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 1.0

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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 User Guide may not be supported in certain models.

USER SETTINGS

Main Menu Settings

Quick Settings

Configures frequently used settings menus.

To turn your monitor on or off automatically

SETTINGS ➜ Quick ➜ On Timer/Off Timer

You can set the On/Off Timer for your monitor. If you do not want to set the On/Off Timer**,** select **Off** in Repeat.

To set the backlight and contrast automatically

SETTINGS ➜ Quick ➜ 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.

Picture Settings

To Select Picture Mode

SETTINGS ➜ Picture ➜ 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.
- **Expert 1/Expert 2**: 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 ➜ Picture ➜ Picture Adjust

• **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 Control/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.
  – **LED Local Dimming**: Makes the light areas of the screen lighter and the dark areas darker for maximum contrast.
    - **Off**: Disables the LED Local Dimming feature.
    - **Low/Medium/High**: Adjusts the contrast of the screen.
  – **TruMotion:** Optimizes the video image for a cinematic look.
    - **Off**: Turns off the TruMotion.
    - **Smooth:** displays fast-moving pictures smoothly.
    - **Clear:** displays fast-moving pictures clearly.
    - **User:** set de-judder manually.
    *De-judder:** adjusts judder on the screen.

• **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,

SETTINGS ➜ 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.

• **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.

⚠ 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 HDMI1-PC/ HDMI2-PC/ DISPLAYPORT-PC/ DVI-D(PC) input mode.

To use the Energy Saving function

SETTINGS ➜ 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 ➜ 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 Easy Brightness Control

SETTINGS ➜ Picture ➜ Easy Brightness Control

The backlight is adjusted according to your schedule.
- **Off:** disables the Easy Brightness Control function.
- **On:** enables the Easy Brightness Control function.

⚠ NOTE

- When Easy Brightness Control is **On**, the **backlight** feature in **Picture Adjust** is disabled.
- When **Energy Saving** is set to **Maximum** or **Auto**, Easy Brightness Control is disabled.
- You can add up to six schedules, and they are sorted by time in ascending order.
- You can delete added items individually.
- Duplicate schedules are not added. However, the backlight value is updated.
- This feature may not be supported in certain models.

To run a Picture Test

SETTINGS ➜ 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.

Sound Settings

To select a Sound Mode

SETTINGS ➔ 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.
- **News**: optimizes sound for watching news.
- **Music**: optimizes sound for listening to music.
- **Cinema**: optimizes sound for watching movies.
- **Sports**: optimizes sound for watching sports.
- **Game**: optimizes sound for playing videogames.

To use the Sound Effects function

SETTINGS ➔ 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 ➔ Sound ➔ Volume Increase Rate

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

To sync audio with video

SETTINGS ➔ Sound ➔ AV Sync. Adjust

- **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 ➔ 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

SETTINGS ➜ Network ➜ Signage Name

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

SETTINGS ➜ 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.

(It may not be supported depending on the model.)

SETTINGS ➜ 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.

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

(It may not be supported depending on the model.)
- 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 ➜ General ➜ Menu Language

Select one of the languages on the menu displayed on the screen.

• **Menu Language:** sets a language for Signage.

To set the time/date

SETTINGS ➜ General ➜ Time & Date

You can check or change the time.

• **Time:** you can set the time manually.
• **Date:** you can set the date manually.

To apply Daylight Saving Time

SETTINGS ➜ General ➜ Daylight Saving Time

You can set the application period for Daylight Saving Time and enable or disable the function by selecting On/ Off.

• **Start Time / End Time:** You can set the time by configuring month/Week/day/time settings.

⚠ NOTE

• When setting the Daylight Saving Time, configure the number of week and day of the week settings.
• For example, if the Daylight Saving Time starts on July 7th, 2014, Monday, set the time as July/ 1st/ Mon/ 00:00 since it is the first Monday of July, 2014.
• Depending on the month, either the fourth or fifth week can be Last.

To turn your monitor on or off automatically

SETTINGS ➜ 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 (15 minutes):** 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 ➜ General ➜ Reset to Initial Settings

Resets all monitor settings.

ENTERTAINMENT

Using My Media

Connecting USB Storage Devices

Connect a USB storage device such as a USB flash memory 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 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.
  - 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.

Files Supported by My Media

Supported External Subtitle Format

• *.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** ➜

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

To set Device Selection,

HOME ➜ ➜ **Photos/ Videos/ Music** ➜

• **Device Selection:** import contents from the selected device.

Supported Internal Subtitle Format

• FULL HD Video
1920 x 1080: XSUB (Supports internal subtitles generated from DivX6)

Supported Video Codec

Extension		Codec
.asf .wmv	Videos	VC-1 Advanced Profile (excluding WMVA), VC-1 Simple and Main Profiles
	Audio	WMA Standard (excluding WMA v1/WMA Speech), WMA 9 Professional
.divx .avi	Videos	DivX3.11, DivX4, DivX5, DivX6, XViD (except 3 warp-point GMC), H.264/AVC, Motion Jpeg, MPEG-4
	Audio	MPEG-1 Layer I, II, MPEG-1 Layer III (MP3), Dolby Digital, Dolby Digital Plus, LPCM, ADPCM, DTS
.mp4 .m4v .mov	Videos	H.264/AVC, MPEG-4
	Audio	AAC, MPEG-1 Layer III (MP3)
.3gp .3g2	Videos	H.264/AVC, MPEG-4
	Audio	AAC, AMR-NB, AMR-WB
.mkv	Videos	MPEG-2, MPEG-4, H.264/AVC, VP8
	Audio	Dolby Digital, PCM, DTS, MPEG-1 Layer I, II, MPEG-1 Layer III (MP3), Vorbis, AAC
.ts .trp .tp .mts	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 .dat	Videos	MPEG-1, MPEG-2
	Audio	MPEG-1 Layer I, II, MPEG-1 Layer III (MP3)
.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
.wav	Support	PCM
.ogg	Support	Vorbis
.wma	Support	WMA

Supported Photo File

File Format	Format	Item
2D (jpeg, jpg, jpe)	JPEG	• Minimum : 64 x 64 • Maximum: Normal Type: 15360 (W) x 8640 (H) / Progressive Type: 1920 (W) x 1440 (H)
2D (png)	PNG	• Minimum : 64 x 64 • Maximum: 1920 (W) x 1080 (H)
2D (bmp)	BMP	• Minimum : 64 x 64 • Maximum: 1920 (W) x 1080 (H)

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.
• Depending on the frame, 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 play correctly.
• 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 name and its subtitle file name must be identical for it to be displayed.
• Playing a video via a USB connection that does not support high-speed connection may not function correctly.
• Files encoded with GMC (Global Motion Compensation) may not be played.

ⓘ 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 ➜ **➜ Settings ➜ 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.

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.

! 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.

File Manager

You can move, copy, or delete files.

To move, copy, or delete files

HOME ➜

• 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

• This app is for managing files and therefore cannot play media files. To play media files, launch **My Media**.
• Those files bigger than internal remaining memory aren`t allowed to be copied or moved to the internal memory.

PICTURE ID Settings

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**.
• With **PICTURE ID ON**, you can only increase the **PICTURE ID** by 1. You cannot decrease it.

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	ꀀSIMPLINK	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	ID ON (RED)	Remote control button
71	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 upon the model.
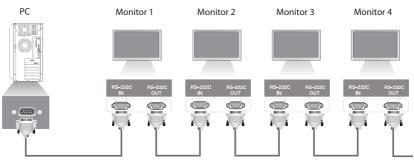
TO CONTROL MULTIPLE PRODUCTS

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

Connecting the Cable

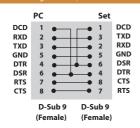Connect the RS-232C cable as shown in the picture.

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

PC   Monitor 1   Monitor 2   Monitor 3   Monitor 4

RS-232C Cable (sold separately)

RS-232C Configurations

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

	PC		Set	
DCD	1		1	DCD
RXD	2		3	TXD
TXD	3		2	RXD
GND	5		5	GND
DTR	4		6	DSR
DSR	6		4	DTR
RTS	7		8	CTS
CTS	8		7	RTS

D-Sub 9   D-Sub 9
(Female)   (Female)

Communication Parameter
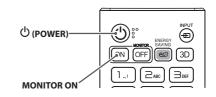
Baud Rate: 9600 BPS

Data Length: 8 bit

Parity Bit: None

Stop Bit: 1 bit

Flow Control: None

Communication Code: ASCII code

Use a crossed (reverse) cable

! NOTE

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

(POWER)

MONITOR ON

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 (15 Min)	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, 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

		COMMAND		DATA
		1	2	(Hexadecimal)
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
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	Power On Delay	f	h	00 to FA
46	Fail Over Select	m	i	00 to 02
47	Fail Over Input Select	m	j	See Auto Switch Input Select
48	Remote Controller Lock	t	p	00 to 02
49	Status Check	s	v	See 'Status Check'
50	Speakers	d	v	00 to 01
51	Daylight Saving Time	s	d	See Daylight Saving Time
52	Wake On Lan	f	w	00 to 01
53	Power Indicator	f	o	00 to 01
54	Fan Control	d	o	00 to 02
55	Fan Failure Check	d	w	FF
56	Luminance Value Read	m	u	00 to 01
57	BLU Maintenance	m	t	00 to 01
58	Easy Brightness Control Mode	s	m	00 to 01
59	Easy Brightness Control Schedule	s	s	See Easy Brightness Control Schedule

* Note: Only the power and key commands can be used while media files are playing from a USB device or internal/external memory. The commands other than the power and key commands will be treated as NG. 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.

* [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   70: DVI-D (PC)
            80: DVI-D (DTV)
            90: HDMI1 (DTV)
            A0: HDMI1 (PC)
            91: HDMI2 (DTV)
            A1: HDMI2 (PC)
            C0: DISPLAYPORT (DTV)
            D0: DISPLAYPORT (PC)

Acknowledgement

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

* Some input signals may not be supported depending upon the model.

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

* 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 upon 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 upon 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

Acknowledgement

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

06. Contrast (Command: k g)

Adjusts the screen contrast.

Transmission

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

Data   00 to 64: Contrast 0 to 100

Acknowledgement

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

07. Brightness (Command: k h)

Adjusts the screen brightness.

Transmission

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

Data　　　00 to 64: Brightness 0 to 100

Acknowledgement

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

08. Sharpness (Command: k k)

Adjusts the screen sharpness.

Transmission

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

Data　　　00 to 32: Sharpness 0 to 50

Acknowledgement

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

09. Color (Command: k i)

Adjusts the screen color.

Transmission

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

Data　　　00 to 64: Color 0 to 100

Acknowledgement

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

10. Tint (Command: k j)

Adjusts the screen tint.

Transmission

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

Data　　　00 to 64: Tint red 50 to green 50

Acknowledgement

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

11. Color Temperature (Command: x u)

Adjusts the screen color temperature.

Transmission

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

Data　　　00 to 64: warm 50 to cool 50

Acknowledgement

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

12. 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

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)

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

Transmission

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

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.

Acknowledgement

[a][ ][Set ID][ ][OK/NG][Data1][Data2][Data3][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 available only 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 available only 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 FFH.
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 available only when Time 1 (year/month/day) and Time 2 (hour/minute/second) are set.

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)
70: DVI-D
90: HDMI1
91: HDMI2
C0: 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.
** It may not be supported depending upon 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)
Configures the automatic standby settings.

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)
Configures the automatic off settings.

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 Picture and Factory Reset functions.

Transmission

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

Data   00: Picture Reset
              02: Initial Settings (factory reset)

Acknowledgement

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

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][Data1][Data2][Data3][x]

Data1   Temperature sensor at the exit (top).
Data2   Temperature sensor at the entrance (bottom).
Data3   Temperature sensor at the main board (main PCB)
* Temperature is displayed as a hexadecimal value.
* The number of data items differs depending on the model.

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 upon 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

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

48. 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]

46. 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]

47. 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][Cr]

Data 1 to 4 (Input priority: 1 to 4)
              70: DVI-D
              90: HDMI1
              91: HDMI2
              C0: DISPLAYPORT
Acknowledgement
[j][ ][SetID][ ][OK/NG][Data1][Data2][Data3][Data4][x]

Data 1 to 4 (Input priority: 1 to 4)
              70: DVI-D
              90: HDMI1
              91: HDMI2
              C0: DISPLAYPORT

49. Status check (Command: s v)

Check the current signal of the product.

Transmission

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

Data 02: Checks whether there is a signal
05: Checks whether luminance sensors 1 and 2 work properly.
06: Currently used luminance sensor
07: Checks whether the Top, Bottom, and Main temperature sensors are functioning normally.
08: The temperature of each temperature sensor when the monitor set was last powered off.
09: Fan Speed

Acknowledgement

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

Data:	If the value is 02,
Data1	00: Signal absent
	01: Signal present
Data:	If the value is 05,
Data1	00: All sensors normal
	01: BLU sensor 1 normal, BLU sensor 2 down
	02: BLU sensor 1 down, BLU sensor 2 normal
	03: All sensors down
Data:	If the value is 06,
	00: Luminance sensor 1 currently used
	01: Luminance sensor 2 currently used
Data:	If the value is 07,
Data1	00: All temperature sensors are faulty.
	01: Top normal, Bottom faulty, Main faulty
	02: Top faulty, Bottom normal, Main faulty
	03: Top faulty, Bottom faulty, Main faulty
	04: Top faulty, Bottom faulty, Main normal
	05: Top normal, Bottom faulty, Main normal
	06: Top faulty, Bottom normal, Main normal
	07: All temperature sensors are normal
Data:	If the value is 08,

Acknowledgement

[v][ ][SetID][ ][OK/NG][Data][Data1][Data2][Data3][x]

Data1	The temperature of the Top sensor when the monitor set is last powered off.
Data2	The temperature of the Bottom sensor when the monitor set is last powered off.
Data3	The temperature of the Main sensor when the monitor set is last powered off.
Data:	if the value is 09,

Acknowledgement

[v][ ][SetID][ ][OK/NG][Data][Data1][Data2][x]

Data1   00-ff: The upper 1-byte of the fan speed
Data2   00-ff: The lower 1-byte of the fan speed
Fan speed: 0 to 2008 in hexadecimal and 0 to 8200 in decimal

** Depending upon the model, this feature may not be supported.

50. Speakers (Command: d v)

Sets the speakers feature.

Transmission

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

Data   00: Off
01: On

Acknowledgement

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

51. Daylight Saving Time (Command: s d)

Sets the Daylight Saving Time feature.

Transmission

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

Data1   00: Off (Data2~5: FFH)
01: Start time
02: End time
Data2   01 to 0C: January to December
Data3   01 to 06: Weeks 1 to 6
* The maximum value of [Data3] may vary depending on the date.
Data4   00 to 06 (Sunday to Saturday)
Data5   00 to17: 00th to 23th hour
* To read the start/end times, enter FFH in [Data2] through [Data5].
(Ex. 1: sd 01 01 ff ff ff ff - Checks the start time.
Ex. 2: sd 01 02 ff ff ff ff - Checks the end time.)
* This feature 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][Data3][Data4][Data5][x]

** Depending upon the model, this feature may not be supported.

52. Wake On Lan (Command: f w)

Selects whether to turn on/off Wake On Lan.

Transmission

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

Data   00: Wake On Lan On
01: Wake On Lan Off

Acknowledgement

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

** Depending upon the model, this feature may not be supported.

53. Power Indicator (Command: f o)

Sets the Power Indicator Settings.

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

Data   00: Off
             01: On

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

** Depending upon the model, this feature may not be supported.

54. Fan control (Command: d o)

Sets the fan mode.

Transmission
[d][o][ ][Set ID][ ][Data][Cr]

Data   00: Auto
             01: On
             02: Manual
             03: Off

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

** Depending upon the model, this feature may not be supported.

55. Fan Failure Check (Command: d w)

Checks for fan failures.

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

Data FF: Status read

Acknowledgement
[w][ ][Set ID][ ][OK/NG][Data1] [Data2] [x]

Data 1   00: One or more fans are faulty.
             01: All fans are normal.
             02: The model has no fan.

Data2   00: No fan is faulty (all fans are normal).
             01: 1 fan is faulty.
             02: 2 fans are faulty.
             03: 3 fans are faulty.
             04: 4 fans are faulty.
             05: 5 fans are faulty.

56. Luminance Value Read (Command: m u)

Reads luminance values.

Transmission
[m][u][ ][Set ID][ ][FF][Cr]

Acknowledgement
[u][][SetID][][OK/NG][Data1][Data2][Data3][Data4]
[Data5][Data6][Data7][x]

Data1   00 to 64: The Backlight PWM value (0 to 100)
Data2   00 to ff: The upper 1-byte of the value measured by
             the CA-210.
Data3   00 to ff: The lower 1-byte of the value measured by
             the CA-210.

CA-210 measurement: 0000 to ffff in hexadecimal and 0 to 65535 in decimal.

Data4   00 to ff: The upper 1-byte of the value measured by
             BLU 1 sensor.
Data5   00 to ff: The lower 1-byte of the value measured by
             BLU 1 sensor.
Data6   00 to ff: The upper 1-byte of the value measured by
             BLU 2 sensor.
Data7   00 to ff: The lower 1-byte of the value measured by
             BLU 2 sensor.

BLU measurements: 0000 to ffff in hexadecimal and 0 to 65535 in decimal.

* During final assembly, a CA-210 measurement is entered through the calibration procedure. The default value, before calibration, is 0.

** Depending upon the model, this feature may not be supported.

57. BLU Maintenance (Command: m t)

Selects whether to turn on/off BLU Maintenance.

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

Data   00: BLU Maintenance Off
             01: BLU Maintenance On

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

** Depending upon the model, this feature may not be supported.

58. 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

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

* This function does not work if the current time is not set.
** Depending upon the model, this feature may not be supported.

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

Sets an Easy Brightness Control schedule.

Transmission

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

Data1

1. f1 to f6 (data reading)

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 Controls

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]

** Depending upon the model, this feature may not be supported.