

# USER GUIDE LG Digital Signage (MONITOR SIGNAGE) L15

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

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## TABLE OF CONTENTS

### **3 USING THE MONITOR**

- 3 Using the Input List
- 3 Adjusting Aspect Ratio

#### 5 ENTERTAINMENT

- 5 Using the Network
- 5 Connecting to a Network
- 7 Network Status
- 7 Using the My Media
- 7 Connecting USB storage devices
- 9 Browsing Files
- 11 Viewing Movies
- 14 Viewing Photos
- 16 Listening to Music
- 18 Viewing the Contents List

#### **19 CUSTOMIZING SETTINGS**

- 19 Accessing Main Menus
- 20 PICTURE Settings
- 23 AUDIO Settings
- 24 TIME Settings
- 25 OPTION Settings
- 28 NETWORK Settings

### 29 IR CODES

### 31 TO CONTROL MULTIPLE PRODUCTS

- 31 Connecting the Cable
- 32 RS-232C Configurations
- 32 4P Cable
- 32 RS-232C Cable
- 32 Communication Parameter
- 33 Command Reference List
- 35 Transmission / Receiving Protocol

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## **USING THE MONITOR**

## **Using the Input List**

- 1 Press INPUT to access the Input List.
- 2 Press the navigation buttons to scroll to one of the input mode and press OK.
  - RGB-PC
  - HDMI
  - DVI-D
  - USB
  - Display Port
  - OPS

## **Adjusting Aspect Ratio**

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

MODE	RGB	HD	М	DV	I-D	Displa	y Port	0	PS
Aspect Ratio	РС	DTV	PC	DTV	PC	DTV	РС	DTV	PC
16:9	о	о	0	0	о	о	о	о	0
Just Scan	х	0	х	0	х	0	х	0	х
Set By Program	х	0	х	0	х	0	х	0	х
4:3	0	0	0	0	0	0	0	0	0
Zoom	х	0	х	0	х	0	х	0	х
Cinema Zoom1	х	0	х	0	х	0	х	0	х

## 

- 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.

- If a fixed image displays on the screen for a long period of time, it will be imprinted and become a permanent disfigurement on the screen. This is image burn or burn-in and not covered by the warranty.
- If you don't use your monitor, turn the power off or set a screen saver program from the PC or the system to prevent image retention.
- If the aspect ratio is set to 4:3 for a long period of time, image burn may occur on the letterboxed area of the screen.

- **16:9**: This selection will allow you to adjust the picture horizontally, in linear proportion, to fill the entire screen (useful for viewing 4:3 formatted DVDs).
- Just Scan : This Selection will allow you view the picture of best quality without loss of original picture in high resolution image. Note: If there is noise in original Picture, You can see the noise at the edge.
- Set By Program : Depending on the input signal, screen aspect ratio changes to 4:3 or 16:9.
- **4:3**: This selection will allow you to view a picture with an original 4:3 aspect ratio, black bars will appear on both the left and right of the screen.
- **Zoom :** This selection will allow you to view the picture without any alteration, while filling the entire screen. However, the top and bottom of the picture will be cropped.
- **Cinema Zoom1 :** Choose Cinema Zoom when you want to enlarge the picture in correct proportion. Note: When enlarging or reducing the picture, the image may become distorted.

## **ENTERTAINMENT**

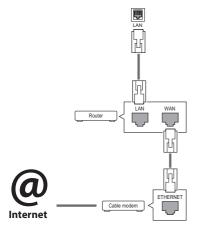
## **Using the Network**

## **Connecting to a Network**

For wired network connections, connect the display to a local area network (LAN) via the LAN port as shown on the following diagram. Then, set up the network settings. For wireless network connections, connect the Wi-Fi USB module to the USB port. Then, set up the network settings. After making a physical connection, a small number of home networks may require the display network settings to be adjusted. For most home networks, the display will connect to automatically

without any adjustments. For detail information, contact your internet pro-

vider or router manual.



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

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

#### Connecting to a wired network

- 1 Press **SETTINGS** to access the main menus.
- 2 Press the navigation buttons to scroll to **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**.

#### Connecting to a wireless network

- 1 Press SETTINGS to access the main menus.
- 2 Press the navigation buttons to scroll to NET-WORK and press OK.
- 3 Press the navigation buttons to select Network Setting and press OK.
- Select Setting from the AP list or Simple setting (WPS-button mode).
   -Setting from the AP list Select an AP to connect to a wireless network.
  - -Simple setting (WPS-button mode) Press the button on the wireless router that supports PBC to easily connect to the router.
- 5 When you are finished, press **EXIT**.

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- 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.

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- 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 respon- sibility.
- A 10 Base-T or 100 Base-TX LAN port is required when using a wired connection to this display. If your internet service does not allow for such a connection, you will not be able to connect the display.
- A DSL modem is required to use DSL service and a cable modem is required to use cable modem service. Depending on the access method of and subscriber agreement with your ISP, you may not be able to use the Internet connection feature contained in this display or you may be limited to the number of devices you can connect at the same time. (If your ISP limits subscription to one device, this display may not be allowed to connect when a PC is already connected.)
- The use of a router may not be allowed or its usage may be limited depending on the policies and restrictions of your ISP. For details, contact your ISP directly.

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

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

## **Network Status**

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

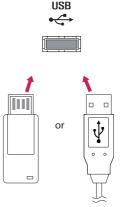
Option	Description	
Setting	Return to the network setting menu.	
Test	Test the current network status after	
	setting the network.	
Close	Return to the previous menu.	

## **Using the My Media**

### **Connecting USB storage devices**

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

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





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

#### Tips for using USB storage devices

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

- If your USB memory device has multiple partitions, or if you use a USB multi-card reader, you can use up to 4 partitions or USB memory devices.
- If a USB memory device is connected to a USB multi-card reader, its volume data may not be detected.
- If the USB memory device does not work properly, disconnect and reconnect it.
- How fast a USB memory device is detected differs from device to device.
- If the USB is connected in Standby Mode, that drive will automatically be loaded when the display is turned on.
- The recommended capacity is 1 TB or less for a USB external hard disk and 32 GB or less for USB memory.
- Any device with more than the recommended capacity may not work properly.
- If a USB external hard disk with a Energy Saving function does not work, turn the hard disk off and on again to make it work properly.
- USB storage devices below USB 2.0 are supported as well. But they may not work properly with videos.
- A maximum of 999 folders or files can be recognized under one folder.
- It is recommended you use a certified USB storage device and cable. Otherwise, a USB storage device may not be detected or a playback error may occur.
- Only a USB memory device can be used to play back the files distributed and stored by Super-Sign 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.
- Data on some USB storage devices may be damaged in a high temperature environment.
- It is recommended that you avoid playing contents using more than two USB ports simultaneously.

## **Browsing Files**

Browse files saved in a USB storage device.

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

### Supported file format

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

Туре	Supported file format		
Photo	JPEG		
	Baseline : 64 x 64 to 15360 x 8640		
	Progressive : 1920 x 1440		
	PNG		
	Interlace : 1200 x 800		
	BMP		
	9600 x 6400		
	Non-supported files are displayed in the form of predefined icon.		
Music	MP3		
	Bit rate : 8 kbps to 320 kbps		
	Sampling rate MPEG1/2 Layer3 : 16 kHz to 48 kHz		
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)	JPEG)/*.mkv(motion JPEG)		
	Video format: MPEG1, MPEG2, MPEG4, H.264, DivX 3.11, DivX 4, DivX 5, DivX 6,		
	Xvid 1.00,Xvid 1.01, Xvid 1.02, Xvid 1.03,Xvid 1.10-beta1/2, JPEG		
	Audio format: MP3, Dolby Digital, LPCM, AAC, HE-AAC		

### **Viewing Movies**

Plays movie files saved in the USB storage device.

- 1 Press **SETTINGS** to access the main menu.
- 2 Press the navigation button to scroll to MY MEDIA and press OK.
- 3 Press the navigation button to scroll to Movie List and press OK.
- 4 Press the navigation buttons to scroll to a folder you want and press **OK**.
- 5 Press the navigation buttons to scroll to a file you want and press **OK**.
  - Change Device : Selects the USB storage device. (Depending on model)
  - Go to root folder : Returns to the home screen of My Media.
  - **Go to upper folder :** Returns to the previous screen.
  - Exit: Exits My Media.
- 6 During movie playback, press **OK** to access the following settings.

Remote button	Description		
	Stops the playback.		
	Plays a video.		
	Pauses or resumes the playback.		
••	Scans backward in a file.		
(*)	Scans forward in a file.		
മ	Adjusts the screen brightness to save energy.		
SETTINGS	Show the <b>Option</b> menu.		
	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.
- The screen may suffer temporary interruptions (image stoppage, faster playback, etc.) when the audio language is changed.
- A damaged movie file may not be played correctly, or some player functions may not be usable.
- Movie files produced with some encoders may not be played correctly.
- If the video and audio structure of recorded file is not interleaved, either video or audio is outputted.
- HD videos with a maximum of 1920 X 1080 @ 25/30P or 1280 X 720 @ 50/60P are supported, depending on the frame.
- Videos with resolutions higher than 1920 X 1080 @ 25/30P or 1280 X 720 @ 50/60P may not work properly depending on the frame.
- Movie files other than the specified types and formats may not work properly.
- Max bitrate of playable movie file is 20 Mbps. (only, Motion JPEG : 10 Mbps)
- We do not guarantee smooth playback of profiles encoded level 4.1 or higher in H.264/AVC.
- DTS Audio codec is not supported.
- A movie file more than 30 GB in file size is not supported for playback.
- A DivX movie file and its subtitle file must be located in the same folder.
- A video file name and its subtitle file name must be identical for it to be displayed.
- Playing a video via a USB connection that doesn't support high speed may not work properly.
- Files encoded with GMC(Global Motion Compensation) may not be played.

### Video options

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

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

Select Set Video Play to access the following menus:

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



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

### **Viewing Photos**

View image files saved in the USB storage device.

- 1 Press SETTINGS to access the main menu.
- 2 Press the navigation button to scroll to **MY MEDIA** and press **OK**.
- 3 Press the navigation button to scroll to **Photo List** and press **OK**.
- 4 Press the navigation buttons to scroll to a folder you want and press **OK**.
- 5 Press the navigation buttons to scroll to a file you want and press **OK**.
  - Change Device : Selects the USB storage device. (Depending on model)
  - Go to root folder : Returns to the home screen of My Media.
  - Go to upper folder : Returns to the previous screen.
  - Exit : Exits My Media.
- 6 While viewing photos, you can access the following settings.

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

#### Photo options

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

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

Select Setting Photo View to access the following menus:

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

### **Listening to Music**

Plays music files saved in the USB storage device.

- 1 Press **SETTINGS** to access the main menu.
- 2 Press the navigation button to scroll to **MY MEDIA** and press **OK**.
- 3 Press the navigation button to scroll to **Music List** and press **OK**.
- 4 Press the navigation buttons to scroll to a folder you want and press **OK**.
- 5 Press the navigation buttons to scroll to a file you want and press **OK**.
  - Change Device : Selects the USB storage device. (Depending on model)
  - Go to root folder : Returns to the home screen of My Media.
  - **Open Music Player :** Opens the settings window for music. This feature is activated only during playback.
  - **Go to upper folder :** Returns to the previous screen.
  - Exit : Exits My Media.
- 6 During music playback, press **OK** to access the following settings.

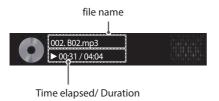
Remote button	Description	
	Stops playing back the file and moves back to the Music List.	
	Plays a music file.	
	Pauses or resumes playback.	
••	Skips to the previous file.	
(4)	Skips to the next file.	
ല്മ	Adjusts the brightness of the screen for energy saving (Off and Screen Off work only.)	
SETTINGS	Show the <b>Option</b> menu.	
ా BACK	Hides the option window.	
EXIT	Return to Music List.	
<b>∢</b> or ►	Skips to specific points in a file during playback. The time of a specific point will appear on the status bar. In some files, this function may not work properly.	

#### Tips for playing music files

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

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- A damaged or corrupted music file does not play but displays 00:00 in playtime.
- A music downloaded from a paid service with copyright protection does not start but displays inappropriate information in playtime.
- If you press **OK**, **•** buttons, screen saver is stopped.
- You can use the Dettor to select the next music and the Dettor to select the previous music.



#### **Music options**

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

## 

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

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

Menu	Description	
Repeat	Repeats the music playback.	
Random	Plays random music tracks.	

## **Viewing the Contents List**

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

- While playing media files from **Contents List**, only the **BACK**, **EXIT**, or volume button are available. Selecting the **BACK** or **EXIT** button stops playing media files and returns to the **Contents List**.
- When you use the distribution feature which utilizes SuperSign Software, the storage device used to store contents is determined based on the size of the remaining memory space. (Note: If USB ports 1 and 2 have the same memory space, contents will be saved on the storage device connected to USB port 1.(Depending on model))
- If there is the AutoPlay folder in the USB device and its files are in supported formats, they can be played back automatically when the USB device is connected to the monitor.
- It is recommended that you avoid playing contents using more than two USB ports simultaneously.
- With respect to the playback of distribution or contents schedules through SuperSign Software, the schedule executed last time is played.

## **CUSTOMIZING SETTINGS**

## **Accessing Main Menus**

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

## **PICTURE Settings**

- 1 Press **SETTINGS** to access the main menus.
- 2 Press the navigation buttons to scroll to **PICTURE** and press **OK**.
- 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				
ۯ Energy	Reduces power consumption by adjusting peak screen brightness.				
Saving	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	Adjusts the backlig	ht and contrast depending on the screen brightness.			
Saving	Level				
	Off	Disables the Smart Energy Saving function.			
	On	Enables the Smart Energy Saving function to save power consumption as much as the value set in the smart energy saving rate.			
Picture Mode	Selects the picture mode optimized for the viewing environment or the programme.				
	Mode				
	Vivid	Heightens contrast, brightness, and sharpness to display vivid images.			
	Standard	Displays images in standard levels of contrast, brightness, and sharpness.			
	APS	APS ( Auto power saving ) mode reduces power consumption by dimming control.			
	Cinema	Optimizes the video image for a cinematic look to enjoy movies as if you are in a movie theater.			
	Sport	Optimizes the video image for high and dynamic actions by emphasizing primary Colors such as white, grass, or sky blue.			
	Game	Optimizes the video image for a fast gaming screen such as PCs or games.			
	Calibration	Applies user-customized white balance based on Standard.			
	Expert1.2	Menu for adjusting picture quality that allows experts and amateurs to enjoy the best Monitor viewing.			
Aspect Ratio	Changes the image size to view images at its optimal size.				

Setting	Description			
Screen	Customizes the PC display options in RGB mode.			
(In RGB Mode Only)	Option			
mode only)	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 <b>Picture Mode</b> , or adjust the picture settings according to a specific picture image. First, select a desired <b>Picture Mode</b> . * This option is unavailable if <b>Picture Mode</b> is set to <b>Vivid</b> .	
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.

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

Setting	Description	
Dynamic Contrast	Adjusts the contrast to the optimal level according to the brightness of the image.	
Dynamic Color	Adjusts color for more natural-looking colors.	
Color Gamut	Selects the range of colours 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 colours that can be expressed.			
Edge Enhancer	Shows clearer and distinctive yet natural edges of the video.			
Color Filter	Filters a specific colour spectrum in RGB colours to fine-tune colour 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 colour with a test pattern. They can select from six colour areas (Red / Green / Blue / Cyan / Magenta / Yellow) without affecting other colours. For normal images, adjustments may not result in noticeable colour changes.			

## Picture Option - HDMI(DTV) Mode

Setting	Description		
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.		
TruMotion (This feature is supported by 65SE3B and 65SE3KB only.)	Corrects images to display smoother motion sequences. • Off : Turn off the TruMotion. • Smooth/ Clear : De-Judder / De-Blur can be set Auto. • User : De-Judder / De-Blur can be set manually. • De-Judder : This function adjusts juddering of the screen. • De-Blur : This function adjusts and eliminates blurring of the screen. • De-Blur : This function adjusts and eliminates blurring of the screen. • De-Judder Auto • De-Blur Auto • De-Blur Auto • De-Blur Auto • De-Blur Auto • De-Blur Auto • De-Blur Auto		

## **AUDIO Settings**

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

The available audio options are described in the following:

Setting	Description			
Sound Mode	Allows optimized s	Allows optimized sound for custom Monitor installation.		
	Level			
	Standard	Suitable for all types of video.		
	News/ Music/ Cinema/ Sport/ Game	Sets audio optimized for a specific genre.		
		various sound effects. ction is available only for <b>Standard</b> mode in <b>Sound Mode</b> menu.		
	Level	Level		
	Clear Voice II	Boosts voice clarity.		
	Virtual Surround	LG's proprietary audio processing technology allows 5.1ch-like surround sound from two speakers. - If <b>Clear Voice II</b> is set to <b>On</b> , <b>Virtual Surround</b> will not be chosen.		
		Adjusts the volume to a level of your choice using the Equalizer.		
		Adjusts left/right audio balance.		
	Reset	You can reset the settings under the Sound Effects menu.		
AV Sync. Adjust	<ul> <li>Synchronizes video and audio directly when they do not match.</li> <li>If you set AV Sync. to ON, you can adjust the sound output to the screen image.</li> <li>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.</li> <li>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.</li> </ul>			



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

## **TIME Settings**

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

The available time settings are described in the following:

Setting	Description				
Clock	Sets the time feature.				
	Level				
	Auto	Auto The current time is entered according to the selected country when connected to a network.			
	Manual	The current time needs to be entered manually.			
On/Off Time	Sets the time to turn on or off the monitor set.				
Auto Off (15Min.)	If Auto-off is active and there is no input signal, the set switches to off mode automatically after 15 minutes.				
Automatic Standby	If the monitor is left unattended for a set period of time, it automatically goes into standby mode.				

- Off Time/ On Time can be saved for up to seven schedules; the monitor is turned on or off at the preset time in the schedule list. If multiple preset times are stored in the schedule list, this function works at the nearest time from the current time.
- Once the on or off time is set, these functions operate daily at the preset time.
- When the scheduled power-on and power-off times are the same, the power-off time has priority over the power-on time if the set is turned on, and vice versa if the set is turned off.
- If port 123 is blocked by a firewall, your monitor cannot receive the current time from the network.

## **OPTION Settings**

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

The available option settings are described in the following:

Setting	Description		
Language	Selects a language for the display text.		
Country	Select your country	ι.	
DivX(R) VOD	Registers or releases DivX. Checks DivX Registration Code for playing DivX-protected videos. Register at http://vod.divx.com. Uses Registration Code to rent or purchase movies at www.divx.com/vod. * Rented/purchased DivX files cannot be played if the DivX Registration Code of a different device is used. Use only the DivX Registration Code granted to this device. * Converted files not conforming to the DivX Codec Standard may not play or may produce abnormal images.		
Initial Setting	Deletes all optional	settings and returns to initial default mode.	
Set ID	You can assign a unique Set ID NO (name assignment) to each product when several products are connected for display. Specify the number (1 to 255 or 1 to 1,000) using the button and exit. Use the assigned Set ID to individually control each product using the Product Control Program.		
Tile Mode	Tile Mode	<ul> <li>To use this function</li> <li>Must be displayed with various other products.</li> <li>Select Tile Mode, set rows and columns, and then enter the tile ID to set the location.</li> <li>Tile Mode: row x column (row = 1-15, column = 1-15).</li> <li>15 x 15 available.</li> </ul>	
	Auto Config.	The displayed image may be unstable for a few seconds while the configuration is in progress.	
	Position		
	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	Reset Function to initialize and release Tile. All Tile setting are released when selecting Tile recall and the scree returns to Full screen.	

SETTINGS	Description	
Contents Schedule	Creates simple schedules and sets playback using files in My Media. Level	
	Add Schedule Creates a contents schedule.	
		- Media: Select the file to which you want to apply the content
		schedule.
		- Select [Create] to register the contents schedule.
	Play	Plays a contents schedule.
	Delete All	Deletes all registered schedules.
	<ul> <li>You can u</li> <li>You can a</li> <li>Only pho</li> <li>The defau</li> <li>differs de</li> <li>You can c</li> <li>You cann</li> <li>Contents</li> <li>etc. may u</li> <li>With resp</li> </ul>	are size is 1920 x 1080. Use photo and video files only. add up to 50 files (photo files + video files = 50). tos whose resolution is 1920 x 1080 or below are supported. ult display time for photos is 1 minute. Playback time for movies epending on the running time. treate up to 7 schedules. ot register a schedule when no file has been selected. schedules that have had information forcibly modified using a PC, not function properly. beet to the playback of distribution or contents schedules through n Software, the schedule executed last time is played.

### Tile Mode

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

Off

1X2

When the Tile Mode When using 2 monitors option is disabled

Tile ID



3X3

When using 9 monitors



4X4

When using 16 monitors



5X5 When using 25 monitors



#### Tile Mode - Natural mode

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

Before



After



## **NETWORK Settings**

- 1 Press **SETTINGS** to access the main menus.
- 2 Press the navigation buttons to scroll to **NETWORK** and press **OK**.
- 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.	
	<b>Network setting</b> When the Wi-Fi dongle is connected, you can view and connect to any available wireless network.	
Network Status	Display the network status.	

### **Network Connection Options**

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

## **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	ပ် Power	R/C BUTTON
OB	INPUT	R/C BUTTON
C4	MONITOR ON	R/C BUTTON
C5	MONITOR OFF	R/C BUTTON
95	ENERGY SAVING (@20)	R/C BUTTON
DC	3D	R/C BUTTON
10 to 19	Number Key 0 to 9	R/C BUTTON
53	1/a/A	R/C BUTTON
2F	CLEAR	R/C BUTTON
02	Volume 🚄 ( + )	R/C BUTTON
03	Volume 🚄 ( - )	R/C BUTTON
79	ARC	R/C BUTTON
99	AUTO	R/C BUTTON
09	MUTE	R/C BUTTON
EO	BRIGHTNESS ^ (Page UP)	R/C BUTTON
E1	BRIGHTNESS <sup>∨</sup> (Page Down)	R/C BUTTON
4D	PSM	R/C BUTTON
AA	INFO ①	R/C BUTTON
5F	W.BAL	R/C BUTTON
43	SETTINGS	R/C BUTTON
40	Up 🛦	R/C BUTTON
41	Down ▼	R/C BUTTON
07	Left ৰ	R/C BUTTON
06	Right ►	R/C BUTTON
3F	S.MENU	R/C BUTTON
44	ОК	R/C BUTTON
28	ВАСК	R/C BUTTON
5B	EXIT	R/C BUTTON
7E	<b>БІШЬГІЦК</b>	R/C BUTTON
7B	TILE (Tile Mode)	R/C BUTTON
B1		R/C BUTTON
ВО		R/C BUTTON
BA	11	R/C BUTTON

Code (Hexa)	Function	Note
8F	₩	R/C BUTTON
8E	▶	R/C BUTTON
72	Red Key (PICTURE ID ON)	R/C BUTTON
71	Green Key (PICTURE ID OFF)	R/C BUTTON
63	Yellow Key	R/C BUTTON
61	Blue Key	R/C BUTTON

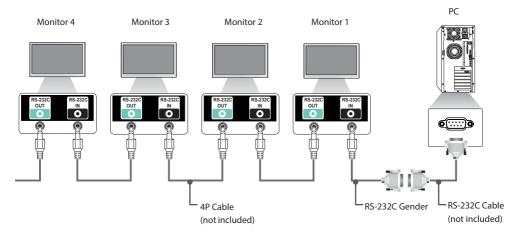
## TO CONTROL MULTIPLE PRODUCTS

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

## **Connecting the Cable**

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

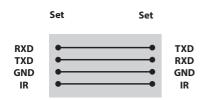
The RS-232C protocol is used for communication between the PC and product. You can turn the product on or off, select an input source or adjust the OSD menu from your PC.



## **RS-232C Configurations**

## 4P Cable

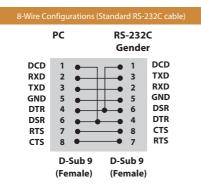
4-Wire Configurations (Standard RS-232C cable)



## 

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

## RS-232C Cable



## **Communication Parameter**

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

## **Command Reference List**

		COMMAND		DATA
		1	2	(Hexadecimal)
01	Power	k	а	00 to 01
02	Select input	х	b	See [Select input]
03	Aspect ratio	k	с	See [Aspect ratio]
04	Energy saving	j	q	See [Energy saving]
05	Picture mode	d	х	See [Picture mode]
06	Contrast	k	g	00 to 64
07	Brightness	k	h	00 to 64
08	Sharpness	k	k	00 to 32
09	Color	k	i	00 to 64
10	Tint	k	j	00 to 64
11	Color temperature	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]
18	Mute	k	e	00 to 01
19	Volume	k	f	00 to 64
20	Clock 1 (year/month/day)	f	а	See [Clock 1]
21	Clock 2 (hour/minute/second)	f	x	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	e	See [Off timer]
25	On timer (repeat mode/time)	f	d	See [On timer]
26	On timer input	f	u	See [On timer input]
27	Automatic Standby	m	n	00 to 01
28	Auto off	f	g	00 to 01
29	Language	f	i	See [Language]
30	Reset	f	k	00 to 02
31	Current temperature	d	n	FF
32	Кеу	m	с	See [Key]
33	Time elapsed	d	1	FF
34	Product serial number	f	y	FF
L .			,	

		COMMAND		DATA
		1	2	(Hexadecimal)
35	Software version	f	Z	FF
36	White balance red gain	j	m	00 to FE
37	White balance green gain	j	n	00 to FE
38	White balance blue gain	j	0	00 to FE
39	Backlight	m	g	00 to 64
40	Screen off	k	d	00 to 01
41	Tile Mode	d	d	See [Tile Mode]
42	Tile Mode Check	d	z	FF
43	Tile ID	d	i	Refer to 'Tile ID'.
44	Tile H Position	d	e	00 to 32
45	Tile V Position	d	f	00 to 32
46	Tile H Size	d	g	00 to 32
47	Tile V Size	d	h	00 to 32
48	Natural Mode (In Tile mode)	d	j	00 to 01



- 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**

35

### Transmission

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

* [Command1]	Identifies the factory setting and the user setting modes.
* [Command2]	Controls monitors.
* [Set ID]	Used for selecting a set you want to control. A Set ID can be assigned to each set from 1 to 255 (from 01H to FFH), or from 1 to 1,000 (from 001H to 3e8H) in certain models, under OPTION in the OSD menu. Selecting '00H' or '000H' for Set ID allows the simultaneous control of all connected monitors. (It may not be supported depending on the model.)
* [Data]	Transmits command data. Data count may increase depending on the command.
* [Cr]	Carriage Return. Corresponds to '0x0D' in ASCII code.
*[]	White Space. Corresponds to '0x20' in ASCII code.

#### Acknowledgement

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

- \* The Product transmits an ACK (acknowledgement) based on this format when receiving normal data. At this time, if the data is FF, it indicates the present status data. If the data is in data write mode, it returns the data of the PC computer.
- \* If a command is sent with Set ID '00' (=0x00) or '000 (=0x000)', the data is reflected to all monitor sets and they do send any acknowledgement (ACK).
- \* If the data value 'FF' is sent in control mode via RS-232C, the current setting value of a function can be checked (only for some functions).
- \* Some commands may not be supported on some models.

Contr	ols the power on/off of the set.
	Transmission
	[k][a][ ][Set ID][ ][Data][Cr]
Data	00: Off 01: On

#### Acknowledgement

02. Select input (Command: x b) Selects an input signal.

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

80: DVI-D (DTV)

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

90: HDMI (HDMI1) (DTV)

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

A0: HDMI (HDMI1) (PC)

60: RGB 70: DVI-D (PC)

Acknowledgement

Transmission

Data

01. Power (Command: k a)

#### [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

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

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

#### Acknowledgement

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

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

#### 05. Picture mode (Command: d x) Selects a picture mode.

#### Transmission

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

- Data
  - 00: Vivid 01: Standard 02: Cinema 03: Sport 04: Game 05: Expert 1 06: Expert 2 08: Eco 11: Calibration

#### Acknowledgement

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

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

Adjusts the aspect ratio.

#### Transmission

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

Data

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

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

Acknowledgement

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

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

Adjusts the screen contrast.

#### Transmission

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

00 to 64: Contrast 0 to 100 Data

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

Acknowledgement

00 to 64: Tint red 50 to green 50

08. Sharpness (Command: k k)

Adjusts the screen sharpness.

#### Transmission

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

Data

00 to 32: Sharpness 0 to 50

Acknowledgement

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

#### 11. Color temperature (Command: x u) Adjusts the screen color temperature.

Transmission

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

Data 00 to 64: Warm 50 to cool 50

Acknowledgement

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

#### 09. Color (Command: k i)

Adjusts the screen color.

#### Transmission

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

00 to 64: Color 0 to 100 Data

#### 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)

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

Transmission

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

Data

Acknowledgement

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

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

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

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

(Only available in RGB-PC input mode)

#### Transmission

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

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

#### Acknowledgement

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

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

Adjusts the sound balance.

#### Transmission

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

Data 00 to 64: Left 50 to right 50

Acknowledgement

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

#### 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]

#### 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] 01: Execution

Data

Acknowledgement

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

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

Mutes/unmutes the sound.

Transmission

Data

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

00: Mute

01: Unmute

#### Acknowledgement

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

## **19. Volume (Command: k f)** Adjusts the playback volume.

#### Transmission

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

00 to 64: Volume 0 to 100

Data

### Acknowledgement

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

22. Off time schedule (Command: f c) Enables/disables the on time schedule.

#### Transmission

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

00: Off 01: On

Data

#### 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 14: Year 2010 to 2040

 Data2
 01 to OC: 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]

00: Off 01: On

Data

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 38:00 to 59 minutes

 Data3
 00 to 38:00 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 **OB.** 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 timer. Example 2: fd 01 e1 ff ff - Delete the 1st index data from on timer. Example 3: fd 01 04 02 03 - Set on timer at 02:03 on Monday to Saturday. \* This function is only available when Clock 1 (year/month/day) and Clock 2 (hour/minute/second) are set.

Acknowledgement

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

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

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

#### Transmission

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

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

Data (adding schedule) 60: RGB 70: DVI-D 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

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

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

Sets the OSD language.

#### Transmission

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

Data	00: Czech 01: Danish 02: German 03: English 04: Spanish (Europe) 05: Greek 06: French 07: Italian 08: Dutch 09: Norwegian 0A: Portuguese 0B: Portuguese (Brazil) 0C: Russian 0D: Finnish 0E: Swedish 0F: Korean 10: Chinese (Cantonese) 11: Japanese 12: Chinese (Mandarin)
	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. Reset (Command: f k)

Resets settings for Picture, Screen and Audio or restores factory settings.

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

Transmission

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

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

#### Acknowledgement

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

31. Current temperature (Command: d n)

Checks the inside temperature value.

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

[n][][Set ID][][OK/NG][Data1][Data2][Data3][x]
\*Temperature is displayed as a hexadecimal value.

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

Transmission

Data FF: Check status

#### **33. 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]

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

#### 34. Product serial number (Command: f y)

Checks the serial number of the product.

#### Transmission

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

Data FF: Check product serial number

Acknowledgement

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

\* Data is in ASCII code.

#### **35. Software version (Command: f z)** Checks the software version of the product.

Transmission

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

Data FF: Check software version

Acknowledgement

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

#### 32. Key (Command: m c)

Sends a key code for the IR remote control.

#### Transmission

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

Data IR\_KEY\_CODE

Acknowledgement

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

For key codes, see IR Codes. \* Some key codes may not be supported on some models.

**30** Re set (So

42

Data

ENGLISH

#### 36. White balance red gain (Command: j m)

Adjusts the white balance red gain value.

Transmission

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

Data 00 to FE: Red gain 0 to 254

Acknowledgement

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

**39. 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.

### 37. White balance green gain (Command: j n)

Adjusts the white balance green gain value.

Transmission

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

Data 00 to FE: Green gain 0 to 254

Acknowledgement

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

40. 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]

41. 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]

#### 38. White balance blue gain (Command: j o)

Adjusts the white balance blue gain value.

#### Transmission

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

Data 00 to FE: Blue gain 0 to 254

Acknowledgement

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

#### 42. 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

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

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

Transmission

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

Data 0 to 32: 0 (Bottom) to 50 (Top) \* Bottom/Top values depend on Tile Vertical size. \*\* It may not be supported depending on the model.

#### Acknowledgement

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

#### 43. Tile ID (Command: d i)

To set Tile ID.

#### Transmission

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

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

FF: Check Tile ID

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

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

#### Acknowledgement

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

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

#### 44. 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]

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

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

#### Transmission

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

Data 00 to 32:0 to 50 \*\* It may not be supported depending on the model.

#### Acknowledgement

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

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

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

#### Transmission

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

Data 00 to 32: 0 to 50 \*\* It may not be supported depending on the model.

#### Acknowledgement

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

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

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

#### Transmission

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

Data

00: Off 01: On

#### Acknowledgement

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

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