LG
Life's Good

USER GUIDE

LG Digital Signage
(MONITOR SIGNAGE)

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

webOS 2.0

TABLE OF CONTENTS

> ⓘ **NOTE**
> • The software-related contents may be changed without prior notice due to upgrade of the product functions.
> • Some features described in the Installation manual may not be supported in certain models.
> • SNMP 2.0 is supported.

User Settings

Main Menu Settings

Picture Settings

`To Select Picture Mode`

SETTINGS ➜ Advanced ➜ Picture ➜ Picture Mode Settings ➜ Picture Mode

Select the picture mode that is best suited to the video type.

• **Vivid:** adjusts the video image for a retail environment by enhancing the **contrast**, **brightness**, and **sharpness**.
• **Standard:** adjusts the video image for a normal environment.
• **APS:** APS (Auto power saving) mode reduces power consumption by dimming control.
• **Cinema:** optimizes the video image for watching movies.
• **Sports:** optimizes the video image for watching sports. Even fast actions such as kicking or throwing a ball are rendered clearly on the screen.
• **Game:** optimizes the video image for playing videogames.
• **Photo:** Optimizes the screen for viewing photos. (This feature is available only with certain models.)
• **Expert/Calibration:** allows an expert, or anyone interested in high quality pictures, to manually tune the picture for the best picture quality.

> ⓘ **NOTE**
> • Depending on the input signal, the available **Picture Mode**s may differ.
> • **Expert** is an option that allows a picture quality expert to fine-tune the picture quality using a specific image. Thus, it may not be effective for a normal picture.

To fine-tune the picture mode

SETTINGS ➜ Advanced ➜ Picture ➜ Picture Mode Settings ➜ Customize

- **Backlight:** adjusts the brightness of the screen by controlling the LCD backlight. The closer the value is to 100, the brighter the screen is.
- **Contrast:** adjusts the difference between the light and dark areas of the picture. The closer the value is to 100, the greater the difference is.
- **Brightness:** adjusts the overall brightness of the screen. The closer the value is to 100, the brighter the screen is.
- **Sharpness:** adjusts the sharpness of the edges of objects. The closer the value is 50, the clearer and the sharper the edge becomes.
- **H Sharpness:** adjusts the sharpness of the contrast edges on the screen from a horizontal point of view.
- **V Sharpness:** adjusts the sharpness of the contrast edges on the screen from a vertical point of view.
- **Color:** softens or deepens the tints on the screen. The closer the value is 100, the deeper the colors become.
- **Tint:** adjusts the balance between red and green levels displayed on the screen. The closer the value is to Red 50, the deeper the color red becomes, and the closer the value is to Green 50, the deeper the color green becomes.
- **Color Temperature:** adjusts the tints of the screen to evoke feelings of warmth or coolness.
- **Advanced Controls/Expert Control:** customizes the advanced options.
    - **Dynamic Contrast**:Optimizes the difference between the light and dark parts of the screen according to the brightness of the image.
    - **Super Resolution**: Sharpens the blurry or indistinguishable parts of the picture.
    - **Color Gamut**: Selects the range of colors to display.
    - **Dynamic Color**: Adjusts the tint and saturation of the image for a more vivid and lively display.
    - **Edge Enhancer**: Provides much sharper and clearer edges to the picture.
    - **Color Filter**: Accurately adjusts color and tint by filtering a specific color area of RGB space.
    - **Preferred Color**: Adjusts the skin tint, grass tint, and sky tint to your preference.
    - **Gamma**: Adjusts the medium brightness of the image.
    - **White Balance**: Adjusts the overall tint of the picture to your preference. In Expert mode, you can fine-tune the picture using the Method/Pattern options.
    - **Color Management System**: Experts use the color management system when they adjust the colors by using the test pattern. The color management system allows you to make an adjustment by selecting from among 6 different color spaces (Red/Yellow/Blue/Cyan/Magenta/Green) without affecting other colors. You may not see tints change in a normal picture even after adjustment.

• **Picture Options:** customizes the picture options.
  – **Noise Reduction:** Removes irregularly generated tiny dots for a clear picture.
  – **MPEG Noise Reduction:** Reduces the noise produced while creating digital video signals.
  – **Black Level:** Adjusts the black level of the picture to correct the brightness and contrast of the picture.
  – **Real Cinema:** Optimizes the video image for a cinematic look.
  – **TruMotion:** Reduces image shaking and image sticking that can occur with moving images.
• **Reset**: resets the picture settings.

🛈 NOTE

• You can adjust advanced settings only in the **User** mode.
• Depending upon the input signal or the selected picture mode, the available options may differ.

To set the aspect ratio,

(Some features may not be supported in certain models.)

SETTINGS ➔ Advanced ➔ Picture ➔ Aspect Ratio

Changes the aspect ratio to view the image in its optimal size.
• **16:9:** displays the image with a 16:9 aspect ratio.
• **Just Scan:** displays the image in the original size without cutting off the edges.
  Original is available in HDMI (720p or higher) mode. (On 58:9 models, this option can be selected regardless of the input signal.)
• **Set By Program:** automatically changes the aspect ratio to 4:3 or 16:9 depending on the input video signal.
• **4:3:** displays the image with a 4:3 aspect ratio.
• **Zoom:** expands the image to fit to the width of the screen. The top and bottom of the image may be cropped.
• **Cinema Zoom:** enlarges the image to have a cinemascope ratio of 2.35:1 without distortion.
• **58:9:** Displays the screen with a 58:9 aspect ratio.

⚠ CAUTION

• If a fixed image is displayed on the screen for a long period of time, it will be imprinted and become a permanent disfigurement on the screen. This image burn or burn-in is 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.
• The options may differ depending on the model.
• Depending on the input signal, the available aspect ratio may differ.
• You can select only **4:3** and **16:9** aspect ratios in HDMI-PC/ DVI-D/ DISPLAYPORT-PC/ OPS-PC/ RGB input mode. (This does not apply to 58:9 models.)
• When you adjust **Zoom** or **Cinema Zoom**, the screen may flicker for some input signals.

To use the Energy Saving function

SETTINGS ➜ Advanced ➜ Picture ➜ Energy Saving

Reduces power consumption by adjusting peak screen brightness.
- **Auto:** adjusts the brightness of the monitor according to ambient light. (This feature is available only with certain models.)
- **Off:** disables the Energy Saving mode.
- **Minimum/Medium/Maximum:** uses the Energy Saving according to the Energy Saving level specified for your monitor.
- **Screen Off:** turns off the screen. You will only hear audio. You can turn on the screen again by pressing any button on the remote control except the power button.

To use the Smart Energy Saving function

SETTINGS ➜ Advanced ➜ Picture ➜ Smart Energy Saving

According to picture brightness, the brightness of the monitor will be adjusted automatically to save energy.
- **Off:** disables the Smart Energy Saving function.
- **On:** enables the Smart Energy Saving function.

To use the SCREEN(RGB-PC) function

(Only applies to certain models.)

SETTINGS ➜ Advanced ➜ Picture ➜ SCREEN(RGB-PC)

Customizes the PC display options in RGB mode.
- **Set Automatically:** 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.
- **Resolution:** Selects a proper resolution.
- **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.

To run a Picture Test

(Only applies to certain models.)

SETTINGS ➜ Advanced ➜ Picture ➜ Picture Test

Run a Picture Test to check that picture signals are outputted normally, then solve any problems by selecting the relevant option on the screen. If there are no problems with the Test Picture, check connected external devices.

How to Use HDMI ULTRA HD Deep Colour

[For Ultra HD models only]

SETTINGS ➜ Advanced ➜ Picture ➜ HDMI ULTRA HD Deep Colour

If you connect an HDMI device to one of the Deep Colour adjustable ports, you can select Deep Colour On (6G) or Off (3G) in the HDMI ULTRA HD Deep Colour settings menu.

If a compatibility issue occurs with a graphics card when the Deep Colour option is set to On at 3840 x 2160 @ 60 Hz, set the Deep Colour option to Off.

- HDMI specifications may vary depending on the input port. Check the specifications of each device before connecting.
- HDMI input port 1,2 are best suited for 4K at 60 Hz (4:4:4, 4:2:2) to enjoy high definition video. However, video or audio may not be supported depending on the specifications of the external devices. In that case, please connect to another HDMI port.

Sound Settings

• Only applies to certain models.

To select a Sound Mode

SETTINGS ➜ Advanced ➜ Sound ➜ Sound Mode

The best sound quality will be selected automatically depending on the video type currently being watched.

• **Standard:** this sound mode works well for content of all types.
• **Cinema:** optimizes sound for watching movies.
• **News:** optimizes sound for watching news.
• **Sports:** optimizes sound for watching sports.
• **Music:** optimizes sound for listening to music.
• **Game:** optimizes sound for playing videogames.

To use the Sound Effects function

SETTINGS ➜ Advanced ➜ Sound ➜ Sound Effects

• **Clear Voice II:** enjoy clearer sound with the three-level adjustment.
• **Equalizer:** manually adjust sound by using the equalizer.
• **Balance:** adjust the output volume for the left speaker and the right speaker.
• **Reset:** reset the sound settings.

To select a Volume Increase Rate,

SETTINGS ➜ Advanced ➜ Sound ➜ Volume Increase Amount

you can set the volume range by selecting any of **Low**/ **Medium**/ **High**.

To sync audio with video

SETTINGS ➜ Advanced ➜ Sound ➜ AV Sync Adjustment

• **Speaker:** adjusts the sync between video and audio coming from external speakers, such as those connected to the digital audio output port, LG audio equipment, or headphones. From the default value, the closer the value is to -, the faster the sound output becomes, and the closer the value is to +, the slower the sound output becomes.
• **Bypass:** audio coming from external devices without delay. Audio may be outputted earlier than video due to the processing time for video that is inputted into the monitor.

To Run a sound test

SETTINGS ➜ Advanced ➜ Sound ➜ Sound Test

Run a sound test to check that sound signals are outputted normally, then solve any problems by selecting the relevant option on the screen. If there are no problems with the Sound Test, check connected external devices.

Network Settings

To Set a Signage Monitor Name

SETTINGS ➡ Advanced ➡ Network ➡ Signage Name

You can set a name for Signage Monitor that will be used on the network by using the on-screen keyboard.

To Set Your Wired Network

SETTINGS ➡ Advanced ➡ Network ➡ Wired Connection (Ethernet)

• **Connecting to a wired network**: Connect your monitor to a local area network (LAN) via the LAN port, and configure the network settings. Only wired network connections are supported. 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 automatically make a connection without any adjustments. For detailed information, contact your Internet provider or consult your router manual.

Setting a Wireless Network

SETTINGS ➡ Advanced ➡ Network ➡ Wi-Fi Connection

If you have set the monitor up for a wireless network, you can check and connect to the available wireless Internet networks.

• **Add a Hidden Wireless Network**: If you input the name of network directly, you can add a wireless network.
• **Connect via PBC**: Connects easily when the button of a wireless AP supporting PBC is pressed.
• **Connect via PIN**: Connects easily when the PIN of the wireless AP that you wish to connect to is entered in to the AP configuration webpage.
• **Advanced Settings**: If you input the information of network directly, you can enter a wireless network. If there is no wireless network available, click **Advanced Settings**. You can add a network.

Setting up a SoftAP

SETTINGS ➡ Advanced ➡ Network ➡ SoftAP

If you set up a SoftAP, you can connect many devices via a Wi-Fi connection without a wireless router and use wireless Internet.

• To use SIGNAGE, you must have an Internet connection.
• You cannot use the SoftAP feature and the Screen Share feature at the same time.
• On models that support Wi-Fi dongles, the SoftAP menu is enabled only when a Wi-Fi dongle is connected to the product.
• SoftAP connection information
   – SSID: A unique identifier necessary to make a wireless Internet connection
   – Security key: The security key you enter to connect to the desired wireless network
   – Number of connected devices: Shows the number of devices currently connected to your Signage device via a Wi-Fi connection. Up to 10 devices are supported.

Tips for Network Setting

- Use a standard LAN cable (Cat5 or higher with a RJ45 connector) with this display.
- 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 with 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.

🚫 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 function correctly.

⚠️ CAUTION

- Do not connect a modular telephone cable to the LAN port.
- Since there are various connection methods, please follow the specifications of your telecommunication carrier or Internet Service Provider.
- Network Setting menu will not be available until the display is connected to a physical network.

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.
- If you do not turn off the entire local home network, network traffic may occur on some devices.
- 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.

General Settings

To configure the language

SETTINGS ➜ **Advanced** ➜ **General** ➜ **Menu Language**

Select one of the languages on the menu displayed on the screen.
 • **Menu Language:** sets a language for Signage.

Setting up the keyboard language

SETTINGS ➜ **Advanced** ➜ **General** ➜ **Keyboard Languages**

Select the language you wish to show on the keyboard.
 • **Keyboard Languages:** Sets the keyboard language.

To set the time/date

SETTINGS ➜ **Advanced** ➜ **General** ➜ **Time & Date**

You can check or change the time.
 • **Set Automatically :** You can set Time and Date.
 • **Daylight Saving Time:** You can set Start Time and End Time for Daylight Saving Time. The DST start/end settings work only when you set them more than one day apart from each other.
 • **Time zone:** You can change the settings for Continent, Country/Territory, and City.

To turn your monitor on or off automatically

SETTINGS ➜ **Advanced** ➜ **General** ➜ **Timers**

You can set the On/Off Timer for your monitor.
 • **On Timer:** you can set the time when your monitor turns on.
 • **Off Timer:** you can set the time when your monitor turns off.
 • **No Signal Power Off (15Min):** When there is no input source, the monitor will automatically turn off after 15 minutes. If you don't want it to turn off automatically, set No Signal Power Off to **Off**.
 • **Auto Power Off:** When there is no key input, the monitor will automatically turn off.

🛈 NOTE

 • On Time/Off 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.
 • 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.

To reset your monitor settings

SETTINGS ➔ Advanced ➔ General ➔ Reset to Initial Settings

Resets all monitor settings.

ENTERTAINMENT

Using My Media

Connecting USB/SD Storage Devices

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

⚠ CAUTION

• Do not turn off the monitor or remove a USB storage device when the **My Media** screen is activated. This could result in loss of files or damage to the USB storage device.
• Back up files you have saved on a USB storage device frequently, as loss or damage to the files may be not covered by the warranty.

Tips for using USB/SD storage devices

- Only a USB storage device can be recognized.
- A USB device does not work effectively when it is connected via a USB hub.
- A USB storage device using an automatic recognition program may not be recognized.
- A USB storage device using 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 storage device when the connected device is working. If the USB storage device is suddenly disconnected, the stored files or the device itself may be damaged.
- Please do not connect a USB storage device which was modified to work on a PC. The device may cause the monitor to malfunction or the content fail to be played. Use only a USB storage device which contains normal music, image or video files.
- A USB storage device formatted as a utility program not supported by Windows may not be recognized.
- A USB storage device (over 0.5 A) which requires an external power supply must be connected to a power supply separately. If it is not, the device may not be recognized.
- Please connect the USB storage device using the cable provided by the device manufacturer.
- Some USB storage devices may not be supported or operate smoothly.
- File alignment method of USB storage devices is similar to that of Window XP and filenames can recognize up to 100 English characters.
- Back up important files regularly as data stored on a USB storage 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. To ensure the device is detected, connect the external power source.
  - Please use a power adapter for an external power source. We do not provide a USB cable for an external power source.
- If your USB storage device has multiple partitions, or if you use a USB multi-card reader, you can use up to four partitions or USB storage devices.
- If a USB storage device is connected to a USB multi-card reader, its volume data may not be detected.
- If the USB storage device does not work properly, disconnect and reconnect it.
- Detection speed differs from device to device.
- If the USB storage device is connected in Standby Mode, the 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 drive and 32 GB or less for USB memory stick.
- Any device with more than the recommended capacity may not work properly.
- If a USB external hard drive with an "Energy Saving" function does not work, try turning the hard drive off and on again.
- USB storage devices below USB 2.0 are also supported but may not function correctly in the Videos.
- A maximum of 999 sub-folders or files can be recognized under one folder.
- The SDHC type for SD cards is supported. To use an SDXC card, format it to the NTFS file system first.
- The exFAT file system is not supported for SD cards and USB storage devices.

Files Supported by My Media

(Subtitles are not supported in certain models.)

• *.smi, *.srt, *.sub (MicroDVD, SubViewer 1.0/2.0), *.ass, *.ssa, *.txt (TMPlayer), *.psb (PowerDivX), *.dcs (DLP Cinema)

To use Select Play

HOME ➜ ➜ **Photos/ Videos/ Music/ All** ➜

• **Play Selection:** plays back selected content.

To set FILTER

HOME ➜ ➜ **Photos/ Videos/ Music/ All** ➜

• **FILTER:** import contents from the selected device.

To set Scheduled Playing

HOME ➜ ➜ **Photos/ Videos/ Music/ All** ➜

• **Scheduled Playing:** You can play the selected content at the scheduled time.

Supported Internal Subtitle Format

- FULL HD Video
  1920 x 1080: XSUB (Supports internal subtitles generated from DivX6)
- [For Ultra HD models only] Ultra HD image: Does not support internal subtitles.

Supported Video Codec

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

Supported Audio File

File Format	Item	Information
.MP3	**Bit rate**	32 Kbps to 320 Kbps
	Sample freq.	16 KHz to 48 KHz
	Support	MPEG1, MPEG2, Layer2, Layer3
	channels	mono, stereo
.ogg	**Bit rate**	64 Kbps to 500 Kbps
	Sample freq.	8 kHz to 48 kHz
	Support	Vorbis
	channels	mono, stereo
.wma	**Bit rate**	~1.5 Mbps
	Sample freq.	8 kHz to 192 kHz
	Support	WMA
	channels	up to 6 ch

Supported Photo File

File Format	Format	Item

.jpeg, .jpg, .jpe	**JPEG**	• Minimum : 64 x 64
		• Maximum
		  - Normal Type: 15360 (W) x 8640 (H)
		  - Progressive Type: 1920 (W) x 1440 (H)

.png	**PNG**	• Minimum : 64 x 64 • Maximum: 5760 (W) x 5760 (H)
.bmp	**BMP**	• Minimum: 64 x 64 • Maximum: 1920 (W) x 1080 (H)

Supported Files and Formats for Content (with SuperSign Manager)

File extension	*.cts, *.sce
Video file extension	*.mpg, *.mpeg, *.dat, *.ts, *.trp, *.tp, *.mp4, *.mkv, *.avi, *. avi(motion JPEG), *. mp4(motion JPEG), *.mkv(motion JPEG)
Video format	MPEG1, MPEG2, MPEG4,H.264, DivX 3.11, DivX 4, DivX 5, DivX 6, Xvid 1.00, Xvid 1.01, Xvid 1.02, Xvid 1.03, Xvid 1.10-beta1/2, Motion JPEG
Audio format	MP3, Dolby Digital, LPCM, AAC, HE-AAC, AMR-NB, AMR-WB
Web page	Only web pages that support iframe can be displayed.

Viewing Videos

Play video files on display. All of the saved video files are shown in your display.

To play video files on display

HOME ➡ ➡ **Videos**

Tips for Playing Video Files

- Some user-created subtitles may not work properly.
- Some special characters in subtitles are not rendered.
- 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 video file may not play correctly, or some player functions may not be usable.
- Video files produced with some encoders may not be played correctly.
- If the video and audio structure of a recorded file is not interleaved, either video or audio is outputted.
- Video files other than the specified types and formats may not play correctly.
- Maximum bit rate of playable video file is 20 Mbps. (Motion JPEG: 10 Mbps only)
- We cannot guarantee smooth playback of files encoded level 4.1 or higher in H.264 / AVC.
- Video files more than 30 GB in file size are not supported.
- A DivX video file and its subtitle file must be located in the same folder.
- A video file and its subtitle file must be located in the same folder. A video file name and its subtitle file name must be identical in order to display the subtitle properly.
- Playing a video via a USB connection that does not support high-speed connection may not function correctly.
- Subtitles on a Network Attached Storage (NAS) device may not be supported depending on the manufacturer and model.
- Streaming of files encoded by GMC (Global Motion Compensation) or Qpel (Quarterpel Motion Estimation) is not supported.
- [For Ultra HD models only] Ultra HD image: 3840 X 2160
  Some HEVC-encoded Ultra HD videos other than the content officially provided by LG Electronics may not be played. Some codecs can be used after upgrading software.

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

- Playable file sizes may vary depending on the encoding condition.
- The AAC Main profile is not supported.
- Video files created by some encoders may not play.

🛈 NOTE

- Option values changed in **Videos** do not affect the **Photos** and **Music**. and in turn are not affected by option values changed in **Photos** or **Music**.
- Option values changed in **Photos** and **Music** do affect each other.
- When restarting a video file after stopping it, you can play from the point at which it was stopped.
- Only 10,000 sync blocks can be supported within the subtitle file.
- When playing a video, you can adjust the picture size by pressing the **ARC** button.
- Korean subtitle is supported only when the OSD menu is in Korean.
- 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

The displays on the screen may differ from the model.

Viewing image files

HOME ➔ 🖼️ **➔ Photos**

Listening to Music

Viewing music files

HOME ➔ 🖼️ **➔ Music**

ⓘ NOTE

- Files with unsupported extensions are not displayed.
- If a file is invalid, a broken image and the message "unrecognizable file" are displayed.
- Damaged music files are displayed as 00:00 and will not be played.
- A music file downloaded from a paid service with copyright protection will not play, and incorrect information may be displayed during playback.
- You can use ▶, ⏸, ⏹, ⏭, ⏮ buttons on the remote control also in this mode.
- You can use the ⏭ button to select the next track and the ⏮ button to select the previous track.
- If you press the ⏮ button within 5 seconds after playing the song, you will return to the previous song; if you press the same button after 5 seconds, you will return to the start of the song.

Settings

You must register your product to play a DRM-protected DivX video.

In order to register/deregister purchased or rented DivX® VOD contents

HOME ➔ 🖼️ **➔ Videos ➔ DivX® VOD**

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*.

- **Registration:** view the registration code of your display.
- **Deregistration:** cancel the registration.

ⓘ 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 rented or purchased DivX files. Use only the DivX registration code assigned to your product.
- Video or audio files that are not converted using the standard DivX codec may be corrupted or not play.
- The DivX® VOD code allows you to activate up to 6 devices under one account.
- After deregistration, you must register your device again to see DivX® VOD contents.

Moving, Copying, or Deleting a File

You can move, copy, or delete files.

To move, copy, or delete files

HOME ➜ ➜ **Devices**

- You can move or copy files or folders from internal to external memory.
- You can move or copy files or folders from external to internal memory.
- You can delete files or folders from internal or external memory.

⚠ NOTE

- Those files bigger than internal remaining memory aren`t allowed to be copied or moved to the internal memory.

SuperSign Contents

Plays stored files using the Export option in SuperSign Editor.

To play back the stored files using the Export option

HOME ➜

Only contents distributed by SuperSign Manager are displayed and selectable. If there is a USB/SD storage device connected, the image on the USB/SD device is outputted additionally.

⚠ NOTE

- If there is an AutoPlay folder in the USB storage device and its files are in supported formats, they will be played back automatically when the USB storage device is connected to the monitor.

Information

To check the basic information of Signage Monitor

HOME ➜

You can see the basic information on Signage Monitor.

You can also switch to **Smart Energy Saving Mode** or configure **Fail Over** settings. (You can switch to **Smart Energy Saving Mode** only when **Energy Saving Mode** is set to Off.)

Local Contents Scheduler

• Only applies to certain models.

You can view or delete any scheduled playing created in **MY MEDIA**.

To access Local Contents Scheduler

HOME ➜ 📺

Go to **Local Contents Scheduler** to check the list of the scheduled playing created in **MY MEDIA**.

> ## ❗ NOTE
>
> • By default, **Local Contents Scheduler** lists the scheduled playing created by the currently connected devices.

To add new a scheduled playing

HOME ➜ 📺 ➜ 🔖

• **NEW SCHEDULED PLAYING**: In the pop-up window, click the **GO TO MY MEDIA** button and enter **MY MEDIA** to create new a scheduled playing.

To configure FILTER

HOME ➜ 📺 ➜ 🔽

• **FILTER**: You can view the list by sorting it based on the type of device used for creating the scheduled playing.

To delete a scheduled playing

HOME ➜ 📺 ➜ 🗑

• **DELETE**: You can select a scheduled playing and delete it.

To view detailed information about a scheduled playing

HOME ➜ 📺 ➜ **Select Scheduled Playing**

• From list of the scheduled playing, select a specific scheduled playing and view its detailed information.

To play scheduled playing instantly

HOME ➜ 📺 ➜ **Select Scheduled Playing ➜ Play Button**

• In the detailed information page of the scheduled playing, click the Play button above the thumbnail to play the scheduled playing instantly.

> ## ❗ NOTE
>
> • To play a scheduled playing instantly rather than at the scheduled time, the scheduled playing must be in a playable status. In other words, the device used for creating the scheduled playing must be connected, and all the content included in the scheduled playing must be valid.

Editing a Scheduled Playing

HOME ➜ 📺 ➜ **Select the desired scheduled Playing ➜** ✏

• **EDIT**: Click the EDIT button at the top left of the Details page of your desired scheduled Playing, and then you will be directed to My Media where you can edit information about the scheduled Playing including its content and other details.

> ## ❗ NOTE
>
> • You can edit the scheduled Playing only when the device used for creating the scheduled playback is connected.

Screen Share

• Only applies to certain models.

Allows the screen of a user's device such as a mobile or PC Windows to be shared with a display using a wireless connection such as WiDi or Miracast.

To use Screen Share

HOME ➔

When the **Screen Share** app is running, the wireless connection such as WiDi or Miracast is automatically set to ON and the display is automatically changed to the connection ready mode. In this state, you can use **Screen Share** by turning on the wireless connection on the device and selecting the display to establish a connection between the device and the display.

🛈 NOTE

Configuring WiDi (Wireless Display)

WiDi, which is short for Wireless Display, is a system that wirelessly transmits video and sound files from a laptop that supports Intel WiDi to the display.
This is available only in certain input modes (Composite/Component/RGB/HDMI/DP/OPS/DVI-D).
Other than these modes, LG Signage cannot be detected by your PC.

1 Connect your laptop to an AP. (This feature can be used without an AP, but it is recommended that you connect to it for optimal performance.)
   Run the Intel WiDi ( ) program on your laptop.

2 Any nearby LG Signages supporting WiDi are detected. In the list of detected displays, select a Signage to connect to and then, click Connect.
   Enter the 8-digit PIN number (ⓐ) displayed on the Signage in the input field of your laptop (ⓑ) and click Continue.
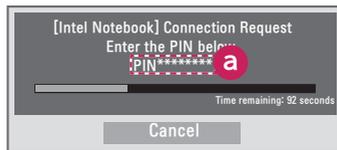
Signage screen   Laptop screen

3 The laptop screen appears in the Signage screen within 10 seconds. The wireless environment may affect the screen from displaying.
   If the connection is poor, the Intel WiDi connection may be lost.

• LG Signage does not need to be registered.
• For more information on how to use Intel WiDi, visit *http://intel.com/go/widi*.
• This works normally with WiDi 3.5 or later versions.

To select connection mode

HOME ➜ ➜ **Listen Mode**

You can select between **On** and **Off**.
If it is set to **On**, even when the app is not running, you can turn on a wireless connection feature such as WiDi or Miracast and select a display to connect the device and display. Then, **Screen Share** will be available for use.

⚠ **NOTE**

• If the **Screen Share** app has been deleted from the HOME screen, **Screen Share** cannot be used even if **Listen Mode** is set to **On**.

To set the transfer speed

HOME ➜ ➜ **Transfer Speed**

Transfer speed can be set to **Fast** or **Normal**. When **Screen Share** is running, this option adjusts the time difference of the image output between the device and the display. Adjusting the transfer speed can repair any interruptions in displays when mirroring is used.

SuperSign EZ

• Only applies to certain models.

SuperSign EZ enables you to produce and play Signage content. This feature enables you to edit Signage content based on templates and set its playback time. In addition, this feature also enables you to access **SuperSign EZ** from your mobile device or PC and create/edit content.

⚠️ CAUTION

• A maximum of 5,000 images stored on a USB drive/SD card can be displayed from your PC or mobile device. Images more than 5,000 cannot be displayed from your PC or mobile device. In addition, we recommend you store no more than 1,000 images for use on your USB drive or SD card. If you use more than 1,000 images, the images may not be displayed smoothly depending on your environment.
• Supported devices (Some features may not be available depending on the type or version of your device or browser.)
  – Android 4.4 or later (Chromium v.38.0)
  – iOS 8 or later (Safari v.600.1.4 or later)
  – PC: Chromium v.38.0
• Supported resolutions (this program is optimized for the following resolutions):
  – 360 x 640, 600 x 960, 375 x 667, 768 x 1024 and 1920 x 1080
• Content playback time: The minimum playback time is set to 5 seconds. If you set the content playback time to less than 5 seconds, it is automatically reset to 5 seconds.
• If you play UHD videos on a UHD model, videos with a high bitrate may not play properly due to the limitations of the processing speed.

Features

• Add/edit (images and texts)/delete Signage content/change playback times and names.
• Add images and videos on mobile devices.
• You can use images added from USB/SD storage devices and internal memory.

How to Use

• Monitors: Run the app in the Launcher bar and add/edit/delete the desired content.
• Mobile devices: Run the app in the Launcher bar and get access using the QR code or URL provided.

🛈 NOTE

• If you use a mobile device, you need to go through an authorization process using a PIN code. The default PIN code is '0000'.
• When using a PC, use the full screen (F11) feature in 1920 x 1080 (Full HD) resolution to view the same screen as the monitor.

Photo Supported File

File Format	Format	Item
.jpeg, .jpg, .jpe	**JPEG**	• Minimum : 64 x 64 • Maximum - Normal Type: 15360 (W) x 8640 (H) - Progressive Type: 1920 (W) x 1440 (H)
.png	**PNG**	• Minimum : 64 x 64 • Maximum: 5760 (W) x 5760 (H)

Supported Video Codec

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

Tips for Playing Video Files

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

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

- Some codecs can be used after upgrading software.

Multi-Screen

• Only applies to certain models.

This feature allows you to view multiple external inputs and videos on a single screen.

Accessing Multi-Screen

HOME ➔ 📷

Enter **Multi-screen** to select the screen layout.

ⓘ NOTE

• When entering **Multi-screen**, the screen may flicker and the picture may appear abnormal on certain devices while the optimal resolution is selected automatically. If this happens, please restart the monitor.

Selecting Screen Layout

When you enter **Multi-screen** without having set any screen layout, the screen layout selection menu appears.

If the screen layout menu does not appear, you can press the up arrow key on the remote control to go to the screen layout menu bar and select it to show the screen layout menu.

Closing Screen Layout Menu

From the screen layout menu, press the up arrow key on the remote control to go to the screen layout menu bar and select it or press the **BACK** key to close the screen layout menu.

Changing Screen Input

Press the 🔲 button on the top right of each split screen to select the desired input.

ⓘ NOTE

• Inputs which have already been selected for other split screens cannot be selected again. To select them, press the **RESET** button to reset the inputs for all screens first.

Playing Videos on Split Screens

Press the 🔲 button on the upper right of each split screen, select **Video File**, and then select a storage device to view the list of videos in the selected device. Next, select your desired video from the list to play it.

Tips for playing Multi-Screen files

• The number of split screens available may differ by model.
• Some tips on playing video files are included.
• Subtitles are not supported.
• Audio is only supported for the main screen.
• The following video types are supported in split mode.

Codec	MPEG-2, H.264, HEVC, VP9
Scan Type	Progressive
Frame rate	24, 25, 30
Resolution	PIP mode supports 3840 x 2160 (main screen only), 1920 x 1080 and 1280 x 720. PBP mode supports 1920 x 1080 and 1280 x 720.

• Certain videos may not play normally depending on codec, resolution, frame rate and scan type.

🛈 NOTE

• Certain models may not support the following codec combinations when playing 3840 x 2160 resolution videos on the main screen in PIP mode.

Main (3840 x 2160)	Sub
HEVC	HEVC
H.264	HEVC
VP9	VP9

• When the 4-section screen has been selected in PBP mode, up to two H.264 and MPEG2 codecs can be used on condition that the HEVC codec is in use on one screen only.

Resolutions supported on external input split screens

The following resolutions are supported when external input is selected.

Mode	Resolution		Frame Rate
PIP	Main	2160p	30
		1080p, 720p	50, 60
	Sub	1080p, 720p	
PBP	1080p, 720p		
	960 x 600, 1280 x 600, 1920 x 300 (Only applies to the models that support the resolutions)		60

• The resolutions supported on the split screens may differ depending on the resolutions supported by the model being used.

PICTURE ID Settings

• Only applies to certain models.

PICTURE ID is used to change the settings of a specific set (display) using a single IR receiver for multi-vision. Communication is possible between a monitor with an IR receiver and other monitors using RS-232C cables. Each monitor is identified by a **Set ID**. If you assign the **PICTURE ID** using the remote control, only displays with matching **PICTURE ID** and **Set ID** can be controlled remotely.

1 Assign the **Set ID** to the installed monitors as shown below.
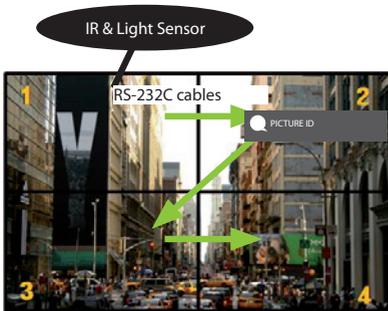
2 Press the red **ON** button on the remote control to assign the **PICTURE ID**.

3 Assign the **Set ID** to the selection of your choice.

• A set with a different **Set ID** from the **PICTURE ID** cannot be controlled by IR signals.

! NOTE

• If **PICTURE ID** is set to 2, only the upper right monitor, which has a **Set ID** of 2, can be controlled by IR signals.

• If you press the green **OFF** button for **PICTURE ID**, the **PICTURE ID**s for all monitors are turned off. If you then press any button on the remote control, all monitors can be controlled by IR signals regardless of **Set ID**.

ENGLISH

IR CODES

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

Code (Hex)	Function	Remarks
08	⏻ POWER	Remote control button
C4	MONITOR ON	Remote control button
C5	MONITOR OFF	Remote control button
95	Energy Saving	Remote control button
0B	INPUT	Remote control button
10	Number Key 0	Remote control button
11	Number Key 1	Remote control button
12	Number Key 2	Remote control button
13	Number Key 3	Remote control button
14	Number Key 4	Remote control button
15	Number Key 5	Remote control button
16	Number Key 6	Remote control button
17	Number Key 7	Remote control button
18	Number Key 8	Remote control button
19	Number Key 9	Remote control button
02	Volume ◢ (+)	Remote control button
03	Volume ◢ (-)	Remote control button
E0	BRIGHTNESS ∧ (Page Up)	Remote control button
E1	BRIGHTNESS ∨ (Page Down)	Remote control button
DC	3D	Remote control button
32	1/a/A	Remote control button
2F	CLEAR	Remote control button
7E	(S)IMPLINK	Remote control button
79	ARC(MARK) (Aspect Ratio)	Remote control button
4D	PSM (Picture Mode)	Remote control button
09	MUTE	Remote control button
43	SETTINGS (Menu)	Remote control button
99	Auto Config.	Remote control button
40	Up ▲	Remote control button
41	Down ▼	Remote control button
06	Right ▶	Remote control button
07	Left ◀	Remote control button
44	OK	Remote control button
28	BACK	Remote control button

Code (Hex)	Function	Remarks
7B	TILE	Remote control button
5B	EXIT	Remote control button
72	PICTURE ID ON (RED)	Remote control button
71	PICTURE ID OFF (GREEN)	Remote control button
63	YELLOW	Remote control Button
61	BLUE	Remote control button
B1	■	Remote control button
B0	▶	Remote control button
BA	❚❚	Remote control button
8F	◀◀	Remote control button
8E	▶▶	Remote control button
5F	W.BAL	Remote control button
3F	S.MENU	Remote control button
7C	HOME	Remote control button

* Some key codes are not supported depending on the model.

TO CONTROL MULTIPLE PRODUCTS

• Only applies to certain models.

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, the Set ID must be between 1 and 1000 without being duplicated.

Connecting the Cable

• The image may be different according to the model.

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.

Monitor 4   Monitor 3   Monitor 2   Monitor 1   PC

RS-232C OUT   RS-232C IN

4P Cable (not included)

RS-232C Gender   RS-232C Cable (not included)

RS-232C IN   RS-232C OUT

PC   Monitor 1   Monitor 2   Monitor 3   Monitor 4
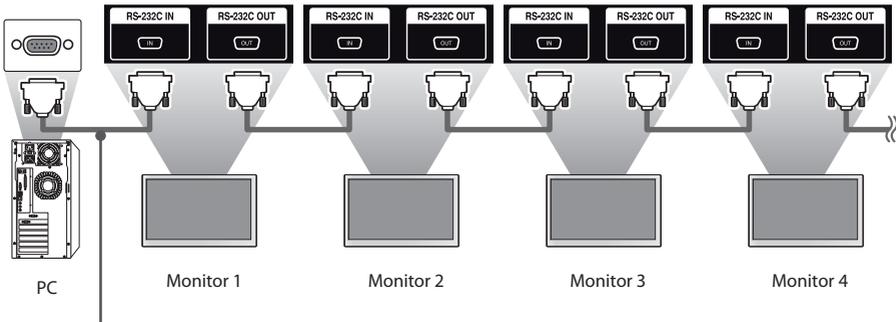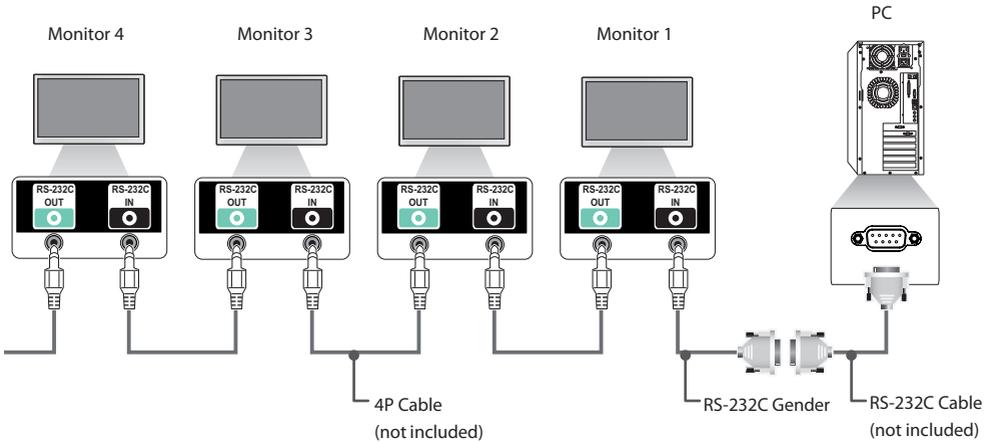
RS-232C Cable (not included)

Communication Parameter

Baud Rate: 9600 BPS

Data Length: 8 bit

Parity Bit: None

Stop Bit: 1 bit

Flow Control: None

Communication Code: ASCII code

NOTE

- When using three-wire connections (non-standard), an IR daisy chain cannot be used.
- Be sure to only use the provided gender to connect properly.
- When monitors connected via Daisy Chain (that controls multiple monitors) are turned off and on successively, some monitors may not turn on. In this case, you can turn those monitors on by pressing the **MONITOR ON** button, not the **POWER** button.
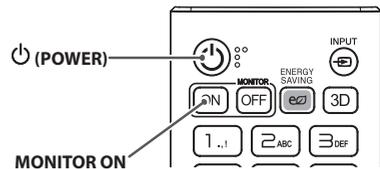
Command Reference List

		COMMAND		DATA
		1	**2**	**(Hexadecimal)**
01	Power	k	a	00 to 01
02	Select input	x	b	See Select Input
03	Aspect Ratio	k	c	See Aspect Ratio
04	Energy Saving	j	q	See Energy Saving
05	Picture Mode	d	x	See Picture Mode
06	Contrast	k	g	00 to 64
07	Brightness	k	h	00 to 64
08	Sharpness	k	k	00 to 32
09	Color	k	i	00 to 64
10	Tint	k	j	00 to 64
11	Color temperature	x	u	00 to 64
12	Balance	k	t	00 to 64
13	Sound Mode	d	y	See Sound Mode
14	Mute	k	e	00 to 01
15	Volume Control	k	f	00 to 64
16	Time 1 (year/month/day)	f	a	See Time 1
17	Time 2 (hour/minute/second)	f	x	See Time 2
18	Off time schedule	f	c	00 to 01
19	On Time Schedule	f	b	00 to 01
20	Off Timer (Repeat/Time)	f	e	See Off Timer
21	On Timer (Repeat/Time)	f	d	See On Timer
22	On Timer Input	f	u	Refer to On Timer Input.
23	No Signal Power Off (15Min)	f	g	00 to 01
24	Auto Power Off (4 Hours)	m	n	00 to 01
25	Language	f	i	See Language
26	Reset	f	k	00 to 02
27	Current Temperature	d	n	FF
28	Key	m	c	See Key
29	Time Elapsed	d	l	FF
30	Product Serial Number	f	y	FF
31	Software Version	f	z	FF
32	White Balance Red Gain	j	m	00 to FE
33	White Balance Green Gain	j	n	00 to FE
34	White Balance Blue Gain	j	o	00 to FE
35	White Balance Red Offset	s	x	00 to 7F
36	White Balance Green Offset	s	y	00 to 7F
37	White Balance Blue Offset	s	z	00 to 7F
38	Backlight	m	g	00 to 64
39	Screen off	k	d	00 to 01

		COMMAND		DATA
		1	**2**	**(Hexadecimal)**
40	Tile Mode	d	d	00 to FF
41	Check Tile Mode	d	z	FF
42	Tile ID	d	i	See Tile ID
43	Natural Mode	d	j	00 to 01
44	DPM Select	f	j	00 to 07
45	Remote Control/Local Key Lock	k	m	00 to 01
46	Power On Delay	f	h	00 to FA
47	Fail Over Select	m	i	00 to 02
48	Fail Over Input Select	m	j	See Fail Over Input Select
49	IR Operation	t	p	00 to 02
50	Local Key Operation	t	o	00 to 02
51	Check the status	s	v	See Check the status
52	Check Screen	t	z	00 to 01
53	Speakers	d	v	00 to 01
54	Daylight Saving Time	s	d	Refer to 'Daylight Saving Time'
55	PM Mode	s	n, 0c	00 to 03
56	ISM Method	j	p	See ISM Method
57	Network Settings	s	n, 80(81)(82)	See Network Settings
58	Auto-adjustment	j	u	01
59	H Position	f	q	00 to 64
60	V Position	f	r	00 to 64
61	H Size	f	s	00 to 64
62	Power On Status	t	r	00 to 02
63	Wake On LAN	f	w	00 to 01
64	Intelligent Auto	t	i	00 to 01
65	OSD Portrait Mode	t	h	00 to 02
66	Reset to Initial Settings	t	n	00 to 01
67	Time Sync	s	n, 16	00 to 01
68	Contents Sync	t	g	00 to 01
69	Pivot Mode	t	a	00 to 01
70	Studio Mode	s	n, 83	00 to 01
71	LAN Daisy Chain	s	n, 84	00 to 01
72	Content Rotation	s	n, 85	00 to 02
73	DPM Wake up Control	s	n, 0b	00 to 01
74	Scan Inversion	s	n, 87	00 to 01
75	Beacon	s	n, 88	00 to 01
76	Aspect Ratio(Rotation)	s	n, 89	00 to 01

		COMMAND		DATA
		1	**2**	**(Hexadecimal)**
77	Easy Brightness Control Mode	s	m	00 to 01
78	Easy Brightness Control Schedule	s	s	See Easy Brightness Control Schedule
79	MultiScreen Mode & Input	x	c	See MultiScreen Mode & Input
80	Aspect Ratio(MultiScreen)	x	d	See Aspect Ratio(MultiScreen)
81	Screen Mute(MultiScreen)	x	e	See Screen Mute(MultiScreen)
82	Screen Off Always	s	n, 0d	00 to 01
83	Screen Video Freeze	k	x	00 to 01
84	Wireless Wake On LAN	s	n, 90	00 to 01
85	OSD Display	k	l	00 to 01
86	UPnP Mode (Command: s n, 9c)	s	n, 9c	00 to 01

* Note: Commands may not work when the external input is not used. Some commands may not be supported depending on the model.

Transmission/Reception Protocol

Transmission

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

* [Command1]: identifies between the factory setting and the user setting modes.

* [Command2]: controls monitor sets.

* [Set ID]: Used for selecting a set you want to control. A unique Set ID can be assigned to each set ranging
    from 1 to 1000(01H~3E8H) under Settings in the OSD menu.
    Selecting '00H' for Set ID allows the simultaneous control of all connected monitors.
    (The maximum value may differ 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 ACK (acknowledgement) based on this format when receiving normal data. At this time, if the data is FF, it indicates the present status data. If the data is in data write mode, it returns the data of the PC computer.

* If a command is sent with Set ID '00' (=0x00), the data is reflected to all monitor sets and each monitor set does not send an acknowledgement (ACK).

* If the data value 'FF' is sent in control mode via RS-232C, the current setting value of a function can be checked (only for some functions).

*Some commands 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]

*The acknowledgement signal is returned properly only when the monitor is fully powered on.
* There may be a delay between the transmission and acknowledgement signals.

02. Select Input (Command: x b)

Selects an input signal.

Transmission

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

Data   20: AV
            40: COMPONENT
            60: RGB
            70: DVI-D (PC)
            80: DVI-D (DTV)
            90: HDMI1 (DTV)
            A0: HDMI1 (PC)
            91: HDMI2/OPS (DTV)
            A1: HDMI2/OPS (PC)
            92: OPS/HDMI3/DVI-D (DTV)
            A2: OPS/HDMI3/DVI-D (PC)
            95: OPS/DVI-D (DTV)
            A5: OPS/DVI-D (PC)
            96: HDMI3/DVI-D (DTV)
            A6: HDMI3/DVI-D (PC)
            C0: DISPLAYPORT (DTV)
            D0: DISPLAYPORT (PC)
            E0: SuperSign webOS Player
            E1: Others
            E2: Multi Screen

Acknowledgement

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

* Some input signals may not be supported depending on the model.
** If it is not distributed from SuperSign W, webOS Player returns NG.

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
            06: Set by Program
            09: Just Scan (720p or higher)
            10 to 1F: Cinema Zoom 1 to 16
            21: 58:9
            30: Vertical Zoom
            31: All-Direction Zoom

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

Acknowledgement

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

04. Energy Saving (Command: j q)

Sets the Energy Saving.

Transmission

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

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

Acknowledgement

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

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

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: Sports
            04: Game
            05: Expert 1
            06: Expert 2
            08: APS
            09: Photos
            10: Touch
            11: Calibration

Acknowledgement

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

* Depending on the model, some picture modes may not be supported.

06. Contrast (Command: k g)
Adjusts the screen contrast.
Transmission
[k][g][ ][Set ID][ ][Data][Cr]

Data   00 to 64: Contrast 0 to 100
Acknowledgement
[g][ ][Set ID][ ][OK/NG][Data][x]

07. Brightness (Command: k h)
Adjusts the screen brightness.
Transmission
[k][h][ ][Set ID][ ][Data][Cr]

Data   00 to 64: Brightness 0 to 100
Acknowledgement
[h][ ][Set ID][ ][OK/NG][Data][x]

08. Sharpness (Command: k k)
Adjusts the screen sharpness.
Transmission
[k][k][ ][Set ID][ ][Data][Cr]

Data   00 to 32: Sharpness 0 to 50
Acknowledgement
[k][ ][Set ID][ ][OK/NG][Data][x]

09. Color (Command: k i)
Adjusts the screen color.
Transmission
[k][i][ ][Set ID][ ][Data][Cr]

Data   00 to 64: Color 0 to 100
Acknowledgement
[i][ ][Set ID][ ][OK/NG][Data][x]

10. Tint (Command: k j)
Adjusts the screen tint.
Transmission
[k][j][ ][Set ID][ ][Data][Cr]

Data   00 to 64: Tint red 50 to green 50
Acknowledgement
[j][ ][Set ID][ ][OK/NG][Data][x]

11. Color Temperature (Command: x u)
Adjusts the screen color temperature.
Transmission
[x][u][ ][Set ID][ ][Data][Cr]

Data   00 to 64: warm 50 to cool 50
Acknowledgement
[u][ ][Set ID][ ][OK/NG][Data][x]

12. 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]

13. Sound mode (Command: d y)
Selects a sound mode.
Transmission
[d][y][ ][Set ID][ ][Data][Cr]

Data   01: Standard
         02: Music
         03: Cinema
         04: Sports
         05. Game
         07: News (Clear Voice III)
Acknowledgement
[y][ ][Set ID][ ][OK/NG][Data][x]

14. 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]

15. Volume Control (Command: k f)
Adjusts the playback volume.
Transmission
[k][f][ ][Set ID][ ][Data][Cr]

Data   00 to 64: Volume 0 to 100
Acknowledgement
[f][ ][Set ID][ ][OK/NG][Data][x]

16. Time 1 (year/month/day) (Command: f a)
Sets the values of the Time 1 (year/month/day), or sets the Auto time.
Transmission
1. [f][a][ ][Set ID][ ][Data1][ ][Data2][ ][Data3][Cr]
2. [f][a][ ][Set ID][ ][0][0][ ][Data1][ ][Cr]

1. Setting the Time 1 (year/month/day)
Data1   04~1B: year 2014 to 2037
Data2   01 to 0C: January to December
Data3   01 to 1F: 1st to 31st
* Enter "fa [Set ID] ff" to view the Time 1 (year/month/day) settings.

2. Setting the Auto time
Data1   00: Auto
         01: Manual
* To view the set value of the Auto time, enter "fa [Set ID] 00 ff".
Acknowledgement
1. [a][ ][Set ID][ ][OK/NG][Data1][Data2][Data3][x]
2. [a][ ][Set ID][ ][OK/NG][0][0][Data1][x]

17. Time 2 (hour/minute/second) (Command: f x)
Adjusts the Time 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 "fx [Set ID] ff" to view the Time 2 (hour/minute/second) settings.
** This function is only available when Time 1 (year/month/day) is set.
Acknowledgement
[x][ ][Set ID][ ][OK/NG][Data1][Data2][Data3][x]

18. Off Time Schedule (Command: f c)
Enables/disables the Off Time Schedule.
Transmission
[f][c][ ][Set ID][ ][Data][Cr]

Data   00: Off
         01: On
Acknowledgement
[c][ ][Set ID][ ][OK/NG][Data][x]

19. 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]

20. Off Timer (Repeat/Time) (Command: f e)
Configures Off Timer (Repeat/Time) settings.
Transmission
[f][e][ ][Set ID][ ][Data1][ ][Data2][ ][Data3][Cr]

Data1
1. f1h to f7h (reading data)
F1: reads the 1st Off Timer data
F2: reads the 2nd Off Timer data
F3: reads the 3rd Off Timer data
F4: reads the 4th Off Timer data
F5: reads the 5th Off Timer data
F6: reads the 6th Off Timer data
F7: reads the 7th Off Timer data
2. e1h-e7h (delete one index), e0h (delete all indexes)
E0: erases all Off Timer settings
E1: erases the 1st Off Timer setting
E2: erases the 2nd Off Timer setting
E3: erases the 3rd Off Timer setting
E4: erases the 4th Off Timer setting
E5: erases the 5th Off Timer setting
E6: erases the 6th Off Timer setting
E7: erases the 7th Off Timer setting
3. 01h to 0Ch (sets the day of the week for the Off Timer)
01: Once
02. Daily
03: Mon - Fri
04: Mon - Sat
05: Sat - Sun
06. Every Sunday
07. Every Monday
08. Every Tuesday
09. Every Wednesday
0A. Every Thursday
0B. Every Friday
0C. Every Saturday
Data2   00 to 17: 00 to 23 hours
Data3   00 to 3B: 00 to 59 minutes
* To read or delete the Off Time Schedule list, [Data2][Data3] must be set to FFH.
Example 1: fe 01 f1 ff ff – reads the first index data in Off Timer.
Example 2: fe 01 e1 ff ff - deletes the first index data from Off Timer.
Example 3: fe 01 04 02 03 - sets Off Timer to 02:03 from Monday to Saturday.
* This function is only available when Time 1 (year/month/day) and Time 2 (hour/minute/second) are set.

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

21. On timer (Repeat/Time) (Command: f d)
Configures On Timer (Repeat/Time) settings.
Transmission
[f][d][ ][Set ID][ ][Data1][ ][Data2][ ][Data3][Cr]

Data1
1. f1h to f7h (reading data)
F1: reads the 1st On Timer data
F2: reads the 2nd On Timer data
F3: reads the 3rd On Timer data
F4: reads the 4th On Timer data
F5: reads the 5th On Timer data
F6: reads the 6th On Timer data
F7: reads the 7th On Timer data
2. e1h-e7h (delete one index), e0h (delete all indexes)
E0: erases all On Timer settings
E1: erases the 1st On Timer setting
E2: erases the 2nd On Timer setting
E3: erases the 3rd On Timer setting
E4: erases the 4th On Timer setting
E5: erases the 5th On Timer setting
E6: erases the 6th On Timer setting
E7: erases the 7th On Timer setting
3. 01h to 0Ch (sets the day of the week for the On Timer)
01: Once
02. Daily
03: Mon - Fri
04: Mon - Sat
05: Sat - Sun
06. Every Sunday
07. Every Monday
08. Every Tuesday
09. Every Wednesday
0A. Every Thursday
0B. Every Friday
0C. Every Saturday
Data2   00 to 17: 00 to 23 hours
Data3   00 to 3B: 00 to 59 minutes
* To read or delete an On Time schedule list, [Data2][Data3] must be set to FF.
Example 1: fd 01 f1 ff ff - reads the first index data from On Timer.
Example 2: fd 01 e1 ff ff - deletes the first index data from On Timer.
Example 3: fd 01 04 02 03 - sets On Timer to 02:03 from Monday to Saturday.
* This function is only available when Time 1 (year/month/day) and Time 2 (hour/minute/second) are set.
*** This feature works properly only when the values for 22.
Acknowledgement
[d][ ][Set ID][ ][OK/NG][Data1][Data2][Data3][x]

22. On Timer Input (Command: f u)

Select an external input for the current On Time setting and add
a new schedule.

Transmission

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

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

Data (Add schedule)
40: COMPONENT
60: RGB
70: DVI-D
A0: HDMI1
A1: HDMI2/OPS
A2: OPS/HDMI3/DVI-D
A5: OPS/DVI-D
A6: HDMI3/DVI-D
D0: DISPLAYPORT

Data1 (Read schedule)
1. f1h to f7h (Read data)
F1: Select the 1st schedule input
F2: Select the 2nd schedule input
F3: Select the 3rd schedule input
F4: Select the 4th schedule input
F5: Select the 5th schedule input
F6: Select the 6th schedule input
F7: Select the 7th schedule input

Data2 (Read schedule)
FF

* To read the schedule input, enter FF for [Data2].
If no schedule is available for [Data1] when attempting to
read the schedule data, the text 'NG' will be displayed and the
operation will fail.
(Example 1: fu 01 90 - Move each schedule input down one row
and save the 1st schedule input in HDMI mode.)
(Example 2: fu 01 f1 ff - Read the 1st schedule input.)
* This function is supported only when 1 (Year/Month/Day), 2
(Hour/Minute/Second), On Time (Repeat Mode/Time) are set.
** When in DTV input mode, the input is switched to PC mode.
** It may not be supported depending on the model.

Acknowledgement

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

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

23. No Signal Power Off (15Min) (Command: f g)

Sets the monitor to enter Automatic Standby mode if there is
no signal for 15 minutes.

Transmission

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

Data   00: Off
            01: On

Acknowledgement

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

24. Auto Power Off (4 Hours) (Command: m n)

Sets the monitor to enter Auto Power Off after 4 hours.

Transmission

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

Data   00: Off
            01: 4 hours

Acknowledgement

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

25. 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 (Mandarin)
            11: Japanese
            12: Chinese (Cantonese)

Acknowledgement

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

26. Reset (Command: f k)
Performs the reset function.
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
Acknowledgement
[k][ ][Set ID][ ][OK/NG][Data][x]

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

27. Current temperature (Command: d n)
Checks the inside temperature.
Transmission
[d][n][ ][Set ID][ ][Data][Cr]

Data FF: Check the status
Acknowledgement
[n][ ][Set ID][ ][OK/NG][Data][x]

* Temperature is displayed as a hexadecimal value.

28. 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 are not supported depending on the model.

29. Time Elapsed (Command: d l)
Checks the elapsed time.
Transmission
[d][l][ ][Set ID][ ][Data][Cr]

Data   FF: Read status
Acknowledgement
[l][ ][Set ID][ ][OK/NG][Data][x]

* The data received is shown as a hexadecimal value.

30. Product serial number (Command: f y)
Checks the serial number of the product.
Transmission
[f][y][ ][Set ID][ ][Data][Cr]

Data   FF: Check product serial number
Acknowledgement
[y][ ][Set ID][ ][OK/NG][Data][x]
* Data is in ASCII code.

31. 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. 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
                 FF: checks the red gain value

Acknowledgement

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

33. 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
                 FF: checks the green gain value

Acknowledgement

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

34. 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
                 FF: checks the blue gain value

Acknowledgement

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

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

Adjusts the white balance red offset value.

Transmission

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

Data   00 to 7F: Red Offset 0 to 127
                 FF: checks the red offset value

Acknowledgement

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

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

Adjusts the white balance green offset value.

Transmission

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

Data   00 to 7F: Green Offset 0 to 127
                 FF: checks the green offset value

Acknowledgement

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

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

Adjusts the white balance blue offset value.

Transmission

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

Data   00 to 7F: Blue Offset 0 to 127
                 FF: checks the blue offset value

Acknowledgement

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

38. Backlight (Command: m g)

Adjusts the backlight brightness.

Transmission

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

Data   00 to 64: Backlight 0 to 100

Acknowledgement

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

39. 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]

40. Tile Mode (Command: d d)

Sets the Tile Mode and sets values for the tile rows and columns.

Transmission

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

Data   00 to FF: The first byte - tile column
                 The second byte - tile row

* 00, 01, 10, and 11 mean that the tile mode is off
** The maximum value may differ depending on the model.

Acknowledgement

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

41. Check Tile Mode (Command: d z)

Checks the tile mode.

Transmission

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

Data   FF: checks the tile mode

Acknowledgement

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

Data1   00: tile mode off
        01: tile mode on
Data2   00 to 0F: tile column
Data3   00 to 0F: tile row

42. Tile ID (Command: d i)

Sets the tile ID value of the product.

Transmission

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

Data   01 to E1: Tile ID 1 to 225**
FF: checks the tile ID
** The data value cannot exceed the value of row x column.

Acknowledgement

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

* When a data value that exceeds the value of row x column is entered (except 0xFF),
ACK becomes NG.

43. Natural Mode (in Tile mode) (Command: d j)

When displaying 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]

44. DPM Select (Command: f j)

To set the DPM (Display Power Management) function.

Transmission

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

Data   00: Off
        01: 5 seconds
        02: 10 seconds
        03: 15 seconds
        04: 1 minutes
        05: 3 minutes
        06: 5 minutes
        07: 10 minutes

Acknowledgement

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

45. Remote Control/Local Key Lock (Command: k m)

Adjusts the remote control/local key (front) lock.

Transmission

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

Data 00: Off (Lock Off)
       01: On (Lock On)
* When the monitor is turned off, the power key works even in On (01) mode.

Acknowledgement

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

46. Power On Delay (Command: f h)

Sets the schedule delay when the power turns on. (unit: seconds).

Transmission

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

Data   00 to FA: min. 0 to maximum 250 (seconds)
* The maximum value may differ depending on the model.

Acknowledgement

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

47. Fail Over Select (Command: m i)

Selects an input mode for auto switch.

Transmission

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

Data   00: Off
        01: Auto
        02: Manual

Acknowledgement

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

48. Fail Over Input Select (Command: m j)

Selects an input source for auto switch.
* This command is only available when the Fail Over (auto) mode is set to Custom.

Transmission

[m][j][ ][Set ID][ ][Data1][ ][Data2][ ][Data3][ ] [Data4]...[ ][DataN][Cr]

Data 1 to N-1 (Input priority: 1 to N-1)
        40: COMPONENT
        60: RGB
        70: DVI-D
        90: HDMI1
        91: HDMI2/OPS
        92: OPS/HDMI3/DVI-D
        95: OPS/DVI-D
        96: HDMI3/DVI-D
        C0: DISPLAYPORT

Data N: E0: INTERNAL Memory
          E1: USB
          E2: SD CARD

Acknowledgement

[j][ ][SetID][ ][OK/NG][Data1][Data2][Data3][Data4] ...[DataN] [x]

Data 1 to N-1 (Input priority: 1 to N-1)
        40: COMPONENT
        60: RGB
        70: DVI-D
        90: HDMI1
        91: HDMI2/OPS
        92: OPS/HDMI3/DVI-D
        95: OPS/DVI-D
        96: HDMI3/DVI-D
        C0: DISPLAYPORT

Data N: E0: INTERNAL Memory
          E1: USB
          E2: SD CARD

* Some input signals may not be available with certain models.
** The data number (N) may vary depending on the model. (The data number depends on the number of supported input signals.)
*** Only the value of E0, E1, or E2 is acceptable for the last data.

49. IR Operation (Command: t p)

Configures the IR operation settings of the product.

Transmission

[t][p][ ][Set ID][ ][Data][Cr]

Data   00: locks off all of the keys
        01: locks on all of the keys except the Power key
        02: locks on all of the keys

Acknowledgement

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

* When the monitor is turned off, the power key works even in the locks on all of the keys (02) mode.

50. Local Key Operation (Command: t o)

Configures the local key operation settings of the product.

Transmission

[t][o][ ][Set ID][ ][Data][Cr]

Data   00: locks off all of the keys
        01: locks on all of the keys except the Power key
        02: locks on all of the keys

Acknowledgement

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

* When the monitor is turned off, the power key works even in the locks on all of the keys (02) mode.
** It may not be supported depending on the model.

51. Status (Command: s v)

Checks the current signal status of the product.

Transmission

[s][v][ ][Set ID][ ][Data][ ][FF][Cr]

Data   02: checks whether there is a signal or not
        03: check the PM mode.
        10: RGB sensing OK/NG (Check Screen)

Acknowledgement

[v][ ][Set ID][ ][OK/NG][Data][Data1][x]

Data: 02 (when a signal is found)
Data1   00: no signal
         01: there is a signal

Data: 03 (when checking the PM mode)
Data1   00: The PM mode is set to Screen On
         01: The PM mode is set to Screen Off
         02: The PM mode is set to Screen Off Always

Data: 10 (Check Screen)
Data1   00: Check Screen result NG
         07: Check Screen result OK

* Sets to NG when Check Screen is set to Off or not supported.

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

52. Check Screen (Command: t z)

Sets Check Screen.

Transmission

[t][z][ ][Set ID][ ][Data][Cr]

Data   00: Off
        01: On

Acknowledgement

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

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

53. Speaker (Command: d v)

Sets the speaker function.

Transmission

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

Data   00: Off
        01: On

Acknowledgement

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

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

54. Daylight Saving Time (Command: s d)

To set theDaylight Saving Time function.

Transmission

[s][d][ ][Set ID][ ][Data1][ ][Data2][ ][Data3][ ][Data4] [ ][Data5][Cr]

Data   00: Off (Data2~5: FFH)
        01: Start Time
        02: End Time
Data2 01~0C: January to December
Data3 01~06: 1 ~ 6th week
* The maximum number of [Data3] differs depending on Date.
Data4 00~06 (Sun. ~ Sat.)
Data5 00~17: 00 ~ 23 hours
* To read the Start Time/End Time, enter FFH for [Data2]~[Data5].
(ex1: sd 01 01 ff ff ff ff - To check the Start Time
ex2: sd 01 02 ff ff ff ff - To check the End Time)
* This function is supported only when 1 (Year/Month/ Day) and 2 (Hour/Minute/Second) are set.

Acknowledgement

[d][ ][Set ID][ ][OK/NG][Data1][Data2][Data3][Data4] [Data5][x]

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

55. PM Mode (Command: s n, 0c)

Selects the desired PM mode option.

Transmission

[s][n][ ][Set ID][ ][0c][ ][Data][Cr]

Data   00: Sets the Power Off mode.
        01: Sets the Sustain Aspect Ratio mode.
        02: Sets the Screen Off mode.
        03: Sets the Screen Off Always mode.

Acknowledgement

[n][ ][Set ID][ ][OK/NG][0c][Data][x]

* It may not be supported depending on the model.

56. ISM Method (Command: j p)

Selects the ISM Method option.

Transmission

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

Data   01: Inversion
        02: Orbiter
        04: White Wash
        08: Normal
        20: Color Wash
        80: Washing Bar
        90: User Image
        91: User Video

** The jp command works when Timer is set to Immediately.

Acknowledgement

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

* It may not be supported depending on the model.

57. Network Settings (Command: s n, 80 or 81 or 82)

Configures network and DNS settings.

Transmission

[s][n][ ][Set ID][ ][Data1][ ][Data2][ ][Data3][ ][Data4][ ]
[Data5][Cr]

Data1   80: Configures/views the temporary IP mode
            (Auto/Manual), subnet mask, and gateway.
        81: Configures/views the temporary DNS address.
        82: Saves temporary settings and views
            information about the current network.

* If Data1 is 80,
    Data2   00: Auto
            01: Manual
            FF: Views the temporary IP mode (Auto/Manual),
                subnet mask, and gateway.

** If Data2 is 01 (Manual),
    Data3   : Manual IP address
    Data4   : Subnet mask address
    Data5   : Gateway address

* If Data1 is 81,
    Data2   : DNS address
            FF: Views the temporary DNS address.
* If Data1 is 82,
    Data2   80: Applies the temporarily saved IP mode (Auto/
                Manual), subnet mask, and gateway.
            81: Applies the temporary DNS address
            FF: Information on the current network (IP, subnet
                gateway, DNS)
*** Examples of settings
    1. Auto: sn 01 80 00
    2. Manual: sn 01 80 01 010177223241 255255254000
            010177222001 (IP: 10.177.223.241, subnet:
            255.255.254.0,
            gateway: 10.177.222.1)
    3. Network read: sn 01 80 ff
    4. DNS setting: sn 01 81 156147035018
                (DNS: 156.147.35.18)
    5. Applying the settings: sn 01 82 80 (applies the saved IP
                mode (auto/manual), subnet mask,
                and gateway)
                sn 01 82 81 (applies the saved
                DSN)
**** Each IP address contains 12 decimal digits .

Acknowledgement

[n][ ][Set ID][ ][OK/NG][Data1][Data][x]

* It may not be supported depending on the model.

** This feature is available only for wired networks.

58. Auto-adjustment (Command: j u)

Automatically corrects the position and shaking of the picture.
(Works only in RGB-PC input mode.)

Transmission

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

Data   01: Execution

Acknowledgement

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

* It may not be supported depending on the model.

59. H Position (Command: f q)

Adjusts the horizontal position of the screen. This feature only
works when the Tile Mode is set to Off.
* The operational range varies depending on the RGB input
resolution. (Works only in RGB-PC input mode.)

Transmission

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

Data   00-64: Min -50 (Left) to Max 50 (Right)

Acknowledgement

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

* It may not be supported depending on the model.

60. V Position (Command: f r)

Adjusts the vertical position of the screen. This feature only works when the Tile Mode is set to Off.
* The operational range varies depending on the RGB input resolution. (Works only in RGB-PC input mode.)

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

Data   00-64: Min -50 (Down) to Max 50 (Up)

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

* It may not be supported depending on the model.

61. H Size (Command: f s)

Adjusts the horizontal size of the screen. This feature only works when the Tile Mode is set to Off.
* The operational range varies depending on the RGB input resolution. (Works only in RGB-PC input mode.)

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

Data   00-64: Min -50 (Small) to Max 50 (Large)

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

* It may not be supported depending on the model.

62. Power On Status (Command: t r)

Selects the desired Power On status option.

Transmission
[t][r][ ][Set ID][ ][Data][Cr]

Data   00: LST (Stays in the previous status)
              01: STD (Stays powered off)
              02: PWR (Stays powered on)

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

63. Wake On LAN (Command: f w)

Selects the desired Wake On LAN option.

Transmission
[f][w][ ][Set ID][ ][Data][Cr]

Data   00: Off
              01: On

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

64. Intelligent Auto (Command: t i)

Selects the desired Intelligent Auto option.

Transmission
[t][i][ ][Set ID][ ][Data][Cr]

Data   00: Off
              01: On

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

* It may not be supported depending on the model.

65. OSD Portrait Mode (Command: t h)

Selects the desired Portrait mode option.

Transmission
[t][h][ ][Set ID][ ][Data] [Cr]

Data   00: Off
              01: 90 degrees
              02: 270 degrees

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

* It may not be supported depending on the model.

66. Reset to Initial Settings (Command: t n)

Enables/disables the Reset to Initial settings.

Transmission

[t][n][ ][Set ID][ ][Data] [Cr]

Data   00: Disables the settings.
                  01: Enables the settings.

Acknowledgement

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

* It may not be supported depending on the model.

67. Time Sync (Command: s n, 16)

Configures the Time Sync.

Transmission

[s][n][ ][Set ID][ ][1][6][ ][Data][Cr]

Data   00: Off
                  01: On

* This feature works in the Master mode.

** This feature does not work if the current time is not set.

Acknowledgement

[n][ ][Set ID][ ][OK/NG][ ][1][6][ ][Data][x]

* It may not be supported depending on the model.

68. Contents Sync (Command: t g)

Configures the Contents Sync.

Transmission

[t][g][ ][Set ID][ ][Data][Cr]

Data   00: Off
                  01: On

Acknowledgement

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

* It may not be supported depending on the model.

69. Pivot Mode (Command: t a)

Sets Pivot Mode to on/off.

Transmission

[t][a][ ][Set ID][ ][Data][Cr]

Data   00: Off
                  01: On

Acknowledgement

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

* This feature may not be supported in certain models.

70. Studio Mode (Command: s n, 83)

Sets Studio Mode to on/off.

Transmission

[s][n][ ][Set ID][ ][8][3][ ][Data][Cr]

Data   00: Off
                  01: On

Acknowledgement

[n][ ][Set ID][ ][OK/NG][8][3][Data][x]

* This feature may not be supported in certain models.

71. LAN Daisy Chain (Command: s n, 84)

Sets LAN Daisy Chain to on/off.

Transmission

[s][n][ ][Set ID][ ][8][4][ ][Data][Cr]

Data   00: Off
                  01: On

Acknowledgement

[n][ ][Set ID][ ][OK/NG][8][4][Data][x]

* This feature may not be supported in certain models.

72. Content Rotation (Command: s n, 85)

Sets Content Rotation to on/off.

Transmission

[s][n][ ][Set ID][ ][8][5][ ][Data][Cr]

Data   00: Off
                  01: 90 degrees
                  02: 270 degrees
                  03: 180 degrees

Acknowledgement

[n][ ][Set ID][ ][OK/NG][8][5][Data][x]

* This feature may not be supported in certain models.

73. DPM Wake up Control((Command: s n, 0b)

Sets the DPM Wake up Control Mode.

Transmission

[s][n][ ][Set ID][ ][0][b][ ][Data][Cr]

Data   00: Clock
               01: Clock+DATA

Acknowledgement

[n][ ][Set ID][ ][OK/NG][0][b][Data][x]

* This feature may not be supported in certain models.

74. Scan Inversion (Command: s n, 87)

Sets Scan Inversion to on/off.

Transmission

[s][n][ ][Set ID][ ][8][7][ ][Data][Cr]

Data   00: Off
               01: On

Acknowledgement

[n][ ][Set ID][ ][OK/NG][8][7][Data][x]

* This feature may not be supported in certain models.

75. Beacon (Command: s n, 88)

Sets Beacon to on/off.

Transmission

[s][n][ ][Set ID][ ][8][8][ ][Data][Cr]

Data   00: Off
               01: On

Acknowledgement

[n][ ][Set ID][ ][OK/NG][8][8][Data][x]

* This feature may not be supported in certain models.

76. Aspect Ratio (Rotation) (Command: s n, 89)

Controls the Aspect Ratio (Rotation) screen.

(This command works only when Content Rotation is on.)

Transmission

[s][n][ ][Set ID][ ][8][9][ ][Data][Cr]

Data   00: Full
               01: Original

Acknowledgement

[n][ ][Set ID][ ][OK/NG][8][9][Data][x]

* This feature may not be supported in certain models.

77. Easy Brightness Control Mode (Command: s m)

Selects whether to turn on/off Easy Brightness Control Mode.

Transmission

[s][m][ ][Set ID][ ][Data][Cr]

Data   00: Easy Brightness Control off
               01: Easy Brightness Control on

* This feature does not work if the current time is not set.

** This may not be supported on some models.

Acknowledgement

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

78. Easy Brightness Control Schedule (Command: s s)

Sets Easy Brightness Control schedules.

Transmission

[s][s][ ][Set ID][ ][Data1][ ][Data2][ ][Data3][Cr]

Data1

1. F1–F6 (reads data)
F1: Reads the 1st data from the Easy Brightness Control
F2: Reads the 2nd data from the Easy Brightness Control
F3: Reads the 3nd data from the Easy Brightness Control
F4: Reads the 4th data from the Easy Brightness Control
F5: Reads the 5th data from the Easy Brightness Control
F6: Reads the 6th data from the Easy Brightness Control
2. FF: Reads all stored lists

3. e1-e6 (deletes one index); e0 (deletes all indexes)
E0: Deletes all Easy Brightness Control.
E1: Deletes the 1st Easy Brightness Control.
E2: Deletes the 2nd Easy Brightness Control.
E3: Deletes the 3rd Easy Brightness Control.
E4: Deletes the 4th Easy Brightness Control.
E5: Deletes the 5th Easy Brightness Control.
E6: Deletes the 6th Easy Brightness Control.
4. 00 to 17: 00th to 23th hour
Data2   00 to 3B: 00th to 59th minute
Data3   00 to 64: Backlight, 0 to 100
* If you want to read or delete the configured Easy Brightness Control lists, set [Data2][Data3] to FF.
* If you want to import all the configured Easy Brightness Control lists through FF, do not enter any values in [Data2][Data3].
* When all the configured Easy Brightness Control lists are imported through FF, OK is acknowledged even if there is no stored list.

Example 1: ss 01 f1 ff ff - Reads the first index data from the Easy Brightness Control.
Example 2: ss 01 ff - Reads all index data from the Easy Brightness Control.
Example 3: ss 01 e1 ff ff - Deletes the first index data from the Easy Brightness Control.
Example 4: ss 01 07 1E 46 - Adds a schedule whose time is 07:30 and whose backlight is 70.

Acknowledgement

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

* This feature may not be supported in certain models.

79. MultiScreen Mode & Input (Command: x c)

Saves or controls the MultiScreen Mode and input.

Transmission

[x][c][ ][Set ID][ ][Data1][ ][Data2][ ][Data3[ ][Data4][ ][Data5[ ]Cr]

Data1 (sets the MultiScreen Mode)
10: PIP
22: PBP2
23: PBP3
24: PBP4
Data2 (sets the MultiScreen Main Input)
Data3 (sets the MultiScreen Sub1 Input)
Data4 (sets the MultiScreen Sub2 Input)
Data5 (sets the MultiScreen Sub3 Input)
20: AV
40: COMPONENT
60: RGB
80: DVI-D
90: HDMI1
91: HDMI2/OPS
92: OPS/HDMI3/DVI-D
95: OPS/DVI-D
96: HDMI3/DVI-D
C0: DISPLAYPORT

Acknowledgement

[c][ ][Set ID][ ][OK/NG][ ][Data1][Data2][Data3][Data4] [Data5][x]

* This feature may not be supported in certain models.
** Only the input modes supported by the model works.

80. Aspect Ratio (MultiScreen) (Command: x d)

Saves or controls the Aspect Ratio (MultiScreen) screen.

Transmission

[x][d][ ][Set ID][ ][Data1][ ][Data2][Cr]

Data1   01: Controls the Main input
       02: Controls the Sub1 input
       03: Controls the Sub2 input
       04: Controls the Sub3 input
Data2   00: Full
       01: Original

Acknowledgement

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

* This feature may not be supported in certain models.

81. Screen Mute (MultiScreen) (Command: x e)

Turns on/off each screen in MultiScreen.

Transmission

[x][e][ ][Set ID][ ][Data1][ ][Data2][Cr]

Data1   01: Controls the Main input
         02: Controls the Sub1 input
         03: Controls the Sub2 input
         04: Controls the Sub3 input
Data2   00: Turns the screen on.
         01: Turns the screen off.

* This function works when the Multi Screen App is running.
** This function may not work properly if there is no signal.

Acknowledgement

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

* This feature may not be supported in certain models.

82. Screen Off Always (Command: s n, 0d)

Screen Off Always has the same effect as entering the Screen Off menu regardless of the PM Mode setting.

Transmission

[s][n][ ][Set ID][ ][0][d][ ][Data][Cr]

Data   00: Off
        01: On

Acknowledgement

[n][ ][Set ID][ ][OK/NG][0][d][Data][x]

* This feature may not be supported in certain models.

83. Screen Video Freeze (Command: k x)

Turns on/off the video freeze function.

Transmission

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

Data   00: Turns on the freeze function.
        01: Turns off the freeze function.

* Available in single input mode.

Acknowledgement

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

* This feature may not be supported in certain models.

84. Wireless Wake-on-LAN (Command: s n, 90)

Sets Wireless Wake-on-LAN.

Transmission

[s][n][ ][Set ID][ ][9][0][ ][Data][Cr]

Data   00: Off
        01: On

Acknowledgement

[n][ ][Set ID][ ][OK/NG][9][0][Data][x]

* This feature may not be supported in certain models.

85. OSD Display (Command: k l)

Selects the desired OSD Display option.

Transmission

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

Data   00: No (Off)
        01: Yes (On)

Acknowledgement

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

* This feature may not be supported for certain models.

86. 86. UPnP Mode (Command: s n, 9c)

Selects the desired UPnP mode option.

Transmission

[s][n][ ][Set ID][ ][9][c][ ][Data][Cr]

Data   00: Off
        01: On

Acknowledgement

[n][ ][Set ID][ ][OK/NG][9][c][Data][x]

* This feature may not be supported for certain models.
* If UPnP Mode is changed, a reboot will occur.