer (repeat mode/time)	f	е	See [Off timer]
25	On timer (repeat mode/time)	f	d	See [On timer]
26	On timer input	f	u	See [On timer input]
27	Automatic Standby	m	n	00 to 01
28	Auto off	f	g	00 to 01
29	Language	f	i	See [Language]
30	ISM method	j	р	See [ISM method]
31	Reset	f	k	00 to 02
32	Current temperature	d	n	FF
33	Key	m	С	See [Key]
34	Time elapsed	d	I	FF
35	Product serial number	f	у	FF
36	Software version	f	z	FF
37	White balance red gain	j	m	00 to FE
38	White balance green gain	j	n	00 to FE
39	White balance blue gain	j	0	00 to FE
10	Backlight	m	g	00 to 64
41	Screen off	k	d	00 to 01

		COMMAND		DATA
		1	2	(Hexadecimal)
42	Power On Delay	f	h	00 to 64
43	Tile Mode	d	d	00 to 01
44	Tile Mode Check	d	z	FF
45	Tile ID	d	i	Refer to 'Tile ID'.
46	Tile H Position	d	e	00 to 32
47	Tile V Position	d	f	00 to 32
48	Tile H Size	d	g	00 to 32
49	Tile V Size	d	h	00 to 32
50	Natural Mode (In Tile mode)	d	j	00 to 01



NOTE

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

Transmission / Receiving Protocol

Transmission

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

- * [Command1]: First command to control the set.
- * [Command2]: Second command to control the set.
- * [Set ID]: 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. ASCII code '0x0D'.
- * []: White Space. Corresponds to '0x20' in ASCII code.

Acknowledgement

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

- * When the product receives data normally, it sends an acknowledgement (ACK) in the format above. If data is in read mode, it indicates the data that shows the current status. If data is in read mode, it simply indicates the data that is sent from the PC.
- * If a command is sent with Set ID '00' (=0x00) 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 are not supported depending on the model.

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.

04. Energy saving (Command: j q)

Sets the energy saving function.

Transmission

[i][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.

02. Select input (Command: x b)

Selects an input signal.

Transmission

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

Data 60: RGB

90: HDMI (HDMI1) (DTV) A0: HDMI (HDMI1) (PC)

Acknowledgement

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

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

05. Picture mode (Command: dx)

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: APS

Acknowledgement

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

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 (\geq 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]

06. Contrast (Command: kg)

Adjusts the screen contrast.

Transmission

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

Data 00 to 64: Contrast 0 to 100

Acknowledgement

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

07. Brightness (Command: k h)

Adjusts the screen brightness.

Transmission

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

Data 00 to 64: Brightness 0 to 100

Acknowledgement

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

10. Tint (Command: k j)

Adjusts the screen tint.

Transmission

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

Data 00 to 64: Tint red 50 to green 50

Acknowledgement

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

08. Sharpness (Command: k k)

Adjusts the screen sharpness.

Transmission

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

Data 00 to 32: Sharpness 0 to 50

Acknowledgement

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

11. Color temperature (Command: x u)

Adjusts the screen color temperature.

Transmission

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

Data 00 to 64: Warm 50 to cool 50

Acknowledgement

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

09. Color (Command: ki)

Adjusts the screen color.

Transmission

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

Data 00 to 64: Color 0 to 100

Acknowledgement

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

12. H position (Command: f q)

Adjusts the horizontal position of the screen.

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

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

(Only available in RGB-PC input mode)

Transmission

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

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

Acknowledgement

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

13. V position (Command: fr)

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]

16. Balance (Command: kt)

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]

** This may not be supported on some models.

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]

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]

** This may not be supported on some models.

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]

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]

** This may not be supported on some models.

19. Volume (Command: kf)

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]

** This may not be supported on some models.

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]

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 1E: 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]

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]

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]

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

OC. 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

OC. 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

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

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

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

Acknowledgement

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

26. On timer input (Command: f u)

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

Transmission

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

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

Data (adding schedule)

60: RGB

90: HDMI (HDMI1)

Data1

1. f1h to f7h (reading data)

F1: Select the 1st schedule input source

F2: Select the 2nd schedule input source

F3: Select the 3rd schedule input source

F4: Select the 4th schedule input source

F5: Select the 5th schedule input source F6: Select the 6th schedule input source

F7: Select the 7th schedule input source

Data2

1. ffh (reading data)

To read the schedule input, enter FFH for [Data2]. If no schedule is available for [Data1] when attempting to read or change the schedule data, the text NG will be displayed and the operation will fail.

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

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

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

** Input may not be supported on some models.

Acknowledgement

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

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

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

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

29. Language (Command: fi)

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

OB: Portuguese (Brazil)

OC: Russian

0D: Finnish

0E: Swedish

0F: Korean

10: Chinese (Cantonese)

11: Japanese

12: Chinese (Mandarin)

Acknowledgement

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

30. ISM method (Command: j p)

Selects an ISM Method option.

Transmission

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

Data 08: Standard

20: Color wash

Acknowledgement

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

^{**} This may not be supported on some models.

31. Reset (Command: fk)

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]

34. Time elapsed (Command: d I)

Checks the elapsed time.

Transmission

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

Data FF: Read status

Acknowledgement

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

32. Current temperature (Command: d n)

Checks the inside temperature value.

Transmission

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

Data FF: Check status

Acknowledgement

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

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

35. Product serial number (Command: f y)

Checks the serial number of the product.

Transmission

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

Data FF: Check product serial number

Acknowledgement

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

33. Key (Command: m c)

Sends a key code for the IR remote control.

Transmission

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

Data IR_KEY_CODE

Acknowledgement

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

For key codes, see IR Codes.

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

36. Software version (Command: fz)

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]

^{*}The data received is shown as a hexadecimal value.

^{*} Temperature is displayed as a hexadecimal value.

^{*} Data is in ASCII code.

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

Adjusts the white balance red gain value.

Transmission

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

Data 00 to FE: Red gain 0 to 254

Acknowledgement

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

40. Backlight (Command: m g)

Adjusts the back light brightness.

Transmission

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

Data 00 to 64: Back light brightness 0 to 100

Acknowledgement

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

** This may not be supported on some models.

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

Adjusts the white balance green gain value.

Transmission

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

Data 00 to FE: Green gain 0 to 254

Acknowledgement

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

41. Screen off (Command: k d)

Turns the screen on or off.

Transmission

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

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

Acknowledgement

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

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

Adjusts the white balance blue gain value.

Transmission

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

Data 00 to FE: Blue gain 0 to 254

Acknowledgement

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

42. Power On Delay (Command: fh)

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

Transmission

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

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

Acknowledgement

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

43. 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]

44. 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 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]

47. Tile V Position (Command: df)

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]

45. Tile ID (Command: di)

To set Tile ID.

Transmission

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

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

FF: Check Tile ID

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

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

Acknowledgement

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

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

48. Tile H Size (Command: dg)

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]

49. 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]

50. Natural Mode (In Tile Mode) (Command: dj)

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

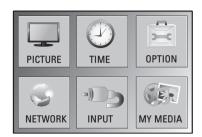
Acknowledgement

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

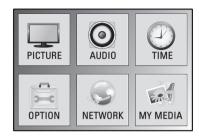


Accessing Installation Menu

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



or



Press the **0** button four times. Press the **OK** button.



or



When the **Installation Menu** is displayed, select the item you want.



Installation Menu

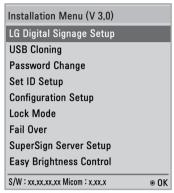


NOTE

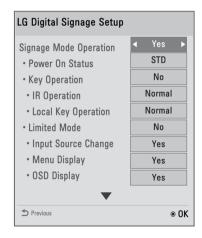
· Default values may differ by region.

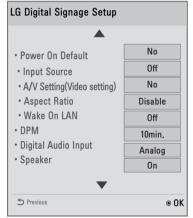
The LG Digital Signage Setup menu

This menu is used after installation to configure the Digital Signage.











Signage Mode Operation

- Decide to work all functions of Signage Mode Operation or not by setting Signage Mode Operation as Yes (Work) or No (Do Not Work)
- When Signage Mode Operation is set to Yes(Work), all functions of Signage Mode apply.
- When Signage Mode Operation is set to No(Do Not Work), all functions of Signage Mode Do Not apply and runs on initial value.

(It may not work depending upon the model.)

Power On Status

- · Select the status of the monitor set when turning on the main power.
- · You can set with PWR, STD, or LST.
- PWR always turns the monitor ON with the main power.
- STD turns the monitor on in the STAND-BY mode.
- LST turns the monitor to its previous status. If the main power were turned off in POWER ON status, the
 monitor would power up in POWER ON. If it were turned off in STAND-BY status, it would power up in
 STAND-BY.

(This may not function, depending upon the model.)

Key Operation

This feature manages the usability of the local/front keys and your remote control with regard to their
operations. This feature works according to the IR Operation and Local Key Operation settings.
(It may not work depending upon the model.)

IR Operation

- Set LG IR Operation to On (Work) or Off (Do Not Work) to enable or disable the remote control.
 (0 Normal, 1 Use PWR Only, 2 Block All)
- · Selecting Block All sets your monitor to block all key signals coming from general LG remote controls.
- Selecting Use PWR Only sets your monitor to block all key signals coming from general LG remote controls except for the Power key signal.
- · Selecting Normal sets your monitor to receive all key signals coming from LG remote controls 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, S-check) (It may not work depending upon the model.)



NOTE

 When all IR key signals or all local key signals are blocked, the Power On Status value switches to PWR. Changing this value has been made impossible to ensure the operation of powering on. (To prevent mistakes by the user)

Limited Mode

This feature enables you to inhibit particular operations of the Signage functions.
 This feature works according to the Input Source Change, Menu Display or OSD Display settings.
 (It may not work depending upon the model.)

Input Source Change

- Decide to change input source or not by setting Input Source Change as On(Change possible) or Off (Change impossible).
- When Input Source Change is set to Off (Change impossible) INPUT key doesn't work.
- When **Input Source Change** is set to On (Change possible), then changing input source is available. (It may not work depending upon the model.)

Menu Display

- Set On (Work) or Off (Do Not Work).
- Even if it is set to Off, press the Menu button for five seconds or more to go back to the Installation Menu.

(It may not work depending upon the model.)

OSD Display

- Decide to display OSD or not by setting OSD Display as On (Mark) or Off (Off Mark).
- When OSD Display is set to Off (Off Mark), all OSD is not displayed except installation menu.
 (It may not work depending upon the model.)

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

- With the power turned on, you can set the Input Source, A/V Setting and Aspect Ratio options.
- Set to Yes (Work) or No (Do Not Work).
- If Power On Default is set to No, Input Source and Volume are deactivated.
- When **Power On Default** is set to Yes, it can set by entering the subordinate menu. (It may not work depending upon the model.)

Input Source

- Set whether it is turned on by the set input source or by the last stored input source.
- It is turned on by the Last Memory Input if the Input source is turned off.
- · All sources supported by the said model can be set as Input source.
- If both the Input source and the ON TIME are set, the Input source takes the priority.
 (It may not work depending upon the model.)

A/V Setting(Video Setting)

- When your monitor is powered on, you can set certain options for A/V.
- If you set this feature to Yes, the A/V values you set before entering the Installation Menu are saved, and even if you have changed A/V values before powering off, the saved values are restored when you power on your monitor again.
- Saves video values: Picture Mode, DPM Select, Smart Energy Saving, Backlight, Contrast, Brightness, Sharpness, Color, Tint and Color Temp.
- Saves audio values: Sound Mode and Balance. (It may not work depending upon the model.)

Aspect Ratio

- This feature enables you to set the screen size that will be applied to your monitor upon powering on.
- Selecting Disable sets the screen size of your monitor upon powering on to Aspect Ratio.
- Selecting Set By Program sets the screen size of your monitor upon powering on to Set By Program.
- Selecting 4:3 sets the screen size of your monitor upon powering on to 4:3.
- Selecting 16:9 sets the screen size of your monitor upon powering on to 16:9.
 (It may not work depending upon the model.)

Wake On LAN

- Sets whether to use Wake On LAN.
- It can be set to On or Off.
- On: Wake On LAN is enabled, and you can turn on the product remotely via LAN.
- Off: Wake On LAN is disabled.
 (It may not work depending upon the model.)

DPM

- Sets whether to use **DPM** (Display Power Management).
- It can be set to Off, 5 sec, 10 sec, etc.
- Others: If there is no input signal, the product enters into standby mode.
- Off: DPM is disabled.
 - (It may not work depending upon the model.)

Digital Audio Input

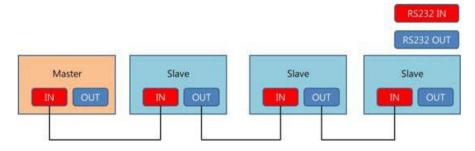
- You can set the audio for each input as Analog or Digital.
- In the case of RGB input, audio is fixed as Analog.
- In the case of Digital input, you can set the audio as Analog or Digital.
 (It may not work depending upon the model.)

Speaker

- You can inhibit the audio settings by setting whether or not to use speakers.
- If you set this feature to Off, audio is not outputted and you cannot enter the Audio menu.
- If you set this feature to On, audio is outputted and you can enter the **Audio** menu. (It may not work depending upon the model.)

Sync Mode

- With **Sync Mode** enabled, monitors connected with RS232C can start playing contents distributed by the Supersign Elite-w such as a video or an image simultaneously.
- If **Sync Mode** is set to Off, the function is disabled.
- If Sync Mode is set to Master for a monitor, it is set as the primary monitor.
- If **Sync Mode** is set to Slave for a monitor, it plays a content file at the same time as the master monitor. (It may not work depending upon the model.)



Power on Delay

This function delays the monitors' powering on to prevent overload when multiple connected monitors
are turned on simultaneously. It can be set to **Off** or any value from 1 to 250 seconds.
(It may not work depending upon the model.)

Pivot Mode

- It Inverts the screen display 180 degrees.
- It inverts both Input video signal and OSD.
- The available options are Off, On.
- · If it is set to Off, the function is disabled.
- If it is set to On, the screen display is inverted 180 degrees.
- Pivot Mode is applied after rebooting.
 (It may not work depending upon the model.)

OSD Portrait Mode (Off, 90, 270)

- Rotate the OSD clockwise.
- The available options are Off, 90° or 270°.
- · If set to Off, the function is deactivated.
- If set to 90, the OSD rotates clockwise by 90 degrees.
- If set to 270, the OSD rotates clockwise by 270 degrees.
 (It may not work depending upon the model.)

Intelligent Auto

- Set to On (Work) or Off (Do Not Work).
- If the setting is On, Display is automatically arranged through resolution size when you change the resolution at the first.

(It may not work depending upon the model.)

Factory Reset

- · This feature enables you to restore all set values to factory default values.
- If you set this feature to Yes, all Signage settings except for the UTT value (the Signage panel's operational hours) are restored to factory default settings.
 (It may not work depending upon the model.)



LG Digital Signage Setup		Initial setting/ Factory Reset	Signage Mode Operation	
Signage Mode Operation	Yes/ No	NO	Yes	NO
Power On Status	STD/ PWR/ LST	(Actual operations are performed in LST status)	User	STD (Actual operations are performed in LST status)
Key Operation	Yes/ No	No	User	No
IR Operation	Normal/ Use PWR Only/ Block All	Normal	User	Normal
Local key Operation	Normal/ Use PWR Only/ Block All	Normal	User	Normal
Limted Mode	Yes/ No	No	User	No
Input Source Change	Yes/ No	Yes	User	Yes
Menu Display	Yes/ No	Yes	User	Yes
OSD Display	Yes/ No	Yes	User	Yes
Power On Default	Yes/ No	No	User	No
Input Source	Off/ RGB/ HDMI	Off	User	Off
A/V Setting (Video Setting)	Yes/ No	No	User	No
Aspect Ratio	Disable/ Set By Program / 4:3/ 16:9	Disable	User	Disable
Wake On Lan	On/ Off	Off	User	Off
DPM	Off/ 5sec./ 10sec./ 15sec./ 1min./ 3min./ 5min./ 10min.	10min.	User	5sec.
Digital Audio Input	Digital/ Analog	RGB : Analog HDMI : Digital	User	RGB : Analog HDMI : Digital
Speaker	On/ Off	On	User	On
Sync mode	Off/ Master/ Slave	Off	User	Off
Power On Delay	Off, 1 sec ~ 250 sec	Off	User	Off
Pivot Mode	Off / Master / Slave	Off	User	Off
OSD Portrait Mode	On/ Off	Off	User	Off
Intelligent Auto	On/ Off	On	User	On
Factory Reset	Confirm			

^{**} User : Value set by the user

Factory Reset VS Initial Setting

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

^{**} Values for other items are the same as each other

USB Cloning

The administrator can configure a monitor more quickly through USB and configure multiple monitors simultaneously. All monitors that have been configured this way operate according to the settings of the same master monitor. This newer procedure significantly decreases the installation time that would be necessary if the standard RS-232C method were used instead.



CAUTION

 To use the USB Cloning function, be sure to use a USB storage device formatted using the FAT32 file system. If the USB storage device has been formatted with another file system, it may not work correctly.

Fz Download

Ez Download is a function that enables users to download the desired items all at once, such as EPK (software update file), TLL (see Send to USB descriptions for more information regarding file types), Splash Image, Micom, ect.

1 Use the ^ v button to select the Ez Download and press the **OK** button.

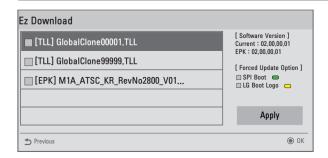


- 2 Select a list to download and press the Apply button.
 - -When EPK items are checked, EPK version information is displayed and SPI Boot and LG Boot Log items are enabled.
 - -When both EPK and JPG are checked, the LG Boot Log option is disabled. When JPG is un-checked, the LG Boot Log option is enabled.
 - -When Global TLL and Model TLL files are both present, only Global TLL file is displayed.
- 3 Wait for the download to complete. When it is finished, your monitor will be turned off.

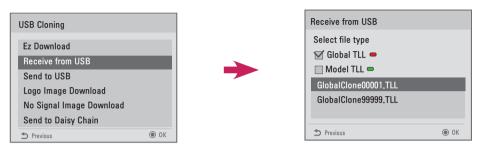


NOTE

- The user interface for No Signal Image Download can be correctly displayed only in English.
- The name of the file to download can be correctly displayed only in English.



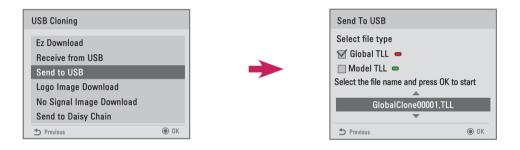
Receive from USB



- 1 Use the _ v button to select the desired *.TTL files name and press the OK button.
- 2 The monitor is changed to Standby mode after a successful download.

 If the download failed, the monitor will changed to the initial installation screen.

Send to USB



- 1 Use the A v button to select the desired file name and press the OK button.
- 2 The monitor is changed to the initial installation screen after a successful download.

NOTE

5DC model.)

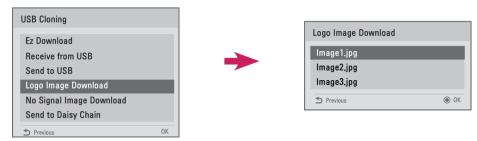
- Model TLL The top-level folder of USB xx (model) xxxxx. TLL (xxxxx is a number) in the form of, (model) must match the reception is possible.
 - (ex) The name of Model TLL File is **xxLS33A-5DC00001.TLL ~ xxLS33A-5DC99999.TLL** for 42LS33A-5DC model.)
 - Shown to be suitable for the same model, Global TLL and only appears as if the Model TLL.
- Global TLL The top-level folder of USB GlobalClonexxxxx.TLL (xxxxx is a number) in the form of, (model) is when the file does not match the Model TLL, Global TLL to be selected.
 (ex) The name of Global TLL File is GlobalClone00001.TLL ~ GlobalClone99999.TLL for 42LS33A-
 - (* Global TLL file exists in the same location in order to Cloning Model TLL file must be deleted or moved to other places.)
- 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

You can download a Splash Image file on your monitor.

Make a LG_DTV folder on the USB flash drive and then copy the splash image file to that folder.

1 Use the _ v button to select the desired file name and press the **OK** button.



- Wait till the download process is completed. After completion of download, monitor set will restart automatically.
- 3 You can see a new Splash Image on monitor which you downloaded while turning on monitor.



NOTE

- Splash Image upgrade funciton supports JPEG file of less than 1MB filesize.
- · Except for JPEG images with progressive encoding.
- · Monitor keep splash image until you change a new splash image.
- The resolution of Splash image should be 1920 x 1080 for full HD panel, 1360 x 768 for HD panel. The lowest resolution is 64 x 64.

No signal Image Download

You can download a No Signal Image file on your monitor.

Make a LG DTV folder on the USB flash drive and then copy the No Signal Image file to that folder.

1 Use the _ v button to select the desired file name and press the **OK** button.



- Wait till the download process is completed. After completion of download, monitor set will restart automatically.
- 3 You can see a new No Signal Image on monitor which you downloaded while turning on monitor.



NOTE

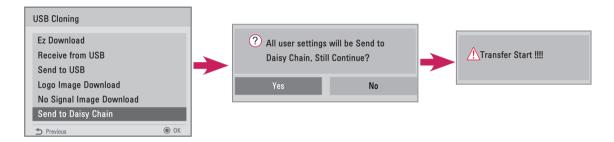
- No Signal Image upgrade funciton supports JPEG file of less than 1MB filesize.
- Except for JPEG images with progressive encoding.
- The resolution of No Signal Image should be 1920 x 1080 for full HD panel, 1360 x 768 for HD panel. The lowest resolution is 64 x 64.
- When the resolution for No Signal Image is set to Full HD > 1920 x 1080, then image sticking may occur.
- The file name for No Signal Image is correctly displayed only in English.

Send to daisy chain

This function is provided to copy the product settings to other sets using RS232C.

- 1 You can send the settings for the current set to other sets using the RS232C output.
- 2 The settings of the first set, which is RS232C daisy chained, are copied.
- 3 After selecting **Send to Daisy Chain**, select **Yes** to send the data or **No** to return to the menu.
- 4 The function attempts to copy the settings until the sets connected to RS232C out port of the current set are powered off. The sets are then powered back on and the function checks that the settings have been copied.

(It may not work depending upon the model.)

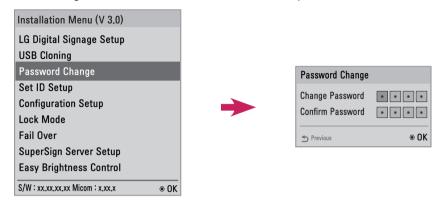


Password Change

You can change the password for security.

Enter a new 4-digit number in **Change Password**.

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

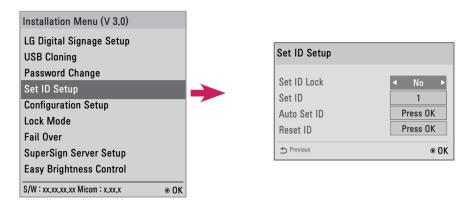


Password Change

You can change the password for security.

Enter a new 4-digit number in **Change Password**.

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



Set ID Lock

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

Set ID

• Enter a number between 1 and 255 (or 1 and 1000) for Set ID.

Auto Set ID

· The Set ID of a product is automatically configured.



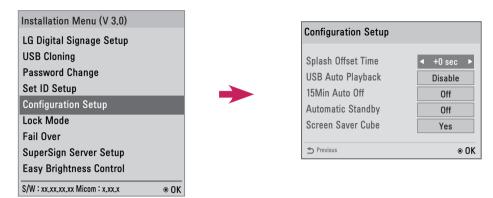
- If it is Yes, the Set ID of each set in a RS232C daisy chain is configured starting from 1.
- If it is No, the first set in the daisy chain is configured first and the rest of the sets are configured sequentially.
- Because Set ID cannot be decreased from the current value, it is recommended to execute Reset ID before using the function.
- The execution time may vary depending on the installation environment.
- If automatically setting the Set ID is not completed normally, turn the product off and on and then try again.
- Selecting Yes/No only works in the initial monitors in the daisy chain.
 (It may not work depending upon the model.)

Reset ID

- Initialize the Set ID of a product.
- Then, the Set ID of all sets in a RS232C daisy chain is set to 1. (It may not work depending upon the model.)

Configuration Setup

This feature enables the detailed configuration of the product.



Splash Offset Time

- This feature displays the duration of time a Splash Image is displayed.
- You can choose 0 to 10 seconds for the duration of time.

USB Auto Playback

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

15Min Auto Off

- · Sets whether to use 15 Min Force Off.
- It can be set to On or Off.
- On If there is No signal for 15 minutes, the product turns off.
- Off 15 Min Force Off is disabled.
- Please set this option to Off when you use the product for a long period of time.

Automatic Standby

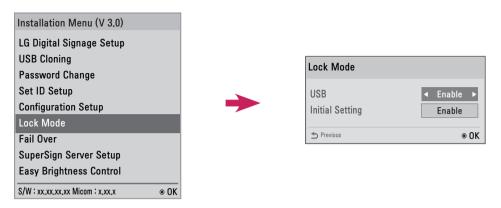
- Sets whether to use 4 Hours Off.
- It can be set to On or Off.
- On If you do not press any buttons on the remote control for 4 hours, the product turns off.
- Off 4 Hours Off is disabled.
- Please set this option to Off when you use the product for a long period of time.

Screen Saver Cube

 This Screen Saver-related feature enables you to enable/disable the 360-degree-rotating LG Cube to appear on the screen in case of no signal.

Lock Mode

Lock Mode feature allows the user to establish whether any outside input limits, thus limiting each of the external input and automatically.



USB

- You can enable/disable 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 on the Input List.
- The set value for the **USB Auto Playback** function changes to No and no input is available. (* As exceptions, you can download software updates and Welcome Screens.)

Initial Setting

- · You can enable/disable Initial Setting.
- If it is set to Disable, **Factory Reset** under OPTION is disabled. (It may not work depending upon the model.)

Fail Over

This feature enables an automatic switch to another input with a signal when there is no signal from the current input of the product.



Mode can be set to Off, Auto or Manual.

- · Off The Fail Over function is disabled.
- **Auto** When there is no video signal in the current input, the input is switched to another input with video signal according to the set input sequence (refer to the table*).
- **Manual** When there is no video signal, you can set the priority by which the input is switched. When there are multiple video signals, the input is switched to the high priority input.

USB can be set to Off, Movie or Photo.

- Off Fail Over USB function is disabled.
- **Movie** A video is played when every input has no video signal on Auto mode, or when there is no video signal among the priority inputs on Manual mode.
- Photo The photo slide show runs when every input has no video signal on Auto mode, or when there is
 no video signal among the priority inputs on Manual mode.

Fail Over priority when set to Auto

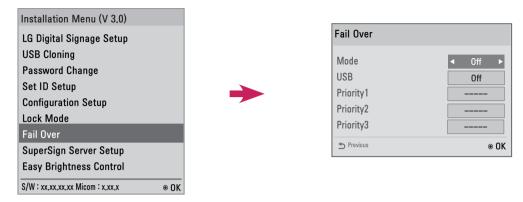
Current source	1st Change	2nd Change	3rd Change	4th Change
RGB	HDMI	DVI-D	USB Auto play	RGB NO SIGNAL
DVI-D	HDMI	RGB	USB Auto play	DVI NO SIGNAL
HDMI	DVI-D	RGB	USB Auto play	HDMI NO SIGNAL



- The number of priorities may vary depending on the model.
- · When the Mode is set to Off, all of the submenus are disabled.
- · When the Mode is set to Auto, the submenus of Priority1, Priority2, and Priority3 are disabled.
- If you select Movie or Photo in the USB menu, the USB Auto Playback option in Configuration Setup is disabled and the function does not work.
- If you select Movie or Photo in the USB Auto Playback menu, the USB menu in the Fail Over menu is disabled and the function does not work.
- If the USB menu in the Lock Mode menu is disabled, the USB Auto Playback option and the Fail Over USB menu are disabled and the functions do not work.
- To enable the Fail Over USB function, a folder named FAIL_OVER or fail_over must exist in the USB along with any valid content (videos or images).
- If a folder named **FAIL_OVER** or **fail_over** or any valid content does not exist on the USB, the default USB pop-up menu is displayed when Fail Over USB function is activated.
- Be sure to turn off the USB Fail Over function after the content distribution. However, if a Fail Over event (e.g., input signal connection, Fail Over USB menu option change or USB re-connection) occurs, the Fail Over USB function will work.
- The USB Fail Over function does not work while software update (including EZ Download) is in progress.
- Fail Over for the LS33A/LS35A model may not work properly under the following conditions:
 - -RGB will still be recognized as connected even when the RGB cable is connected to the equipment and monitor with no signal.
 - (e.g., if the HDMI input had lost its signal and the RGB cable was connected, the input would switch to RGB even though there was no signal.)
 - -HDMI will still be recognized as connected even when the equipment has no signal but is powered. (e.g., if a powered laptop was connected to the monitor and only the laptop was set to be displayed, HDMI would still be recognized as connected even though there was no signal from the monitor.)

SuperSign Server Setup

This feature is for a linkage with SuperSign Manager.



Player Name

 You can set the name of a player you want to control in SuperSign Manager. (You can enter up to 20 characters.)

Server IP Setting

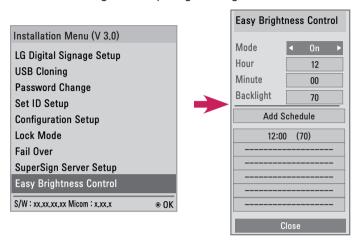
• You can set the IP address of the computer (server) on which SuperSign Manager is installed.

Server IP Status

- This menu displays the connection status with the server.
 - Not connected indicates that your PC is not connected to the SuperSign server.
 - Waiting for Approval indicates that your PC is connected to the SuperSign server but not yet approved.
 - Rejected indicates that your PC is connected to the SuperSign server but has been rejected.
 - Connected indicates that your PC is connected to the SuperSign server and has been approved.

Easy Brightness Control

This feature is for a linkage with SuperSign Manager.





- · Adjusts the backlight according to the schedule you set.
- · Set to On (Work) or Off (Do Not Work).
- · Easy Brightness Control is disabled if the current time is not set.
- If Energy Saving is set to Maximum, Easy Brightness Control is disabled.
- · You can set up to six schedules and they will be sorted in time ascending order.
- · If more than six schedules are added, the latest schedule will be automatically deleted.
- · You can delete a schedule by pressing the OK button.
- Duplicate schedules are not added, but the backlight value changes.
 (It may not work depending upon the model.)
- Return to default settings by clicking General → Reset to Initial Settings.

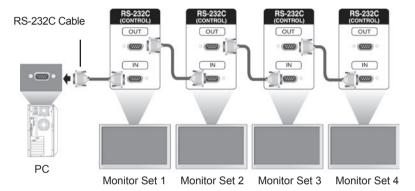
CONTROLLING THE MULTIPLE PRODUCT

- Use this method to connect several products to a single PC. You can control several products at one time by connecting them to a single PC.
- In the Option menu, Set ID must be between 1 and 255 (or from 1 to 1,000) without being duplicated.

Connecting the cable

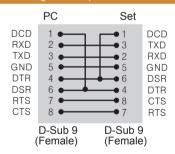
Connect the RS-232C cable as shown in the picture.

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



RS-232C Configurations







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