

OWNER'S MANUAL

Safety and Reference

LG Digital Signage
(MONITOR SIGNAGE)

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

60UL3E

70UL3E



(2007-REV02)

Important Safety Instruction

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer.
- Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Warning! Safety instructions



CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN



CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER TO QUALIFIED SERVICE PERSONNEL.



The symbol is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the device.

WARNING : TO REDUCE THE RISK OF FIRE AND ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

- TO PREVENT THE SPREAD OF FIRE, KEEP CANDLES OR OTHER ITEMS WITH OPEN FLAMES AWAY FROM THIS PRODUCT AT ALL TIMES.

- **Do not place the monitor and/or remote control in the following environments:**

- Keep the product away from direct sunlight.
- An area with high humidity such as a bathroom
- Near any heat source such as stoves and other devices that produce heat.
- Near kitchen counters or humidifiers where they can easily be exposed to steam or oil.
- An area exposed to rain or wind.
- Do not expose to dripping or splashing and do not place objects filled with liquids, such as vases, cups, etc. on or over the apparatus (e.g., on shelves above the unit).
- Near flammable objects such as gasoline or candles, or expose the monitor to direct air conditioning.
- Do not install in excessively dusty places.

Otherwise, this may result in fire, electric shock, combustion/ explosion, malfunction or product deformation.

- **Ventilation**

- Install your monitor where there is proper ventilation. Do not install in a confined space such as a bookcase.
- Do not install the product on a carpet or cushion.
- Do not block or cover the product with cloth or other materials while unit is plugged in.
- Take care not to touch the ventilation openings. When watching the monitor for a long period, the ventilation openings may become hot.
- Protect the power cord from physical or mechanical abuse, such as being twisted, kinked, pinched, closed in a door, or walked upon. Pay particular attention to plugs, wall outlets, and the point where the cord exits the device.
- Do not move the monitor whilst the Power cord is plugged in.
- Do not use a damaged or loosely fitting power cord.
- Be sure to grasp the plug when unplugging the power cord. Do not pull on the power cord to unplug the monitor.
- Do not connect too many devices to the same AC power outlet as this could result in fire or electric shock.
- **Disconnecting the Device from the Main Power**
 - The power plug is the disconnecting device. In case of an emergency, the power plug must remain readily accessible.
- Do not let your children climb or cling onto the monitor. Otherwise, the monitor may fall over, which may cause serious injury.

- Make sure the power cord is connected securely to the monitor and wall socket if not secured damage to the Plug and socket may occur and in extreme cases a fire may break out.
- Do not insert metallic or inflammable objects into the product. If a foreign object is dropped into the product, unplug the power cord and contact the customer service.
- Do not touch the end of the power cord while it is plugged in. You may be electrocuted.
- **If any of the following occur, unplug the product immediately and contact your local customer service.**
 - The product has been damaged.
 - If water or another substance enters the product (like an AC adapter, power cord, or monitor).
 - If you smell smoke or other odors coming from the monitor.
 - When lightning storms or when unused for long periods of time.

Even the monitor is turned off by remote control or button, AC power source is connected to the unit if not unplugged in.
- Do not use high voltage electrical equipment near the monitor (e.g., a bug zapper). This may result in product malfunction.
- Do not attempt to modify this product in any way without written authorization from LG Electronics. Accidental fire or electric shock can occur. Contact your local customer service for service or repair. Unauthorized modification could void the user's authority to operate this product.
- Use only an authorized attachments / accessories approved by LG Electronics. Otherwise, this may result in fire, electric shock, malfunction, or product damage.
- Never disassemble the AC adapter or power cord. This may result in fire or electric shock.
- Handle the adapter carefully to avoid dropping or striking it. An impact could damage the adapter.
- To reduce the risk of fire or electrical shock, do not touch the monitor with wet hands. If the power cord prongs are wet or covered with dust, dry the power plug completely or wipe dust off.

• Batteries

- Store the accessories (battery, etc.) in a safe location out of the reach of children.
- Do not short circuit, disassemble, or allow the batteries to overheat. Do not dispose of batteries in a fire. Batteries should not be exposed to excessive heat.
- Caution: Risk of fire or explosion if the battery is replaced by an incorrect type.

• Moving

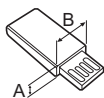
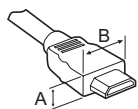
- When moving, make sure the product is turned off, unplugged, and all cables have been removed. It may take 2 or more people to carry larger monitors. Do not press or put stress on the front panel of the monitor. Otherwise, this may result in product damage, fire hazard or injury.
- Keep the packing anti-moisture material or vinyl packing out of the reach of children.
- Do not allow an impact shock, any objects to fall into the product, and do not drop anything onto the screen.
- Do not press strongly upon the panel with a hand or a sharp object such as a nail, pencil, or pen, or make a scratch on it. It may cause damage to screen.

• Cleaning

- When cleaning, unplug the power cord and wipe gently with a soft/dry cloth. Do not spray water or other liquids directly on the monitor. Do not clean your monitor with chemicals including glass cleaner, any type of air freshener, insecticide, lubricants, wax (car, industrial), abrasive, thinner, benzene, alcohol etc., which can damage the product and/or its panel. Otherwise, this may result in electric shock or product damage.

Preparing

- When the monitor is turned on for the first time after being shipped from the factory, initialization of the monitor may take approximately one minute.
- Image shown may differ from your monitor.
- Your monitor's OSD (On Screen Display) may differ slightly from that shown in this manual.
- The available menus and options may differ from the input source or product model that you are using.
- New features may be added to this monitor in the future.
- The device must be easily accessed to a location outlet near the access. Some devices are not made by turning on / off button, turning off the device and unplugging the power cord.
- The items supplied with your product may vary depending upon the model.
- Product specifications or contents of this manual may be changed without prior notice due to upgrade of product functions.
- For an optimal connection, HDMI cables and USB devices should have bezels less than 10 mm (0.39 inches) thick and 18 mm (0.7 inches) width.
- Use an extension cable that supports USB 2.0 if the USB cable or USB flash drive does not fit into your monitor's USB port.
- Use a certified cable with the HDMI logo attached. If you do not use a certified HDMI cable, the screen may not display or a connection error may occur.
- Recommended HDMI cable types (3 m (9.84 feet) or less)
 - High Speed HDMI®/™ cable
 - High Speed HDMI®/™ cable with Ethernet



- * $A \leq 10 \text{ mm}$
(0.39 inches)
- * $B \leq 18 \text{ mm}$
(0.7 inches)

- Do not use any unapproved items to ensure the safety and lifespan of the product.
- Any damages or injuries by using unapproved items are not covered by the warranty.
- Some models appear to have a thin film on the screen. It is actually part of the screen; do not remove it.

Optional Extras

Stand

Model	Stand
60UL3E	ST-60UL3RB
70UL3E	ST-70UL3DT

Optional extras can be changed or modified for quality improvement without any notification.

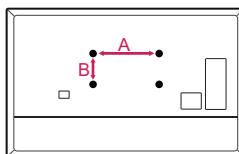
Contact your dealer for buying these items.

These devices work only with certain models.

The model name or design may be changed due to the manufacturer's circumstances or policies.

Wall Mounting Bracket

Make sure to use screws and wall mounts that meet the VESA standard. Standard dimensions for the wall mount kits are described in the following table.



Model	60UL3E	70UL3E
VESA (A x B)	300 x 300	600 x 400
Standard screw	M6	M8
Number of screws	4	4
Wall mount bracket (optional)	OLW480B	LSW640B

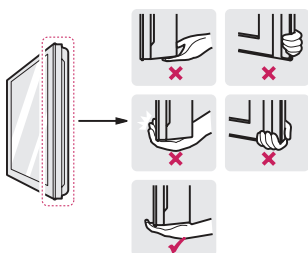
Lifting and Moving the Monitor

When moving or lifting the monitor, read the following to prevent the monitor from being scratched or damaged and for safe transportation regardless of its type and size.

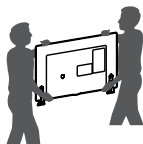
- It is recommended to move the monitor in the box or packing material that the monitor originally came in.
- Before moving or lifting the monitor, disconnect the power cord and all cables.
- When holding the monitor, the screen should face away from you to avoid damage.



- Hold the top and bottom of the monitor frame firmly. Make sure not to hold the transparent part, speaker, or speaker grille area.



- Use at least two people to move a large monitor.
- When transporting the monitor by hand, hold the monitor as shown in the following illustration.



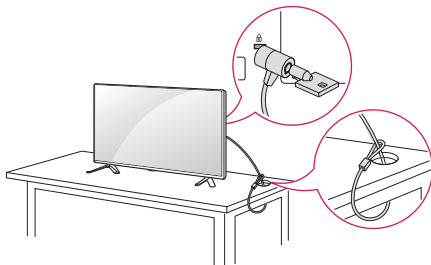
- When transporting the monitor, do not expose the monitor to jolts or excessive vibration.
- When transporting the monitor, keep the monitor upright; never turn the monitor on its side or tilt towards the left or right.
- When handling the monitor, be careful not to damage the protruding buttons.



- Avoid touching the screen at all times, as this may result in damage to the screen.
- Do not place the product on the floor with its front facing down without padding. Failure to do so may result in damage to the screen.
- Do not move the monitor by holding the cable holders, as the cable holders may break, and injuries and damage to the monitor may occur. (Depending upon model)
- When attaching the stand to the monitor set, place the screen facing down on a cushioned table or flat surface to protect the screen from scratches.

Using the Kensington Security System (optional)

The Kensington security system connector is located at the rear of the monitor. For more information of installation and using, refer to the manual provided with the Kensington security system or visit <http://www.kensington.com>. Connect the Kensington security system cable between the monitor and a table.

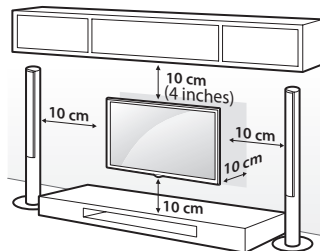


(Depending upon model)

- The Kensington security system is optional. You can obtain additional accessories from your local dealer.

Mounting on a Wall

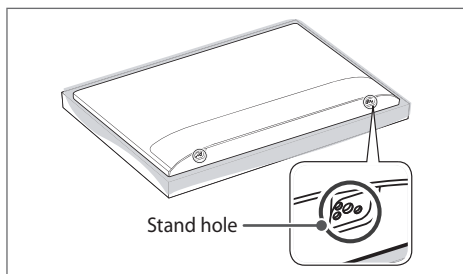
An optional wall mount can be used with your LG monitor. Consult with your local dealer for a wall mount that supports the VESA standard used by your monitor model. Carefully attach the wall mount bracket at the rear of the monitor. Install the wall mount bracket on a solid wall perpendicular to the floor. If you are attaching the monitor to other building materials, please contact qualified personnel to install the wall mount. Detailed instructions will be included with the wall mount. We recommend that you use an LG brand wall mount. The LG wall mount is easy to adjust or to connect the cables. When you do not use LG's wall mount bracket, use a wall mount bracket where the device is adequately secured to the wall with enough space to allow connectivity to external devices. If you are using a non-adjustable mount, attach the mount to the wall. Attach the cables to the monitor first, then attach the monitor to the mount.



(Depending upon model)



- Remove the stand before installing the monitor on a wall mount by performing the stand attachment in reverse.
- For more information of screws and wall mount bracket, refer to the Separate purchase.
- If you intend to mount the product to a wall, attach VESA standard mounting interface (optional parts) to the back of the product. When you install the set to use the wall mounting bracket (optional parts), fix it carefully so as not to drop.
- When mounting a monitor on the wall, make sure not to install the monitor by hanging the power and signal cables on the back of the monitor.
- Do not install this product on a wall if it could be exposed to oil or oil mist. This may damage the product and cause it to fall.
- When installing the wall mounting bracket, it is recommended to cover the stand hole using tape, in order to prevent the influx of dust and insects. (Depending upon model)



Connections

You can connect various external devices to the monitor. For more information on external device's connection, refer to the manual provided with each device.

Other connections

Connect your monitor to external devices. For the best picture and audio quality, connect the external device and the monitor with the HDMI cable.

HDMI

- Supported HDMI Audio format :
(Depending upon model)
DTS (44.1 kHz / 48 kHz / 88.2 kHz / 96 kHz),
DTS HD (44.1 kHz / 48 kHz / 88.2 kHz / 96 kHz / 176.4 kHz / 192 kHz),
Dolby Digital / Dolby Digital Plus (32 kHz / 44.1 kHz / 48 kHz),
PCM (32 kHz / 44.1 kHz / 48 kHz / 96 kHz / 192 kHz)
- DTV Audio Supported Codec: MPEG, Dolby Digital
- **SETTINGS** ► ► **[Picture]** ► **[Additional Settings]** ► **[HDMI ULTRA HD Deep Color]**
 - On : Support 4K @ 60 Hz (4:4:4, 4:2:2, 4:2:0)
 - Off : Support 4K @ 60 Hz 8 bit (4:2:0)

If the device connected to Input Port also supports ULTRA HD Deep Color, your picture may be clearer. However, if the device doesn't support it, it may not work properly. In that case, change the monitor's [HDMI ULTRA HD Deep Color] setting to off.

- This feature is available only on certain models which support HDMI ULTRA HD Deep Color.

USB

- Some USB Hubs may not work. If a USB device connected through a USB Hub is not detected, connect it directly to the USB port on the monitor.

External Devices

Supported external devices are: Blu-ray player, HD receivers, DVD players, VCRs, audio systems, USB storage devices, PC, gaming devices, and other external devices.

- The external device connections shown may differ slightly from illustrations in a manual.
- Connect external devices to the monitor regardless about the order of the monitor port.
- If you connect a gaming device to the monitor, use the cable supplied with the gaming device.
- Refer to the external equipment's manual for operating instructions.
- In PC mode, there may be noise associated with the resolution, vertical pattern, contrast or brightness. If noise is present, change the PC output to another resolution, change the refresh rate to another rate or adjust the brightness and contrast on the [Picture] menu until the picture is clear. Depending upon the graphics card, some resolution settings may not allow the image to be positioned on the screen properly.
- When connecting via a wired LAN, it is recommended to use a CAT 7 cable.

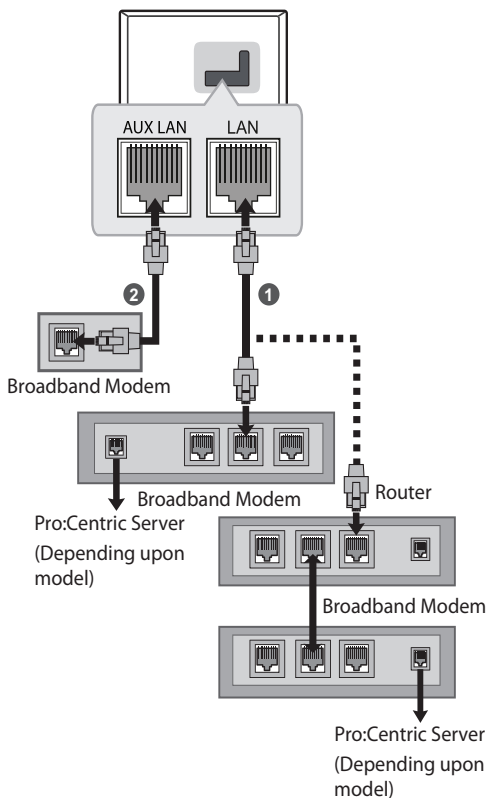
Network setup

(Depending upon model)

Wired network connection

This monitor can be connected to a Pro:Centric server via the **LAN** port. After making the physical connection, the monitor needs to be set up for network communication.

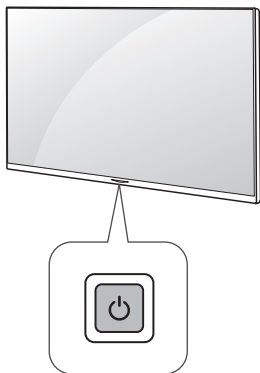
Connect the **LAN** port of the Modem or Router from Pro:Centric server to the **LAN** port on the monitor.



- 1 Connect the **LAN** port of the Modem or Router to the **LAN** port on the monitor.
 - 2 Connect the **LAN** port of the PC to the **AUX LAN** port on the monitor. (Depending upon model)
- Do not connect a modular phone cable to the **LAN** port.
 - Since there are various connection methods, please follow the specifications of your telecommunication carrier or internet service provider.

Using the Button

You can simply operate the monitor functions, using the button.



Basic Functions



Power On (Press)
Power Off ¹ (Press and Hold)
Menu control (Press ²)
Menu selection (Press and Hold ³)

- 1 All running apps will close.
- 2 You can access and adjust the menu by pressing the button when monitor is on.
- 3 You can use the function when you access menu control.

Adjusting the Menu

When the monitor is turned on, press the  button one time. You can adjust the Menu items using the button.

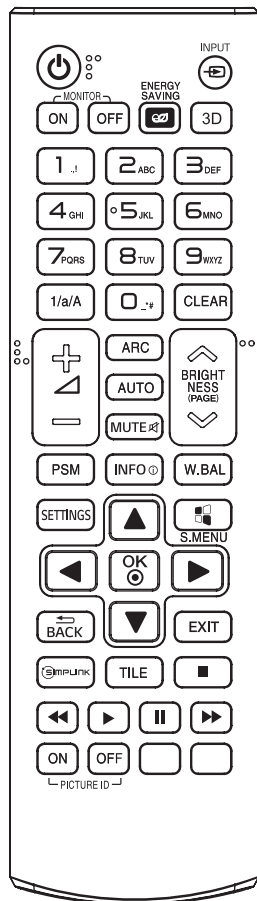
	Turns the power off.
	Changes the input source.
	Adjusts the volume level.

Using Remote Control

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

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

To remove the batteries, perform the installation actions in reverse. This remote uses infrared light. When in use, it should be pointed in the direction of the monitor's remote sensor.



(Some buttons and services may not be provided depending upon models or regions.)

 **(Power)** Turns the monitor on or off.

MONITOR ON Turns the monitor on.

MONITOR OFF Turns the monitor off.

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

INPUT  Changes the input source.

3D Used for viewing 3D videos.

1/a/A Toggles between numerical and alphabetical.

Number and Alphabet buttons Enters numerical or alphabetical characters depending upon the setting.

CLEAR Deletes the entered numerical or alphabetical character.

Volume Up/Down Button Adjusts the volume.

ARC Selects the Aspect Ratio mode.

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

MUTE  Mutes all sounds.

 **BRIGHTNESS (PAGE)** Adjusts the brightness of the display.

PSM Selects the [Picture Mode].

INFO  Displays the input information.

W.BAL Enters the [White Balance] menu.

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

 **S.MENU** SuperSign menu key.

Navigation Buttons Scrolls through menus or options.

 **OK** Selects menus or options and confirms your input.

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

EXIT Quit all OSD tasks and applications.

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

TILE Selects the TILE Mode.

PICTURE ID ON/OFF When the Picture ID number matches the Set ID number, you can control whichever monitor you want in multi-display format. (PICTURE ID ON/OFF keys are multi-function key. In special case, those keys can be operated as color key.)

USB Menu Control Buttons Controls media playback.

     **Trick key** May not be supported on some models.



- Do not mix new batteries with old batteries. This may cause the batteries to overheat and leak.
- Failure to match the correct polarities of the battery may cause the battery to burst or leak, resulting in fire, personal injury, or ambient pollution.
- This apparatus uses batteries. In your community there might be regulations that require you to dispose of these batteries properly due to environmental considerations. Please contact your local authorities for disposal or recycling information.
- Batteries inside or inside the product shall not be exposed to excessive heat such as sunshine, fire or the like.

Troubleshooting

The software may be updated for improvement in performance. The customer is responsible to ensure the compatibility of their equipment with any LG Electronics software. If needed, please consult with LG Electronics and update new software versions according to the guidance provided by LG Electronics.

- Cannot control the monitor with the remote control.
 - Check if anything such as tape has been placed over the receiver.
 - Check if there is any obstacle between the product and the remote control.
 - Replace the batteries with new fresh ones.
- No image display and no sound is produced.
 - Check if the product is turned on.
 - Check if the power cord is connected to a wall outlet.
 - Check if there is a problem in the wall outlet by connecting other products.
- The monitor turns off suddenly.
 - Check the power control settings. The power supply may be interrupted.
 - Check if the auto-off function is activated on the settings related time.
 - If there is no signal while the monitor is on, the monitor will turn off automatically after 15 minutes of inactivity.
- When connecting to the PC (HDMI), no signal is detected.
 - Turn the monitor off/on using the remote control.
 - Reconnect the HDMI cable.
 - Restart the PC with the monitor on.
- **Abnormal Display**
 - If the monitor feels cold to the touch, there may be a small flicker when it is turned on. This is normal; there is nothing wrong with monitor. Some minute dot defects may be visible on the screen, appearing as tiny red, green, or blue spots. However, they have no adverse effect on the monitor's performance. Avoid touching the LCD screen or holding your finger(s) against it for long periods of time. Doing so may produce some temporary distortion effects on the screen.

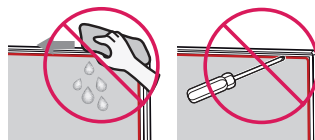
- This panel is an advanced product that contains millions of pixels. In a very few cases, you could see fine dots on the screen while you're viewing the monitor. Those dots are deactivated pixels and do not affect the performance and reliability of the monitor.
- Displaying a still image for a prolonged period of time may cause an image sticking. Avoid displaying a fixed image on the monitor screen for an extended length of time.

• Generated Sound

- **Cracking noise** A cracking noise that occurs when watching or turning off the monitor is generated by plastic thermal contraction due to temperature and humidity. This noise is common for products where thermal deformation is required.
- **Electrical circuit humming/panel buzzing** A low level noise is generated from a high-speed switching circuit, which supplies a large amount of current to operate a product. It varies depending upon the product. This generated sound does not affect the performance and reliability of the product.



- When cleaning the product, be careful not to allow any liquid or foreign objects to enter the gap between the upper, left or right side of the panel and the guide panel. (Depending upon model)



- Make sure to wring any excess water or cleaner from the cloth.
- Do not spray water or cleaner directly onto the monitor screen.
- Make sure to spray just enough of water or cleaner onto a dry cloth to wipe the screen.

Settings

To select Picture Mode

SETTINGS ▶ ⓘ (⚙️) ▶ [Picture] ▶ [Picture Mode Settings] ▶ [Picture Mode]

Select the picture mode optimized for the viewing environment or the program.

- [Vivid] Heightens contrast, brightness and sharpness to display vivid images.
- [Standard] Displays images in standard levels of contrast, brightness and sharpness.
- [APS] APS (Auto power saving) mode reduces power consumption by dimming control.
- [Cinema] Displays the optimum picture for a movie.
- [Sports] Optimized picture mode for sports matches. The pitch and kits are presented in vibrant colors, with crystal-clear images even for fast movements.
- [Game] Displays the optimum picture for a game.
- [HDR Effect] This feature lets you enjoy a more dynamic, clearer image by correcting the light and dark areas of the display. This feature provides a realistic image, even when the source image's gradation level is high. If you set Picture Mode to HDR Effect, you will not be able to use some of Picture Mode Settings.
- [Expert] Menu for adjusting picture quality that allows experts and amateurs to enjoy the best monitor viewing. This menu for adjustment is provided for ISF-certified picture tuning professionals. (ISF logo can be used only on ISF-certified monitors.) ISFccc: Imaging Science Foundation Certified Calibration Control
- Depending upon input signal, the available range of picture modes may differ.
- [Expert] mode is for picture tuning professionals to control and fine-tune using a specific image. For normal images, the effects may not be drastic.
- [Picture Mode] change may modify [Energy Saving] and [Motion Eye Care] settings and it can affect energy consumption.

To set additional picture options

SETTINGS ▶ ⓘ (⚙️) ▶ [Picture] ▶ [Picture Mode Settings] ▶ [Picture Options]

Adjusts detailed setting for images.

- [Noise Reduction] Eliminates noise in the picture.
- [MPEG Noise Reduction] Eliminates noise generated while creating digital picture signals.
- [Black Level] Adjusts the brightness and contrast of the screen to suit the black level of the input picture by using the blackness (black level) of the screen.
- [Real Cinema] Optimizes the screen for movie viewing.
- [Motion Eye Care] Saves power consumption by adjusting the brightness corresponding to the movement of the image on the screen.
- [LED Local Dimming] (Depending upon model) Maximize contrast by increasing the intensity of bright and dark areas of the screen.
- [TruMotion] Corrects- images to display smoother motion sequences. Auto means juddering and blurring range that depend on input video status is controlled by TruMotion mode.
- Depending upon input signal or other picture settings, the range of detailed items for adjustment may differ.

To use energy saving feature

SETTINGS ► ► [Picture] ► [Energy Saving]

Reduces power consumption by adjusting peak screen brightness.

- [Auto] The monitor sensor detects the ambient lighting and automatically adjusts the screen brightness.
- [Off] Turns off the Energy Saving.
- [Minimum] / [Medium] / [Maximum] Applies the pre-set Energy Saving.
- [Screen Off] Screen is turned off and only sound is played. Press any button on the remote control to turn the screen back on.
- Depending on the [Energy Saving] ([Auto] / [Maximum]), you may not be able to adjust the Backlight. In this case, navigate to **SETTINGS ►  ► [Picture] ► [Energy Saving]** and set to [Off] or [Minimum].

Specifications

Product specifications may be changed without prior notice due to upgrade of product functions.
Estimated yearly energy consumption indicated on the FTC label is measured in accordance with the Test Procedures for Signage Sets (USA only).
The actual energy consumption depends on the usage environment (The content watched, Signage settings, etc.).

Environment condition	
Operating Temperature	0 °C to 40 °C (32 °F to 104 °F)
Operating Humidity	Less than 80 %
Storage Temperature	-20 °C to 60 °C (-4 °F to 140 °F)
Storage Humidity	Less than 85 %

HDMI (PC) supported mode

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
640 x 350	31.46	70.09
720 x 400	31.46	70.08
640 x 480	31.46	59.94
800 x 600	37.87	60.31
1024 x 768	48.36	60.00
1360 x 768	47.71	60.01
1152 x 864	54.34	60.05
1280 x 1024	63.98	60.02
1920 x 1080	67.50	60.00
	135.00	120.00
3840 x 2160	54.00	24.00
	56.25	25.00
	67.50	30.00
4096 x 2160	53.95	23.97
	54.00	24.00

HDMI (DTV) supported mode

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
640 x 480p	31.46	59.94
	31.50	60.00
720 x 480p	31.47	59.94
	31.50	60.00
720 x 576p	31.25	50.00
1280 x 720p	44.96	59.94
	45.00	60.00
	37.50	50.00
1920 x 1080i	28.12	50.00
	33.72	59.94
	33.75	60.00
1920 x 1080p	26.97	23.97
	27.00	24.00
	33.71	29.97
	33.75	30.00
	56.25	50.00
	67.43	59.94
	67.50	60.00
	112.50	100.00
	134.86	119.88
	135.00	120.00
3840 x 2160p	53.95	23.98
	54.00	24.00
	56.25	25.00
	61.43	29.97
	67.50	30.00
	112.50	50.00
	134.86	59.94
4096 x 2160p	135.00	60.00
	53.95	23.98
	54.00	24.00
	56.25	25.00
	61.43	29.97
	67.50	30.00
	112.50	50.00
	134.86	59.94
	135.00	60.00

Supported Photo Formats

File Format	Format	Resolution
.jpeg .jpg .jpe	JPEG	Minimum : 64 (W) x 64 (H) Maximum : - Normal Type : 15360 (W) x 8640 (H) - Progressive Type : 1920 (W) x 1440 (H)
.png	PNG	Minimum : 64 (W) x 64 (H) Maximum : 5760(W) x 5760 (H)
.bmp	BMP	Minimum : 64 (W) x 64 (H) Maximum : 1920 (W) x 1080 (H)

Supported Audio Formats

File Format	Info
.mp3	[Bit rate] 32 Kbps - 320 Kbps [Sample freq.] 16 kHz - 48 kHz [Support] MPEG1, MPEG2 [channels] mono, stereo
.wav	[Bit rate] - [Sample freq.] 8 kHz ~ 96 kHz [Support] PCM [channels] mono, stereo
.ogg	[Bit rate] 64 Kbps - 320 Kbps [Sample freq.] 8 kHz ~ 48 kHz [Support] Vorbis [channels] mono, stereo
.wma	[Bit rate] 128 Kbps ~ 320 Kbps [Sample freq.] 8 kHz ~ 48 kHz [Support] WMA [channels] up to 6 ch
.flac	[Bit rate] - [Sample freq.] 8 kHz ~ 96 kHz [Support] FLAC [channels] mono, stereo

Supported Video Formats

File Format	Codec	
.asf .wmv	Video	VC-1 Advanced Profile (except for WMVA), VC-1 Simple and Main Profiles
	Audio	WMA Standard (except for WMA v1/ WMA Speech)
.avi	Video	Xvid (except for 3 warp-point GMC), H.264/AVC, Motion Jpeg, MPEG-4
	Audio	MPEG-1 Layer I, II, MPEG-1 Layer III (MP3), Dolby Digital, LPCM, ADPCM, DTS
.mp4 .m4v .mov	Video	H.264/AVC, MPEG-4, HEVC
	Audio	Dolby Digital, Dolby Digital Plus, AAC, MPEG-1 Layer III (MP3), Dolby AC-4
.3gp .3g2	Video	H.264/AVC, MPEG-4
	Audio	AAC, AMR-NB, AMR-WB
.mkv	Video	MPEG-2, MPEG-4, H.264/AVC, VP8, VP9, HEVC
	Audio	Dolby Digital, Dolby Digital Plus, AAC, PCM, DTS, MPEG-1 Layer I, II, MPEG-1 Layer III (MP3)
.ts .trp .tp .mts	Video	H.264/AVC, MPEG-2, HEVC
	Audio	MPEG-1 Layer I, II, MPEG-1 Layer III (MP3), Dolby Digital, Dolby Digital Plus, AAC, PCM, Dolby AC-4
.mpg .mpeg .dat	Video	MPEG-1, MPEG-2
	Audio	MPEG-1 Layer I, II, MPEG-1 Layer III (MP3)
.vob	Video	MPEG-1, MPEG-2
	Audio	Dolby Digital, MPEG-1 Layer I, II, DVD-LPCM
.mkv ¹ .mp4 ¹ .ts ¹	Video	H.264/AVC, HEVC
	Audio	Dolby Digital, Dolby Digital Plus, AAC

1 UHD

KEY CODES

* This feature is not available for all models.

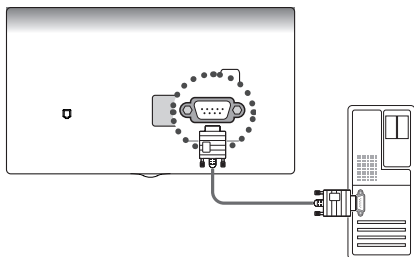
Code (Hex)	Function	Note	Code (Hex)	Function	Note
08	 (POWER)	R/C Button	3F	 S.MENU	R/C Button
C4	MONITOR ON	R/C Button	40		R/C Button
C5	MONITOR OFF	R/C Button	41		R/C Button
95	 ENERGY SAVING	R/C Button	07		R/C Button
0B	INPUT 	R/C Button	06		R/C Button
DC	3D	R/C Button	44	OK 	R/C Button
32	1/a/A	R/C Button	28	 BACK	R/C Button
10-19	Number Key 0-9 Alphabet buttons	R/C Button	5B	EXIT	R/C Button
2F	CLEAR	R/C Button	7E	 SIMPLINK	R/C Button
02		R/C Button	7B	TILE	R/C Button
03		R/C Button	72	PICTURE ID ON (Red)	R/C Button
79	ARC	R/C Button	71	PICTURE ID OFF (Green)	R/C Button
99	AUTO	R/C Button	B1		R/C Button
09	MUTE 	R/C Button	B0		R/C Button
E0	BRIGHTNESS (PAGE) 	R/C Button	BA	II	R/C Button
E1	BRIGHTNESS (PAGE) 	R/C Button	8F		R/C Button
4D	PSM	R/C Button	8E		R/C Button
AA	INFO 	R/C Button	63	Yellow	R/C Button
5F	W.BAL	R/C Button	61	Blue	R/C Button
43	SETTINGS	R/C Button			

- Key code 4C (0 x 4C) is available on ATSC/ISDB models which use major/minor channel. (For South Korea, Japan, North America, Latin America except Colombia models)

EXTERNAL CONTROL DEVICE SETUP

- * Image shown may differ from your monitor.
- * Cable is not provided.
- * The connection interface may differ from your Signage.

RS-232C Setup



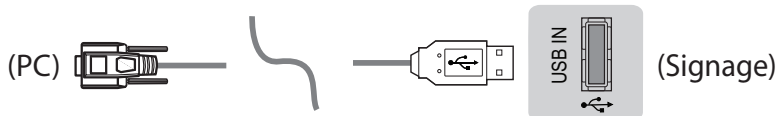
- Connect the USB to Serial converter/RS-232C input jack to an external control device (such as a computer or an A/V control system) to control the product's functions externally.
- Connect the serial port of the control device to the RS-232C jack on the product back panel.

! NOTE

- The type of control port on the monitor can be different between model series.

USB to Serial converter with USB Cable

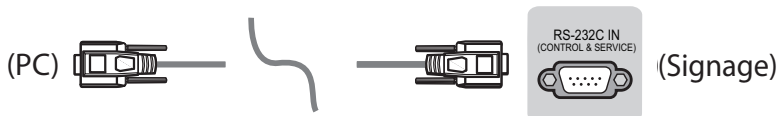
USB Type



- LG signage supports PL2303 chip-based (Vendor ID : 0 x 0557, Product ID : 0 x 2008) USB to serial converter which is not made nor provided by LG.
- It can be purchased from computer stores that carry accessories for IT support professionals.

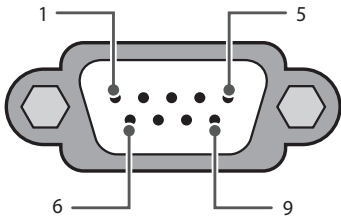
RS-232C with RS-232C Cable

DE9 (D-Sub 9pin) Type



- You need to purchase the RS-232C (DE9, D-Sub 9 pin female-to-female type) to RS-232C cable required for the connection between the PC and the signage, which is specified in the manual.
- The connection interface may differ from your signage.

Connector type : D-Sub 9-pin male



RS-232C
(Serial port)

RS-232C configurations

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

	PC	Signage
RXD	2	3
TXD	3	2
GND	5	5
DTR	4	6
DSR	6	4
RTS	7	8
CTS	8	7

3-Wire Configurations
(Not standard)

	PC	Signage
RXD	2	3
TXD	3	2
GND	5	5
DTR	4	6
DSR	6	4
RTS	7	8
CTS	8	7

Set ID

For Set ID number, see “Real data mapping (Hexadecimal : Decimal)”.

- 1 Press **SETTINGS** ► **ⓘ** (⚙️) to access the main menus.
- 2 Press the Navigation buttons to scroll to ([General] ► [Set ID]) and press **OK**.
- 3 Scroll left or right to select a set ID number and select **↔** **BACK**. The adjustment range is 1-99.
- 4 When you are finished, press **EXIT**.

Communication Parameters

- Baud rate : 9600 bps (UART)
- Data length : 8 bits
- Parity : None
- Stop bit : 1 bit
- Communication code : ASCII code
- Use a crossed (reverse) cable.

Command reference list

* (Depending upon model)

	COMMAND1	COMMAND2	DATA (Hexadecimal)
1 Power	k	a	00 to 01
2 [Aspect Ratio]	k	c	(page 23)
3 Screen Mute	k	d	(page 23)
4 Volume Mute	k	e	00 to 01
5 Volume Control	k	f	00 to 64
6 [Contrast]	k	g	00 to 64
7 [Brightness]	k	h	00 to 64
8 [Color]	k	i	00 to 64
9 [Tint]	k	j	00 to 64
10 [Sharpness]	k	k	00 to 32
11 OSD Select	k	l	00 to 01
12 Remote Control Lock Mode	k	m	00 to 01
13 [Balance]	k	t	00 to 64
14 [Color Temperature]	x	u	00 to 64
15 [Equalizer]	j	v	(page 25)
16 [Energy Saving]	j	q	00 to 05
17 Key	m	c	Key Codes
18 Control Backlight	m	g	00 to 64
19 Input select	x	b	(page 25)

- During playing media, all commands except Power (ka) and Key (mc) are not executed and treated as NG. With RS232C cable, signage can communicate "ka command" in power-on or power-off status; but with USB-to-Serial converter cable, the command works only if signage is on.

TRANSMISSION / RECEIVING PROTOCOL

* (Depending upon Model)

Transmission

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

(Command 1) : First command to control the signage. (j, k, m or x)

(Command 2) : Second command to control the signage.

(Set ID) : You can adjust the set ID to choose desired monitor ID number in option menu. Adjustment range is 1 to 99. When selecting Set ID '0', every connected set is controlled. Set ID is indicated as decimal (1 to 99) on menu and as Hexadecimal (0 x 0 to 0 x 63) on transmission/receiving protocol.

(Data) : To transmit command data (hexadecimal). Transmit 'FF' data to read status of command.

(Cr) : Carriage Return - ASCII code '0 x 0D'

() : Space - ASCII code '0 x 20'

OK Acknowledgement

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

* The set transmits ACK (acknowledgement) based on this format when receiving normal data. At this time, if the data is data read mode, it indicates present status data. If the data is data write mode, it returns the data of the PC computer.

Error Acknowledgement

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

* The set transmits ACK (acknowledgement) based on this format when receiving abnormal data from non-viable functions or communication errors.

Data 00: Illegal Code

Real data mapping (Hexadecimal : Decimal)

* When you enter the (Data) in hexadecimal, refer to following conversion table.

00 : Step 0	32 : Step 50 ([Set ID] 50)	FE : Step 254
01 : Step 1 ([Set ID] 1)	33 : Step 51 ([Set ID] 51)	FF : Step 255
...	...	...
0A : Step 10 ([Set ID] 10)	63 : Step 99 ([Set ID] 99)	01 00 : Step 256
...	...	...
0F : Step 15 ([Set ID] 15)	C7 : Step 199	27 0E : Step 9998
10 : Step 16 ([Set ID] 16)	C8 : Step 200	27 0F : Step 9999
...	...	...

1 Power (Command: k a)

- To control power on or off of the set.

Transmission

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

Data 00 : [Off]

Data 01 : [On]

Ack

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

- To show signage is power on or *Off

Transmission

(k)(a)()([Set ID])()(FF)(Cr)

Ack

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

- * Similarly, if other functions transmit 'FF' data based on this format, Acknowledgement feedback presents status about each function.
- * OK Ack., Error Ack. and other message may display on the screen when signage is power on.

2 [Aspect Ratio] (Command: k c) (Main Picture Size)

- To adjust the screen format. (Main picture format)
You can also adjust the screen format using the picture settings.

Transmission

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

Data 01 : [4:3] (Normal screen - Just Scan Off)

Data 02 : [16:9] (Wide screen - Just Scan Off)

Data 06 : [Original] (Just Scan Off)

Data 09 : [Just Scan]

Ack

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

- * Using the PC input, you select either 16:9 or 4:3 screen aspect ratio.
- * In DTV/HDMI/Component mode (high-definition), Just Scan is available.
- * Full wide mode may work differently based on model and is supported for DTV fully, and ATV, AV partially.

3 Screen Mute (Command: k d)

- To select screen mute on/off.

Transmission

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

Data 00 : Screen mute off (Picture on) / Video mute off

Data 01 : Screen mute on (Picture off)

Data 10 : Video mute on

Ack

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

- * In case of video mute on only, monitor will display On Screen Display(OSD). But, in case of Screen mute on, monitor will not display OSD.

4 Volume Mute (Command: k e)

- To control volume mute on/off. You can also adjust mute using the mute button on remote control.

Transmission

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

Data 00 : Volume mute on (Volume off)

Data 01 : Volume mute off (Volume on)

Ack

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

5 Volume Control (Command: k f)

- To adjust volume. You can also adjust volume with the volume buttons on remote control.

Transmission

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

Data Min : 00 to Max : 64

Ack

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

6 [Contrast] (Command: k g)

- To adjust screen contrast. You can also adjust contrast in the picture settings.

Transmission

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

Data Min : 00 to Max : 64

Ack

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

7 [Brightness] (Command: k h)

- To adjust screen brightness. You can also adjust brightness in the picture settings.

Transmission

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

Data Min : 00 to Max : 64

Ack

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

8 [Color] (Command: k i)

- To adjust the screen color. You can also adjust colour in the picture settings.

Transmission

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

Data Min : 00 to Max : 64

Ack

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

9 [Tint] (Command: k j)

- To adjust the screen tint. You can also adjust color in the picture settings.

Transmission

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

Data Red : 00 to Green : 64

Ack

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

10 [Sharpness] (Command: k k)

- To adjust the screen sharpness. You can also adjust sharpness in the picture settings.

Transmission

(k)(k)()([Set ID])()(Data)(Cr)

Data Min : 00 to Max : 32

Ack

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

11 OSD Select (Command: k l)

- To select OSD (On Screen Display) on/off when controlling remotely.

Transmission

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

Data 00 : [Off]

Data 01 : [On]

Ack

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

12 Remote Control Lock Mode (Command: k m)

- To lock the front panel controls on the monitor and remote control.

Transmission

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

Data 00 : [Off]

Data 01 : [On]

Ack

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

- * If you are not using the remote control, use this mode. When main power is off & on (plug-off and plug-in, after 20 - 30 seconds), external control lock is released.

- * In the standby mode (DC off by off timer or 'ka', 'mc' command), and if key operation is on, signage will not turn on by power on key of IR & Local Key.

13 [Balance] (Command: k t)

- To adjust balance. You can also adjust balance in the audio settings.

Transmission

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

Data Min : 00 to Max : 64

Ack

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

14 [Color Temperature] (Command: x u)

- To adjust color temperature. You can also adjust color temperature in the picture settings.

Transmission

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

Data Min : 00 to Max : 64

Ack

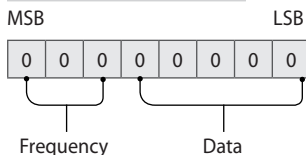
(u)()([Set ID])()(OK/NG)(Data)(x)

15 [Equalizer] (Command: j v)

- Adjust EQ of the set.

Transmission

(j)(v)()([Set ID])()(Data)(Cr)



7	6	5	Frequency	4	3	2	1	0	Step
0	0	0	1st Band	0	0	0	0	0	0(decimal)
0	0	1	2nd Band	0	0	0	0	1	1(decimal)
0	1	0	3rd Band	...	...	...	...	...	...
0	1	1	4th Band	1	0	0	1	1	19(decimal)
1	0	0	5th Band	1	0	1	0	0	20(decimal)

Ack

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

- * It depends on model, and can adjust when sound mode is EQ adjustable value.

16 [Energy Saving] (Command: j q)

(Depending upon model)

- To reduce the power consumption of the monitor.
You can also adjust energy saving in picture settings.

Transmission

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

Data 00 : [Off]

Data 01 : [Minimum]

Data 02 : [Medium]

Data 03 : [Maximum]

Data 04 : [Auto]

Data 05 : [Screen off]

Ack

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

17 Key (Command: m c)

- To send IR remote key code.

Transmission

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

Data : Key code - page 18

Ack

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

18 Control Backlight (Command: m g)

- To control the backlight.

Transmission

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

Data Min : 00 to Max : 64

Ack

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

19 Input select (Command: x b) (Main Picture Input)

- To select input source for main picture.

Transmission

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

Data 90 : HDMI1

Data 91 : HDMI2

Ack

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

- * This function depends on model and signal.

IR OUT Using Guide

Suitable / Not Recommend remote-controller data format

Item	Data format code	Note
Suitable Data Format	NEC, Toshiba Full Repeat Code Format	Single : Enable Repeat : Enable
	Philips RC5, RC6 Code Format	
	Zenith Code Format	
Not Recommend Data Format	Matsushita, RCA Code Format	Single : Enable
	Sony 12/15/20 bit, Mitsubishi Code Format	Repeat : Disable
	Sharp, JVC, R-step, Philips RCMM, RECS-80, XMP Code Format	Single : Disable Repeat : Disable

IR Receiver specifications

Carrier frequency	37.9 KHz
Peak Wavelength	940 nm
Minimum burst length	Min. 300 us
Minimum gap time is required of	Min. 350 us
Data word length	Max. 100 ms
Minimum gap time in the data stream is needed of	Min. 50 ms

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
High Level Out Pulse Width	Tw _H	Burst Wave = 600 μ S Period = 1.2 ms	400	-	800	μ S
Low Level Out Pulse Width	Tw _L		400	-	800	μ S



If not use the remote-controller with data formats recommended, IR output signals will be suppressed automatically by IR receiver. In this case, LG does not guarantee IR working function. To make sure of this matter, here are two methods as below.

- Use the remote-controller with suitable data formats.
- Use the IR dongle receiver of the set-top box.

Open Source Software Notice Information

To obtain the source code under GPL, LGPL, MPL, and other open source licenses, that is contained in this product, please visit <http://opensource.lge.com>. In addition to the source code, all referred license terms, warranty disclaimers and copyright notices are available for download.

LG Electronics will also provide open source code to you on CD-ROM for a charge covering the cost of performing such distribution (such as the cost of media, shipping, and handling) upon email request to opensource@lge.com. This offer is valid for a period of three years after our last shipment of this product. This offer is valid to anyone in receipt of this information.

Updating Firmware

(Depending upon model)

You can update the firmware for the product by downloading the latest firmware.

- 1 Download the latest firmware at partner.lge.com.
(Signing up for a membership and log-in required)
- 2 Create a folder named "LG_DTV" or "lg_dtv" on a USB memory device.
- 3 Move the downloaded file to the folder that you have created on the USB memory device.
- 4 Connect the USB memory device to the USB port on your monitor.
- 5 When a pop-up window appears, start the update by following the instructions.

Licenses

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

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(Depending upon model)



Regulatory

FCC NOTICE

(For USA)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation. Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC Radio Frequency Interference Requirements (for UNII devices)

High power radars are allocated as primary users of the 5.25 to 5.35 GHz and 5.65 to 5.85 GHz bands. These radar stations can cause interference with and/or damage this device. This device cannot be co-located with any other transmitter.

FCC RF Radiation Exposure Statement

[For having wireless function (WLAN, Bluetooth,...)]

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be colocated or operating in conjunction with any other antenna or transmitter. This equipment should be installed and operated with minimum distance 20 cm (7.8 inches) between the radiator and your body. Users must follow the specific operating instructions for satisfying RF exposure compliance.

Industry Canada Statement

(For Canada)

[For having wireless function (WLAN, Bluetooth,...)]

This device contains licence-exempt transmitter(s)/ receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

IC Radiation Exposure Statement

(For Canada)

[For having wireless function (WLAN, Bluetooth,...)]

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm (7.8 inches) between the antenna & your body.

NOTE : THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

RSS-247 Requirement

(For Canada)

[For product having the wireless function using 5 GHz frequency bands]

(1) the device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;

(2) for devices with detachable antenna(s), the maximum antenna gain permitted for devices in the bands 5250–5350 MHz and 5470–5725 MHz shall be such that the equipment still complies with the e.i.r.p. limit;

(3) for devices with detachable antenna(s), the maximum antenna gain permitted for devices in the band 5725–5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits as appropriate; and

(4) [for devices operating in the band 5250–5350 MHz having an e.i.r.p. greater than 200 mW] antenna type(s), antenna models(s), and worst-case tilt angle(s) necessary to remain compliant with the e.i.r.p. elevation mask requirement set forth in section 6.2.2.3 of RSS-247 shall be clearly indicated.

Users should also be advised that high-power radars are allocated as primary users (i.e. priority users) of the bands 5250–5350 MHz and 5650–5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

NOTE TO CABLE/ MONITOR INSTALLER

(For USA and Canada)

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the National Electric Code (U.S.A.). The code provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of the cable entry as practical.

WARNING!

Never place a monitor set in an unstable location. A monitor set may fall, causing serious personal injury or death. Many injuries, particularly to children, can be avoided by taking simple precautions such as:

- Using cabinets or stands recommended by the manufacturer of the monitor set.
- Only using furniture that can safely support the monitor set.
- Ensuring the monitor set is not overhanging the edge of the supporting furniture.
- Not placing the monitor set on tall furniture (for example, cupboards or bookcases) without anchoring both the furniture and the monitor set to a suitable support.
- Not placing the monitor set on cloth or other materials that may be located between the monitor set and supporting furniture.
- Educating children about the dangers of climbing on furniture to reach the monitor set or its controls.

If your existing monitor set is being retained and relocated, the same considerations as above should be applied.

Symbols

	Refers to alternating current(AC).
	Refers to direct current(DC).
	Refers to class II equipment.
	Refers to stand-by.
	Refers to "ON" (power).
	Refers to dangerous voltage.



Supplier's Declaration of Conformity

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

LG Customer Information Center

For inquiries or comments, visit www.lg.com or call;

1-888-865-3026 USA, Commercial User

1-855-286-2456 CANADA

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

MODEL _____

SERIAL _____

MANUEL D'UTILISATION

Sécurité et références

Affichage dynamique numérique de LG
(AFFICHAGE SUR MONITEUR)

Veuillez lire le présent manuel attentivement avant d'utiliser l'appareil et conservez-le pour pouvoir vous y reporter ultérieurement.

60UL3E

70UL3E

Directives de sécurité importantes

- Lisez ces directives.
- Conservez ces directives.
- Soyez attentif à tous les avertissements.
- Suivez toutes les directives.
- N'utilisez pas cet appareil près de l'eau.
- Nettoyez uniquement avec un linge sec.
- Ne bloquez pas les ouvertures d'aération. Installez l'appareil en respectant les directives du fabricant.
- N'installez pas l'appareil près de sources de chaleur comme les radiateurs, les bouches de chaleur, les fours et tout autre appareil (y compris les amplificateurs) produisant de la chaleur.
- Ne contournez pas la fonction sécuritaire de la fiche polarisée ou de la prise de mise à la terre. Une fiche polarisée est munie de deux lames, dont l'une est plus large que l'autre. Une fiche de mise à la terre comporte deux lames et une broche de mise à la terre. La lame la plus large ou la broche de mise à la terre sont fournies pour votre sécurité. Si la fiche fournie ne s'insère pas dans votre prise, consultez un électricien pour la remplacer.
- Protégez le cordon d'alimentation de manière à ce qu'il ne soit ni piétiné ni pincé, particulièrement près de la fiche, des prises de courant et du point de sortie de l'appareil.
- N'utilisez que les articles ou les accessoires recommandés par le fabricant.
- Utilisez uniquement avec un chariot, un socle, un trépied ou une table recommandé par le fabricant ou vendu avec l'appareil. Si vous déplacez l'appareil à l'aide d'un chariot, faites preuve de prudence afin de prévenir les blessures causées par un basculement.



- Débranchez cet appareil pendant les orages électriques ou lorsqu'il n'est pas utilisé pendant de longues périodes.
- Confiez l'ensemble des réparations à du personnel qualifié. Une intervention est nécessaire dans les cas suivants : si la prise ou le cordon d'alimentation est endommagé, si un liquide a été renversé sur l'appareil ou si des objets sont tombés dans l'appareil, si l'appareil a été exposé à la pluie ou à l'humidité, si l'appareil ne fonctionne pas normalement ou s'il est tombé.

Avertissement! Directives de sécurité



MISE EN GARDE
RISQUE DE DÉCHARGE ÉLECTRIQUE
NE PAS OUVRIR



MISE EN GARDE : AFIN DE RÉDUIRE LE RISQUE DE DÉCHARGE ÉLECTRIQUE, NE RETIREZ PAS LE COUVERCLE (OU LE PANNEAU ARRIÈRE). AUCUNE PIÈCE POUVANT ÊTRE RÉPARÉE PAR L'UTILISATEUR NE SE TROUVE À L'INTÉRIEUR DE L'APPAREIL. CONFIEZ L'ENTRETIEN DE CET APPAREIL À DU PERSONNEL QUALIFIÉ.



Ce symbole a pour fonction d'alerter l'utilisateur de la présence d'une tension dangereuse non isolée à l'intérieur du boîtier de l'appareil qui pourrait être d'une puissance suffisante pour causer une décharge électrique.



Ce symbole vise à alerter l'utilisateur de la présence de directives d'utilisation et de maintenance (entretien) importantes dans la documentation accompagnant l'appareil.

AVERTISSEMENT : AFIN DE RÉDUIRE LE RISQUE D'INCENDIE ET DE DÉCHARGE ÉLECTRIQUE, N'EXPOSEZ PAS CE PRODUIT À LA PLUIE OU À L'HUMIDITÉ.

- POUR ÉVITER L'EXPANSION DU FEU, MAINTENEZ À TOUT MOMENT CE PRODUIT LOIN DES BOUGIES OU D'AUTRES ÉLÉMENTS À FLAMMES NUES.

- **Ne placez pas le moniteur ou la télécommande dans les environnements suivants :**

- En exposition directe à la lumière du soleil.
- Dans une zone avec une forte humidité comme une salle de bains.
- À proximité d'une source de chaleur comme une cuisinière et tout autre appareil produisant de la chaleur.
- À proximité des comptoirs de cuisine ou des humidificateurs où ils peuvent facilement être exposés à la vapeur ou à l'huile.
- Dans une zone exposée à la pluie ou au vent.
- Dans une zone où existe un risque de ruissellement ou d'éclaboussure. Évitez de poser des objets contenant du liquide, comme des vases, des tasses, etc., sur l'appareil ou au-dessus de celui-ci (par exemple, sur une tablette).
- À proximité d'objets inflammables, tels que de l'essence ou des bougies, ou en exposition directe du moniteur à la climatisation.

- Dans un endroit très poussiéreux.

Cela pourrait entraîner des risques d'incendie, de décharge électrique, de combustion ou d'explosion, de mauvais fonctionnement ou d'altération du produit.

- **Aération**

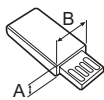
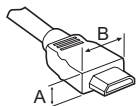
- Installez votre moniteur dans un endroit correctement ventilé. Ne l'installez pas dans un espace restreint comme une bibliothèque.
- N'installez pas le produit sur un tapis ou un coussin.
- N'obstruez pas les ouvertures de l'appareil et ne le recouvrez pas avec du tissu ou tout autre matériau lorsqu'il est branché.
- Prenez soin de ne pas toucher aux ouvertures d'aération. Lorsque vous regardez le moniteur pendant de longues périodes, les ouvertures d'aération peuvent chauffer.
- Protégez le cordon d'alimentation contre les dommages physiques ou mécaniques. Veillez notamment à ce qu'il ne soit pas tordu, déformé, pincé, coincé dans une porte ou piétiné. Soyez particulièrement attentif aux fiches, aux prises de courant murales et à l'emplacement de sortie du cordon sur l'appareil.
- Ne déplacez pas le moniteur lorsque le cordon d'alimentation est branché.
- N'utilisez pas un cordon d'alimentation endommagé ou desserré.
- Assurez-vous de tenir la fiche lorsque vous débranchez le cordon d'alimentation. Ne tirez pas sur le cordon d'alimentation pour débrancher le moniteur.
- Ne branchez pas trop d'appareils dans une même prise de courant alternatif, car cela pourrait causer un incendie ou une décharge électrique.
- **Débranchement de l'appareil de la source d'alimentation principale**
 - La fiche d'alimentation permet d'effectuer le débranchement. La fiche d'alimentation doit rester accessible en tout temps afin de pouvoir débrancher l'appareil en cas d'urgence.
- Ne laissez pas vos enfants monter sur le moniteur ou s'accrocher à celui-ci. Le moniteur pourrait basculer, ce qui pourrait causer des blessures graves.

- Assurez-vous que le cordon d'alimentation est correctement branché au moniteur et à la prise murale. Si ceux-ci ne sont pas correctement branchés, la fiche et la prise murale peuvent être endommagées, ce qui peut déclencher un incendie dans les cas les plus extrêmes.
- N'insérez pas d'objets métalliques ou inflammables dans le produit. Si un corps étranger tombe dans l'appareil, débranchez le cordon d'alimentation et communiquez avec le service à la clientèle.
- Ne touchez pas l'extrémité du cordon d'alimentation lorsqu'il est branché. Vous pourriez recevoir une décharge électrique.
- **Si l'une des situations énoncées ci-dessous se produit, débranchez immédiatement le produit et communiquez avec le service à la clientèle de votre région.**
 - Si le produit a été endommagé.
 - Si de l'eau ou toute autre substance pénètre dans le produit (comme dans un adaptateur c.a., le cordon d'alimentation ou le moniteur).
 - Si vous sentez de la fumée ou toute autre odeur provenant du moniteur.
 - En cas d'orage ou de périodes d'inutilisation prolongées.

Même si le moniteur est éteint par la télécommande ou le bouton, l'alimentation c.a. reste connectée à l'appareil s'il n'est pas débranché.
- N'utilisez pas d'équipement à haute tension à proximité du moniteur (par exemple, un tue-mouches électrique). Cela pourrait entraîner un mauvais fonctionnement de l'appareil.
- Ne tentez en aucun cas de réaliser des modifications sur cet appareil sans avoir obtenu l'autorisation écrite de LG Electronics au préalable. Cela pourrait entraîner des risques d'incendie ou de décharge électrique. Si vous désirez effectuer un service ou une réparation, communiquez avec votre service à la clientèle local. Une modification non autorisée pourrait entraîner la révocation de l'autorisation d'utilisation de cet appareil.
- N'utilisez que des pièces additionnelles ou des accessoires approuvés par LG Electronics. Sinon, cela pourrait entraîner des risques d'incendie, de décharge électrique, de mauvais fonctionnement ou d'altération du produit.
- Ne démontez jamais l'adaptateur c.a. ou le cordon d'alimentation. Cela peut provoquer un incendie ou une décharge électrique.
- Manipulez l'adaptateur avec soin pour éviter de l'échapper ou de le frapper. Un impact pourrait l'endommager.
- Pour réduire les risques d'incendie ou de décharge électrique, ne touchez pas le moniteur avec les mains mouillées. Si les broches de la fiche du cordon d'alimentation sont mouillées ou couvertes de poussière, séchez ou époussetez la fiche soigneusement.
- **Piles**
 - Rangez les accessoires (piles ou autres) dans un lieu sûr et hors de la portée des enfants.
 - Ne court-circuitez pas les piles, ne les démontez pas et ne les laissez pas surchauffer. Ne jetez pas les piles dans le feu. Les piles ne doivent pas être exposées à une chaleur excessive.
 - Mise en garde : Le remplacement des piles par un type de piles incorrect peut entraîner un risque d'incendie ou d'explosion.
- **Déplacement**
 - Lorsque vous déplacez le moniteur, assurez-vous qu'il est éteint, débranché, et que tous les câbles ont été retirés. Deux personnes ou plus peuvent être nécessaires pour porter les moniteurs de grande taille. N'appliquez aucune pression sur le panneau avant du moniteur. Cela pourrait entraîner des risques de dommages du produit, d'incendie ou de blessures.
- Gardez le matériel anti-humidité et le matériel d'emballage en vinyle hors de la portée des enfants.
- Évitez de heurter l'appareil et assurez-vous qu'aucun objet ne tombe dans celui-ci ou n'entre en contact avec l'écran.
- N'appuyez pas fortement sur l'écran avec votre main ou un objet pointu (comme un ongle, un crayon ou un stylo) et évitez d'égratigner l'écran. Cela pourrait endommager l'écran.
- **Nettoyage**
 - Lors du nettoyage, débranchez le cordon d'alimentation et essuyez l'appareil avec un chiffon doux et sec. Ne vaporisez pas d'eau ou d'autres liquides directement sur le moniteur. Ne nettoyez pas votre moniteur avec des produits chimiques, comme du nettoyant pour vitres, tout type de purificateur d'air, de l'insecticide, du lubrifiant, de la cire (pour voiture ou à usage industriel), de l'abrasif, du diluant, du benzène, de l'alcool, etc., qui pourraient endommager le produit ou son panneau. Sinon, cela pourrait provoquer une décharge électrique ou endommager le produit.

Préparation

- Lorsque le moniteur est allumé pour la première fois après livraison, son initialisation peut prendre environ une minute.
- L'illustration peut différer de votre moniteur.
- L'affichage à l'écran de votre moniteur peut légèrement différer des illustrations du présent manuel.
- Les menus et les options offerts peuvent différer en fonction des entrées ou du modèle de produit que vous utilisez.
- De nouvelles fonctionnalités pourront être ajoutées à ce moniteur à l'avenir.
- L'appareil doit être branché près d'une prise électrique facilement accessible. Certains appareils ne doivent pas être allumés/éteints au moyen d'un bouton, mais en éteignant l'appareil et en débranchant le cordon d'alimentation.
- Les articles fournis avec votre produit peuvent varier selon le modèle.
- Les caractéristiques du produit ou le contenu de ce manuel peuvent être modifiés sans préavis, pour refléter la mise à niveau des fonctions du produit.
- Pour que la connexion soit optimale, les connecteurs des câbles HDMI et des dispositifs USB devraient avoir un rebord de moins de 10 mm (0,39 po) d'épaisseur et de moins de 18 mm (0,7 po) de largeur.
- Utilisez une rallonge prenant en charge l'USB 2.0 si le câble USB ou la clé USB ne rentrent pas dans le port USB de votre moniteur.
- Utilisez un câble certifié portant le logo HDMI. Si vous n'utilisez pas un câble HDMI certifié, l'écran pourrait ne rien afficher ou un problème de connexion pourrait se produire.
- Types de câbles HDMI recommandés (de 3 m [9,84 pi] ou moins)
 - Câble HDMI®/™ haute vitesse
 - Câble HDMI®/™ haute vitesse avec Ethernet



- * $A \leq 10$ mm (0,39 po)
- * $B \leq 18$ mm (0,7 po)

- Afin de garantir la sécurité et la durée de vie de l'appareil, n'utilisez pas d'éléments non approuvés.
- Tout dommage ou blessure causé par l'utilisation d'un élément non approuvé n'est pas couvert par la garantie.
- Certains modèles ont une fine pellicule apposée sur l'écran. Celle-ci fait partie du moniteur; il ne faut pas la retirer.

Articles supplémentaires en option

Base

Modèle	Socle
60UL3E	ST-60UL3RB
70UL3E	ST-70UL3DT

Des articles supplémentaires en option peuvent être remplacés ou modifiés à des fins d'amélioration de la qualité, sans préavis.

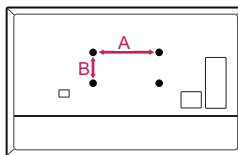
Communiquez avec votre détaillant pour acheter ces articles.

Ces dispositifs ne fonctionnent qu'avec certains modèles.

Le nom ou la conception du modèle peuvent être modifiés selon les conditions ou les politiques du fabricant.

Support mural

Assurez-vous d'utiliser les vis et les fixations murales qui répondent aux normes VESA. Les dimensions standards des trousseaux de fixation murale sont indiquées dans le tableau suivant.



Modèle	60UL3E	70UL3E
VESA (A x B)	300 x 300	600 x 400
Vis standard	M6	M8
Nombre de vis	4	4
Fixation murale (facultative)	OLW480B	LSW640B

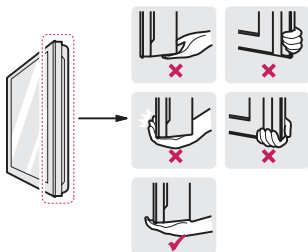
Soulèvement et déplacement du moniteur

Suivez les instructions suivantes pour éviter les rayures et les dommages sur le moniteur en déplaçant ou en soulevant le moniteur, et pour le transporter de manière sécurisée, quelles que soient sa forme et sa taille.

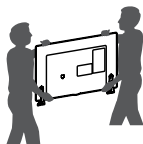
- Il est recommandé de déplacer le moniteur dans la boîte ou les matériaux d'emballage dans lequel se trouvait le moniteur à l'origine.
- Avant de déplacer ou de soulever le moniteur, débranchez le cordon d'alimentation et tous les câbles.
- Lorsque vous tenez le moniteur, l'écran ne doit pas être orienté face à vous pour le protéger des dommages.



- Tenez fermement le haut et le bas du cadre du moniteur. Assurez-vous de ne pas tenir la partie transparente, le haut-parleur ou la grille du haut-parleur.



- Utilisez au moins deux personnes pour déplacer un moniteur de grande taille.
- Lorsque vous transportez le moniteur à la main, tenez le moniteur comme illustré ci-dessous.



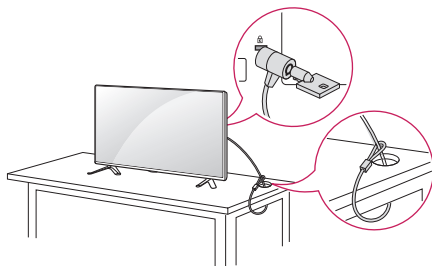
- Lors du transport du moniteur, évitez de l'exposer à des chocs ou des vibrations excessives.
- Lors du transport du moniteur, tenez le moniteur droit. Ne tournez jamais le moniteur sur son côté ou ne l'inclinez pas latéralement.
- Lorsque vous manipulez le moniteur, faites attention de ne pas endommager les boutons en saillie.



- Évitez de toucher à l'écran, puisque cela pourrait causer des dommages à celui-ci.
- Ne déposez pas le produit sur le plancher si la partie avant (l'écran) n'est pas posée sur une surface coussinée. Cela pourrait endommager l'écran.
- Ne déplacez pas le moniteur en le tenant par les supports pour câbles, car ils pourraient se briser, ce qui pourrait causer des blessures et endommager le moniteur. (Selon le modèle.)
- Lorsque vous fixez le socle au moniteur, placez l'écran vers le bas sur une table couverte ou une surface plane pour protéger l'écran contre les rayures.

Utilisation du système de sécurité Kensington (facultatif)

Le connecteur du système de sécurité Kensington se trouve à l'arrière du moniteur. Pour de plus amples renseignements sur l'installation et l'utilisation de ce système, reportez-vous au manuel fourni avec le système de sécurité Kensington ou visitez le site <http://www.kensington.com>. Fixez le câble du système de sécurité Kensington entre le moniteur et une table.

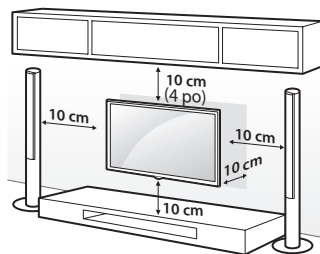


(Selon le modèle.)

- Le système de sécurité Kensington est facultatif. Vous pouvez vous procurer des accessoires auprès de votre détaillant local.

Montage sur un mur

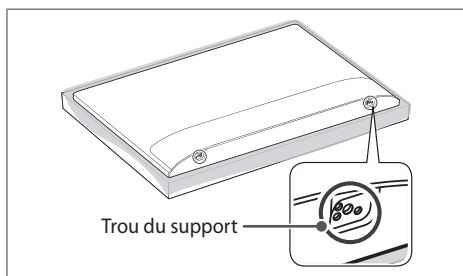
Une fixation murale en option peut être utilisée avec votre moniteur LG. Demandez une fixation murale répondant à la norme VESA et adaptée à votre modèle de moniteur à votre revendeur local. Attachez soigneusement le support mural à l'arrière du moniteur. Installez-le sur un mur solide qui est perpendiculaire au sol. Si vous fixez le moniteur à d'autres matériaux de construction, veuillez communiquer avec du personnel qualifié pour installer la fixation murale. Des directives détaillées seront comprises avec la fixation murale. Nous vous recommandons d'utiliser une fixation murale de marque LG. La fixation murale de LG est facile à ajuster et les câbles s'y branchent aisément. Si vous n'utilisez pas une fixation murale de LG, utilisez un support permettant de poser l'appareil au mur de façon sécuritaire et offrant suffisamment d'espace pour la connexion des appareils externes. Si vous utilisez une fixation non réglable, posez-la sur le mur. Branchez d'abord les câbles au moniteur, puis attachez le moniteur sur la fixation.



(Selon le modèle.)



- Retirez le socle avant d'installer le moniteur sur une fixation murale en procédant dans le sens inverse du montage du socle.
- Pour de plus amples renseignements sur les vis et les supports muraux, consultez la section Achats séparés.
- Si vous avez l'intention d'installer le produit sur un mur, fixez l'interface de fixation VESA (pièces en option) à l'arrière du produit. Quand vous installez l'appareil pour utiliser le support de fixation murale (pièces en option), fixez-le soigneusement pour qu'il ne tombe pas.
- Lors du montage d'un moniteur au mur, assurez-vous de ne pas le suspendre à l'aide du câble de signal ou d'alimentation se trouvant à l'arrière du moniteur.
- N'installez pas ce produit sur un mur où il risque d'être exposé à de l'huile ou à un brouillard d'huile. Cela pourrait endommager le produit et entraîner sa chute.
- Lors de l'installation du support mural, il est recommandé de couvrir le trou du support avec de l'adhésif pour éviter l'intrusion de poussière ou d'insectes. (Selon le modèle.)



Connexions

Vous pouvez connecter différents appareils externes au moniteur. Pour plus d'information sur la connexion des appareils externes, consultez le manuel fourni avec chaque appareil.

Autres connexions

Connectez votre moniteur à des appareils externes. Pour obtenir la meilleure qualité d'image et de son, connectez l'appareil externe sur votre moniteur à l'aide du câble HDMI.

HDMI :

- Format audio HDMI pris en charge :
(Selon le modèle.)
DTS (44,1 kHz / 48 kHz / 88,2 kHz / 96 kHz),
DTS HD (44,1 kHz / 48 kHz / 88,2 kHz / 96 kHz / 176,4 kHz / 192 kHz),
Dolby Digital / Dolby Digital Plus (32 kHz / 44,1 kHz / 48 kHz),
PCM (32 kHz / 44,1 kHz / 48 kHz / 96 kHz / 192 kHz)
- Codecs audio TVN pris en charge : MPEG, Dolby Digital
- **SETTINGS** ► ► **[Image]** ► **[Réglages additionnels]** ► **[HDMI ULTRA HD Deep Color]**
 - Marche : Prise en charge du 4K à 60 Hz (4:4:4, 4:2:2 et 4:2:0)
 - Arrêt : Prise en charge du 4K à 60 Hz 8 bits (4:2:0)

Si l'appareil connecté au port d'entrée prend également en charge le mode ULTRA HD Deep Color, l'image pourrait être plus claire. Par contre, s'il ne le prend pas en charge, ce mode pourrait ne pas fonctionner correctement. Dans ce cas, désactivez le réglage [HDMI ULTRA HD Deep Color] du moniteur.

 - Cette fonction n'est offerte que sur certains modèles qui prennent en charge le mode HDMI ULTRA HD Deep Color.

USB

- Certains concentrateurs USB pourraient ne pas fonctionner. Si un dispositif USB connecté à l'aide d'un concentrateur USB n'est pas détecté, connectez-le directement au port USB du moniteur.

Dispositifs externes

Sont pris en charge les dispositifs externes : lecteur Blu-ray, récepteurs HD, lecteurs DVD, magnétoscopes, systèmes audio, dispositifs de stockage USB, PC, consoles de jeu et autres dispositifs externes.

- La connexion au périphérique externe peut différer légèrement des illustrations présentées dans le manuel.
- Connectez des appareils externes au moniteur quel que soit l'ordre des ports du moniteur.
- Si vous connectez une console de jeu sur le moniteur, utilisez le câble fourni avec la console.
- Pour connaître le mode d'emploi d'un appareil externe, consultez le guide d'utilisation associé à l'appareil en question.
- En mode PC, il peut y avoir du bruit associé à la résolution, au motif vertical, au contraste ou à la luminosité. Si vous entendez du bruit, changez la résolution de la sortie PC, changez la fréquence de rafraîchissement, ou réglez la luminosité et le contraste dans le menu [Image] pour obtenir une image nette. Selon votre carte graphique, il est possible que certains réglages de résolution ne permettent pas le positionnement correct de l'image sur l'écran.
- Lorsque vous connectez l'appareil à un réseau local filaire, il est recommandé d'utiliser un câble CAT 7.

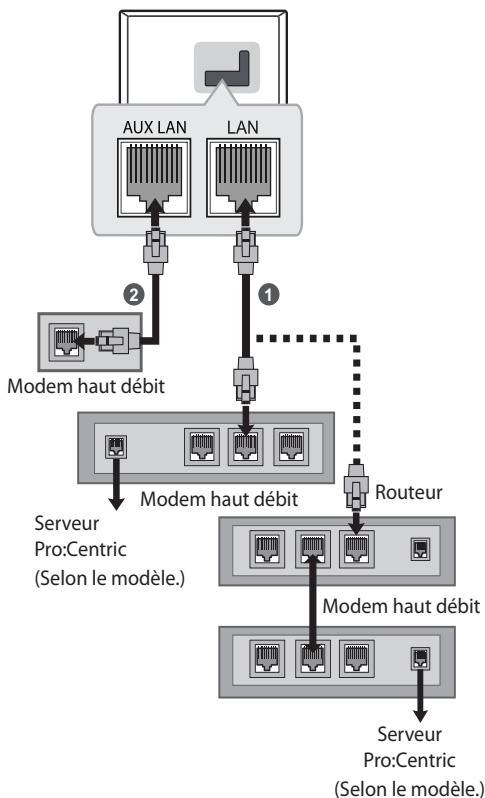
Configuration réseau

(Selon le modèle.)

Connexion à un réseau filaire

Ce moniteur peut être connecté à un serveur Pro:Centric à l'aide du port **LAN**. Une fois la connexion physique effectuée, le moniteur doit être réglé pour la communication avec le réseau.

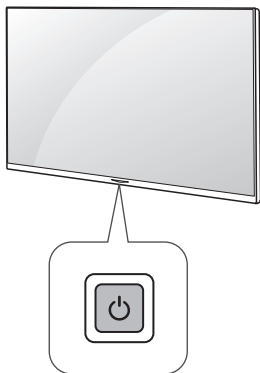
Connectez le port **LAN** du modem ou du routeur du serveur Pro:Centric au port **LAN** sur le moniteur.



- 1 Connectez le port **LAN** du modem ou du routeur au port **LAN** du moniteur.
 - 2 Connectez le port **LAN** du PC au port **AUX LAN** du moniteur. (Selon le modèle.)
- Ne connectez pas un câble de téléphone modulaire au port **LAN**.
 - Étant donné qu'il existe différentes méthodes de raccordement, veuillez suivre les prescriptions de votre opérateur de télécommunication ou de votre fournisseur de services Internet.

Utilisation du bouton

Vous pouvez simplement commander le moniteur à l'aide du bouton.



Fonctions de base



Mise sous tension (appuyez)
Mise hors tension¹ (maintenez enfoncé)
Commande du menu (appuyez²)
Sélection du menu (maintenez enfoncé³)

- 1 Toutes les applications actives seront fermées.
- 2 Vous pouvez accéder au menu et le régler en appuyant sur le bouton lorsque le moniteur est en marche.
- 3 Vous pouvez utiliser cette fonction lorsque vous accédez à la commande de menu.

Réglage du menu

Lorsque le moniteur est en marche, appuyez une fois sur le bouton . Vous pouvez régler les éléments du menu à l'aide des boutons.

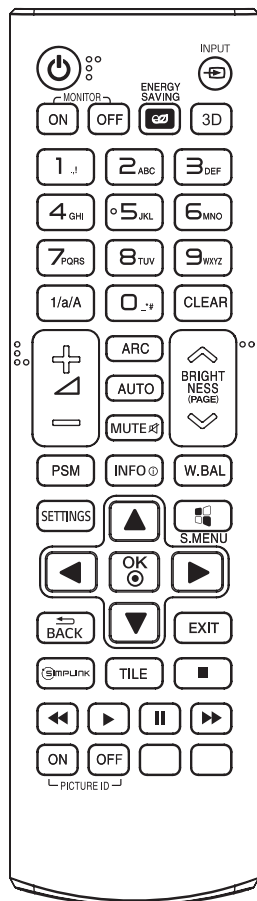
	Éteint le moniteur.
	Permet de changer la source d'entrée.
	Règle le niveau du volume.

Utilisation de la télécommande

Les descriptions du présent manuel font référence aux touches qui se trouvent sur la télécommande. Veuillez lire le présent manuel attentivement et utiliser le moniteur correctement.

Pour installer les piles, ouvrez le couvercle de leur compartiment et insérez les piles (AAA de 1,5 V) en faisant correspondre leurs bornes $\oplus$ et $\ominus$ à celles du compartiment, puis remettez le couvercle en place.

Pour retirer les piles, suivez le processus d'installation dans l'ordre inverse. Cette télécommande fonctionne au moyen de la lumière infrarouge. Lorsqu'elle est utilisée, elle doit être pointée dans la direction du capteur de télécommande du moniteur.



(Certains boutons et services peuvent ne pas être offerts selon le modèle ou la région.)

 **(Alimentation)** Allume ou éteint le moniteur.

MONITOR ON Allume le moniteur.

MONITOR OFF Éteint le moniteur.

 **ENERGY SAVING** Permet de réduire la consommation d'énergie en réglant le pic de luminosité de l'écran.

INPUT  Permet de changer la source d'entrée.

3D Est utilisé lors du visionnement de vidéos 3D.

1/a/A Permet de basculer entre les modes numérique et alphabétique.

Touches de numéros et de lettres Permettent d'entrer des caractères numériques ou alphabétiques selon le réglage.

CLEAR Supprime le caractère numérique ou alphabétique saisi.

Touche d'augmentation et de réduction du volume Permet de régler le volume.

ARC Permet de sélectionner un format d'image.

AUTO Permet de régler automatiquement la position de l'image et de réduire l'instabilité de l'image (entrée RVB uniquement).

MUTE  Désactive tous les sons.

BRIGHTNESS (PAGE) Permet de régler la luminosité de l'écran.

PSM Permet de sélectionner le [Mode photo].

INFO  Affiche les renseignements d'entrée.

W.BAL Active le menu [White Balance (équilibre des blancs)].

SETTINGS Permet d'accéder aux menus principaux ou d'enregistrer votre sélection et de quitter les menus.

 **S.MENU** Touche du menu SuperSign.

Touches de navigation Permettent de parcourir les menus ou les options.

 Sélectionne des menus ou des options et confirme votre choix.

 **BACK** Permet de revenir à l'étape précédente dans la fonction interactive.

EXIT Permet de quitter toutes les tâches et les applications affichées à l'écran.

 **SIMPLINK** Vous permet de contrôler plusieurs périphériques multimédias pour profiter simplement du contenu multimédia à l'aide de la télécommande et du menu Simplink.

TILE Permet de sélectionner le mode TILE (mosaïque).

PICTURE ID ON/OFF Lorsque le numéro d'identifiant de l'image correspond à celui de l'appareil, vous pouvez contrôler le moniteur que vous souhaitez utiliser en mode Multi-écran. (Les touches

PICTURE ID ON/OFF sont des touches multifonctions. Dans certains cas, ces touches peuvent fonctionner comme des touches de couleur.)

Touches de contrôle du menu USB Permettent de contrôler la lecture multimédia.

 **Trick key** Peuvent ne pas être prises en charge sur certains modèles.



- Ne combinez pas des piles neuves avec des piles usagées. Les piles pourraient surchauffer et du liquide pourrait s'en écouler.
- Le non-respect des polarités de la pile pourrait causer l'explosion de la pile ou une fuite et entraîner un incendie, des blessures corporelles ou un risque de pollution pour l'environnement.
- Ce dispositif fonctionne avec des piles. Il est possible que des règlements en matière d'environnement vous obligent à éliminer adéquatement ces piles. Veuillez communiquer avec les autorités locales pour plus de renseignements sur la mise au rebut ou sur le recyclage des piles usagées.
- Les piles internes ou externes au produit ne doivent pas être exposées à une chaleur excessive comme celle dégagée par la lumière du soleil ou par le feu.

Dépannage

Le logiciel peut être mis à jour afin d'en améliorer la performance. Le client a la responsabilité de s'assurer de la compatibilité de son matériel avec tout logiciel fourni par LG Electronics. Au besoin, communiquez avec LG Electronics et mettez à jour les versions de vos logiciels conformément aux directives de LG Electronics.

- Impossible de commander le moniteur avec la télécommande.
 - Assurez-vous que rien n'a été placé sur le récepteur (du ruban adhésif, par exemple).
 - Vérifiez qu'aucun obstacle n'empêche la communication entre l'appareil et la télécommande.
 - Remplacez les piles par de nouvelles.
- Le moniteur ne produit pas d'images ni de son.
 - Vérifiez que le moniteur est allumé.
 - Vérifiez que le cordon d'alimentation est branché dans une prise murale.
 - Vérifiez que la prise murale fonctionne en y branchant d'autres appareils.
- Le moniteur s'éteint brusquement.
 - Vérifiez les réglages de commande de l'alimentation. Il y a peut-être eu une panne de courant.
 - Vérifiez si la fonctionnalité d'arrêt automatique est activée dans les réglages liés à l'heure.
 - Si aucun signal n'est détecté alors que le moniteur est en marche, le moniteur s'éteint automatiquement après 15 minutes d'inactivité.
- Aucun signal n'est détecté lors de la connexion à un PC (HDMI).
 - Éteignez ou allumez le moniteur à l'aide de la télécommande.
 - Rebranchez le câble HDMI.
 - Redémarrez le PC avec le moniteur allumé.
- **Affichage anormal**
 - Si le moniteur est froid au toucher, un faible scintillement peut se produire lorsqu'il est allumé. Ce phénomène est normal, le moniteur ne présente aucun problème. Pendant quelques minutes, des défauts de points peuvent être visibles à l'écran, apparaissant comme de petites taches rouges, vertes ou bleues. Ils n'ont toutefois aucun effet négatif sur les performances du moniteur. Évitez de toucher l'écran ou de mettre vos doigts sur celui-ci pendant une longue période de temps. Cela pourrait produire un effet de distorsion à l'écran.

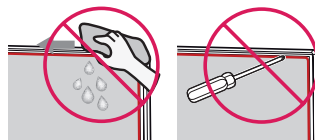
- Cet écran est un produit de haute technologie qui contient des millions de pixels. Dans de très rares cas, de petits points peuvent apparaître à l'écran lorsque vous regardez le moniteur. Ces points sont des pixels désactivés et n'affectent ni les performances, ni la fiabilité du moniteur.
- L'affichage d'une image fixe pendant une longue période peut entraîner l'incrustation de l'image. Évitez d'afficher une image fixe sur le moniteur pendant une période prolongée.

• Sons produits

- **Craquements** Les craquements qui se produisent lorsque vous regardez ou que vous éteignez le moniteur sont générés par la contraction thermique du plastique en raison de la température et de l'humidité. Ce bruit est courant dans les produits où une déformation thermique est requise.
- **Bourdonnement du circuit ou du panneau électrique** Un bruit très faible est produit par un circuit commutateur haute vitesse fournissant une grande quantité de courant pour faire fonctionner un appareil. Il varie selon l'appareil. Ce son ne nuit aucunement à la performance ou à la fiabilité de l'appareil.



- Pour nettoyer le produit, assurez-vous de ne laisser aucun liquide ou corps étranger pénétrer entre les parties supérieure, gauche ou droite du panneau et le guide. (Selon le modèle.)



- Assurez-vous d'essorer l'excès d'eau ou de produit de nettoyage du linge.
- Ne vaporisez pas d'eau ou de nettoyant directement sur l'écran du moniteur.
- Assurez-vous de vaporiser juste assez d'eau ou de nettoyant sur un chiffon sec pour nettoyer l'écran.

Réglages

Sélection du mode image

SETTINGS ► ⓘ (⚙️) ► [Image] ► [Paramètres du mode Image] ► [Mode photo]

Sélectionnez le mode image optimisé pour l'environnement de visionnement ou le programme.

- [Vif] Augmente les niveaux de contraste, de luminosité et de netteté pour produire des images éclatantes.
- [Standard] Affiche les images aux niveaux standards de contraste, de luminosité et de netteté.
- [APS] Le mode APS (économie d'énergie automatique) réduit la consommation d'énergie en réduisant l'éclairage de la télécommande.
- [Cinéma] Affiche une image de qualité optimale pour un film.
- [Sports] Mode d'image optimisé pour les matches de sport. Le terrain et les uniformes s'affichent dans des couleurs vives et des images d'une superbe clarté, même lors de mouvements rapides.
- [Jeu] Affiche une image de qualité optimale pour un jeu.
- [HDR effect] Cette fonction vous permet de profiter d'une image nette, au dynamisme accru en corrigeant les zones trop claires ou trop sombres à l'écran. Cette fonction permet d'obtenir une image réaliste, même lorsque le degré de gradation de l'image source est élevé. Si vous réglez le mode Photo à HDR effect, vous ne pourrez pas utiliser certains paramètres du mode Image.
- [Expert] Menu de réglage de la qualité de l'image qui permet aux experts comme aux amateurs de profiter du meilleur visionnement du moniteur. Ce menu de réglage est prévu pour les professionnels de l'étalonnage d'images certifiés ISF. (Le logo ISF ne peut être utilisé que sur des moniteurs certifiés ISF.) ISFccc : Imaging Science Foundation Certified Calibration Control
- Selon le signal d'entrée, la plage de modes d'image disponibles peut différer.
- [Expert] est un mode destiné aux professionnels de l'étalonnage d'images pour leur permettre un contrôle et un étalonnage précis de certaines images. Pour les images normales, les effets ne sont pas nécessairement spectaculaires.
- Changer le [Mode photo] peut entraîner la modification des paramètres [Économie d'énergie] et [Contrôle de la luminosité en fonction du mouvement], et avoir des répercussions sur la consommation d'énergie.

Réglage des options d'image supplémentaires

SETTINGS ► ⓘ (⚙️) ► [Image] ► [Paramètres du mode Image] ► [Options d'image]

Ajuste les réglages d'image détaillés.

- [Réduction de bruit] Élimine le bruit de l'image.
- [Réduction de bruit MPEG] Élimine le bruit généré lors de la création de signaux d'image numériques.
- [Niveau de noir] Règle la luminosité et le contraste de l'écran pour les adapter au niveau de noir de l'image de la source en utilisant le niveau de noir de l'écran.
- [Cinéma véridique] Optimise l'écran pour le visionnement de films.
- [Contrôle de la luminosité en fonction du mouvement] Règle automatiquement la luminosité et réduit le flou de l'image en fonction des données d'image afin de réduire la fatigue oculaire.
- [Atténuation localisée DEL] (Selon le modèle.) Maximise le contraste en augmentant l'intensité des zones claires et des zones sombres de l'écran.
- [TruMotion] Corrige les images pour afficher des mouvements plus fluides. Auto signifie que la plage d'effet de saccade et de flou qui dépend de l'état d'entrée vidéo est contrôlée par le mode TruMotion.
- Selon le signal d'entrée ou d'autres réglages de l'image, les possibilités de réglage peuvent différer.

Utilisation du mode d'économie d'énergie

SETTINGS ► ⓘ (⚙️) ► [Image] ► [Économie d'énergie]

Permet de réduire la consommation d'énergie en réglant le pic de luminosité de l'écran.

- [Auto.] Le capteur du moniteur détecte l'éclairage ambiant et règle automatiquement la luminosité de l'écran.
- [Arrêt] Désactive la fonction Économie d'énergie.
- [Minimum] / [Moyen] / [Maximum] Permet d'appliquer un des types prédéfinis de la fonction Économie d'énergie.
- [Écran éteint] L'écran est éteint et seul le son est audible. Appuyez sur n'importe quelle touche de la télécommande pour rallumer l'écran.
- Selon le réglage de l'option [Économie d'énergie] ([Auto.] / [Maximum]), il se peut que vous ne puissiez pas régler l'option Rétroéclairage. Dans un tel cas, naviguez jusqu'à **SETTINGS ► ⓘ (⚙️) ► [Image] ► [Économie d'énergie]** et réglez l'option à [Arrêt] ou à [Minimum].

Caractéristiques

Les caractéristiques techniques sont susceptibles d'être modifiées sans préavis en raison des mises à niveau des fonctions des produits.

L'estimation de la consommation énergétique annuelle marquée sur l'étiquette FTC est mesurée en fonction des procédures de test pour les ensembles d'affichage (uniquement aux États-Unis).

La consommation énergétique réelle dépend de l'environnement d'utilisation (le contenu regardé, les réglages de l'affichage, etc.).

Conditions d'utilisation	
Température de fonctionnement	De 0 °C à 40 °C (de 32 °F à 104 °F)
Humidité de fonctionnement	Moins de 80 %
Température d'entreposage	De -20 °C à 60 °C (de -4 °F à 140 °F)
Humidité d'entreposage	Moins de 85 %

Prise en charge du mode HDMI (PC)

Résolution	Fréquence horizontale (kHz)	Fréquence verticale (Hz)
640 x 350	31,46	70,09
720 x 400	31,46	70,08
640 x 480	31,46	59,94
800 x 600	37,87	60,31
1 024 x 768	48,36	60,00
1 360 x 768	47,71	60,01
1 152 x 864	54,34	60,05
1 280 x 1 024	63,98	60,02
1 920 x 1 080	67,50	60,00
	135,00	120,00
3 840 x 2 160	54,00	24,00
	56,25	25,00
	67,50	30,00
4 096 x 2 160	53,95	23,97
	54,00	24,00

Prise en charge du mode HDMI (TVN)

Résolution	Fréquence horizontale (kHz)	Fréquence verticale (Hz)
640 x 480p	31,46	59,94
	31,50	60,00
720 x 480p	31,47	59,94
	31,50	60,00
720 x 576p	31,25	50,00
1 280 x 720p	44,96	59,94
	45,00	60,00
	37,50	50,00
1 920 x 1 080i	28,12	50,00
	33,72	59,94
	33,75	60,00
1 920 x 1 080p	26,97	23,97
	27,00	24,00
	33,71	29,97
	33,75	30,00
	56,25	50,00
	67,43	59,94
	67,50	60,00
	112,50	100,00
	134,86	119,88
	135,00	120,00
3 840 x 2 160p	53,95	23,98
	54,00	24,00
	56,25	25,00
	61,43	29,97
	67,50	30,00
	112,50	50,00
	134,86	59,94
4 096 x 2 160p	135,00	60,00
	53,95	23,98
	54,00	24,00
	56,25	25,00
	61,43	29,97
	67,50	30,00
	112,50	50,00
	134,86	59,94
	135,00	60,00

Fichiers de photo pris en charge

Format de fichier	Format	Résolution
.jpeg .jpg .jpe	JPEG	Minimum : 64 (L) x 64 (H) Maximum : - Type normal : 15 360 (L) x 8 640 (H) - Type progressif : 1 920 (L) x 1 440 (H)
.png	PNG	Minimum : 64 (L) x 64 (H) Maximum : 5 760 (L) x 5 760 (H)
.bmp	BMP	Minimum : 64 (L) x 64 (H) Maximum : 1 920 (L) x 1 080 (H)

Fichiers audio pris en charge

Format de fichier	Info
.mp3	[Débit binaire] de 32 à 320 kb/s [Fréquence d'échantillonnage] de 16 kHz à 48 kHz [Formats pris en charge] MPEG1, MPEG2 [Chaînes] mono, stéréo
.wav	[Débit binaire] - [Fréquence d'échantillonnage] De 8 kHz à 96 kHz [Formats pris en charge] PCM [Chaînes] mono, stéréo
.ogg	[Débit binaire] de 64 à 320 kb/s [Fréquence d'échantillonnage] de 8 kHz à 48 kHz [Formats pris en charge] Vorbis [Chaînes] mono, stéréo
.wma	[Débit binaire] de 128 à 320 kb/s [Fréquence d'échantillonnage] de 8 kHz à 48 kHz [Format pris en charge] WMA [Chaînes] Jusqu'à 6 canaux
.flac	[Débit binaire] - [Fréquence d'échantillonnage] de 8 kHz à 96 kHz [Formats pris en charge] FLAC [Chaînes] mono, stéréo

Fichiers vidéo pris en charge

Format de fichier	Codec	
.asf .wmv	Vidéo	Profil VC-1 avancé (sauf pour WMVA), les profils VC-1 simple et principal
	Audio	WMA standard (sauf pour WMA v1/WMA Speech)
.avi	Vidéo	Xvid (sauf 3 warp-point GMC), H.264/AVC, Motion Jpeg, MPEG-4
	Audio	MPEG-1 couche I, II, MPEG-1 couche III (MP3), Dolby Digital, LPCM, ADPCM, DTS
.mp4 .m4v .mov	Vidéo	H.264/AVC, MPEG-4, HEVC
	Audio	Dolby Digital, Dolby Digital Plus, AAC, MPEG-1 couche III (MP3), Dolby AC-4
.3gp .3g2	Vidéo	H.264/AVC, MPEG-4
	Audio	AAC, AMR-NB, AMR-WB
.mkv	Vidéo	MPEG-2, MPEG-4, H.264/AVC, VP8, VP9, HEVC
	Audio	Dolby Digital, Dolby Digital Plus, AAC, PCM, DTS, MPEG-1 couche I, II, MPEG-1 couche III (MP3)
.ts .trp .tp .mts	Vidéo	H.264/AVC, MPEG-2, HEVC
	Audio	MPEG-1 couche I, II, MPEG-1 couche III (MP3), Dolby Digital, Dolby Digital Plus, AAC, PCM, Dolby AC-4
.mpg .mpeg .dat	Vidéo	MPEG-1, MPEG-2
	Audio	MPEG-1 couche I, II, MPEG-1 couche III (MP3)
.vob	Vidéo	MPEG-1, MPEG-2
	Audio	Dolby Digital, MPEG-1 couche I, II, DVD-LPCM
.mkv ¹	Vidéo	H.264/AVC, HEVC
.mp4 ¹ .ts ¹	Audio	Dolby Digital, Dolby Digital Plus, AAC

1 UHD

CODES CLÉS

* Cette fonction n'est pas offerte sur tous les modèles.

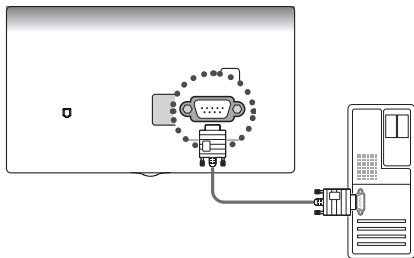
Code (Hex)	Fonction	Remarque	Code (Hex)	Fonction	Remarque
08	 (ALIMENTATION)	Touche R/C	3F	 S.MENU	Touche R/C
C4	MONITOR ON	Touche R/C	40		Touche R/C
C5	MONITOR OFF	Touche R/C	41		Touche R/C
95	 ÉCONOMIE D'ÉNERGIE	Touche R/C	07		Touche R/C
0B	INPUT 	Touche R/C	06		Touche R/C
DC	3D	Touche R/C	44	OK 	Touche R/C
32	1/a/A	Touche R/C	28	 BACK	Touche R/C
10-19	Touches numériques 0-9 Touchés alphabétiques	Touche R/C	5B	EXIT	Touche R/C
2F	CLEAR	Touche R/C	7E	 SIMPLINK	Touche R/C
02		Touche R/C	7B	TILE	Touche R/C
03		Touche R/C	72	PICTURE ID ON (Rouge)	Touche R/C
79	ARC	Touche R/C	71	PICTURE ID OFF (Vert)	Touche R/C
99	AUTO	Touche R/C	B1		Touche R/C
09	MUTE 	Touche R/C	B0		Touche R/C
E0	LUMINOSITÉ (PAGE) 	Touche R/C	BA	II	Touche R/C
E1	LUMINOSITÉ (PAGE) 	Touche R/C	8F		Touche R/C
4D	PSM	Touche R/C	8E		Touche R/C
AA	INFO 	Touche R/C	63	Jaune	Touche R/C
5F	W.BAL	Touche R/C	61	Bleu	Touche R/C
43	SETTINGS	Touche R/C			

- Le code clé 4C (0 x 4C) est disponible sur les modèles ATSC/ISDB, qui utilisent un canal majeur/mineur. (Modèles vendus en Corée du Sud, au Japon, en Amérique du Nord, en Amérique latine, à l'exception de la Colombie)

CONFIGURATION DE L'APPAREIL DE COMMANDE EXTERNE

- * L'illustration peut différer de votre moniteur.
- * Câble non fourni.
- * L'interface de connexion peut différer de votre affichage.

Configuration RS-232C



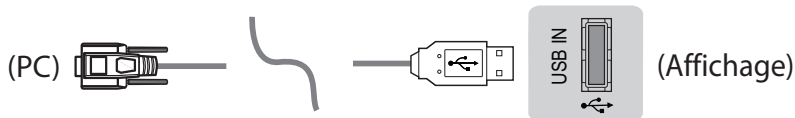
- Connectez la prise d'entrée de l'adaptateur USB/Série RS-232C sur un appareil de commande externe (comme un ordinateur ou un système de commande audio-vidéo) pour commander les fonctions du produit de façon externe.
- Reliez le port série de l'appareil de commande à la prise RS-232C située sur le panneau arrière du produit.

REMARQUE

- Le type de port de commande sur le moniteur peut différer entre plusieurs séries de modèles.

Adaptateur USB/Série avec câble USB

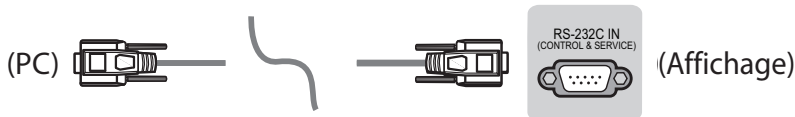
Type USB



- L'affichage LG prend en charge la connexion USB à puce vers convertisseur série PL2303 (réf. revendeur : 0 x 0557, réf. produit : 0 x 2 008) qui n'est ni fabriqué ni fourni par LG.
- Vous pourrez l'acquérir auprès de distributeurs spécialisés en informatique professionnelle.

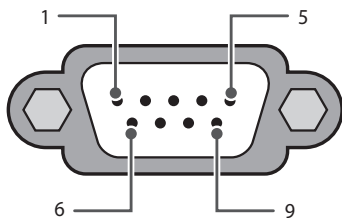
RS-232C avec câble RS-232C (ancienne génération)

Type DE9 (D-Sub 9 broches)



- Vous devez acheter le câble RS-232C (type femelle-femelle 9 broches DE9, D-Sub) vers RS-232C requis pour établir la connexion entre le PC et l'affichage, qui est mentionné dans le manuel.
- L'interface de connexion peut différer de votre affichage.

Type de connecteur : D-Sub 9 broches mâle



RS-232C
(Port série)

Configurations RS-232C

Configurations à 7 broches

(Standard pour le câble RS-232C)

	PC	Affichage	
RXD	2	3	TXD
TXD	3	2	RXD
GND	5	5	GND
DTR	4	6	DTR
DSR	6	4	DSR
RTS	7	8	RTS
CTS	8	7	CTS
	D-Sub 9	D-Sub 9	

Configurations à 3 broches

(Non standard)

	PC	Affichage	
RXD	2	3	TXD
TXD	3	2	RXD
GND	5	5	GND
DTR	4	6	DTR
DSR	6	4	DSR
RTS	7	8	RTS
CTS	8	7	CTS
	D-Sub 9	D-Sub 9	

Identité télé

Pour définir le numéro d'identité, voir la section « **Correspondance avec les données réelles (Hexadécimale : Décimale)** ».

- 1 Appuyez sur **SETTINGS** ► (ⓘ) (⚙️) pour accéder aux menus principaux.
- 2 Appuyez sur les touches de navigation pour accéder à ([Général] ► [Identité télé]) puis appuyez sur **OK**.
- 3 Faites défiler vers la gauche ou vers la droite pour sélectionner un numéro d'identité, puis sélectionnez **BACK**. La plage de réglage s'étend de 1 à 99.
- 4 Lorsque vous avez terminé, appuyez sur **EXIT**.

Paramètres de communication

- Débit en baud : 9 600 b/s (UART)
- Longueur de données : 8 bits
- Parité : Aucune
- Bit d'arrêt : 1 bit
- Code de communication : Code ASCII
- Utilisez un câble croisé (inversé).

Liste de référence des commandes

* (Selon le modèle.)

	COMMANDE1	COMMANDE2	DONNÉES (hexadécimales)
1 Alimentation	k	a	De 00 à 01
2 [Format de l'image]	k	c	(page 23)
3 Sourdine écran	k	d	(page 23)
4 Sourdine volume	k	e	De 00 à 01
5 Réglage du volume	k	f	De 00 à 64
6 [Contraste]	k	g	De 00 à 64
7 [Luminosité]	k	h	De 00 à 64
8 [Couleur]	k	i	De 00 à 64
9 [Teinte]	k	j	De 00 à 64
10 [Netteté]	k	k	De 00 à 32
11 Sélection de l'affichage	k	l	De 00 à 01
12 Mode verrouillage de la télécommande	k	m	De 00 à 01
13 [Équilibre]	k	t	De 00 à 64
14 [Température de couleur]	x	u	De 00 à 64
15 [Équaliseur]	j	v	(page 25)
16 [Économie d'énergie]	j	q	De 00 à 05
17 Touche	m	c	Code clé
18 Commande du rétroéclairage	m	g	De 00 à 64
19 Sélection d'entrée	x	b	(page 25)

- Durant la lecture de contenu multimédia, toutes les commandes, à l'exception des commandes Power (Marche/ Arrêt) (ka) et Key (Touche) (mc), sont désactivées et traitées en tant que NG. Avec un câble RS232C, l'affichage peut transmettre des « commandes ka » qu'il soit allumé ou éteint. Mais avec un câble de convertisseur USB-série, la commande fonctionne uniquement si l'affichage est allumé.

PROTOCOLE DE TRANSMISSION/RÉCEPTION

* (Selon le modèle.)

Transmission

(Commande1)(Commande2)()([Identité télé])()(Données)(Cr)

(Commande 1) : Première commande à contrôler l'affichage. (j, k, m ou x)

(Commande 2) : Deuxième commande à contrôler l'affichage.

(Identité télé) : Vous pouvez régler la valeur Identité télé pour sélectionner le numéro d'identité du moniteur dans le menu Option. La plage de réglage est de 1 à 99. Lorsque vous sélectionnez « 0 » pour le numéro d'identité télé, chaque appareil connecté est commandé. L'identité télé est indiquée sous forme décimale (1 à 99) dans le menu et sous forme hexadécimale (0 x 0 à 0 x 63) dans le protocole de transmission/réception.

(Données) : Pour transmettre la commande de données (hexadécimales). Transmet les données « FF ».

(Cr) : Retour de chariot – code ASCII '0 x 0D'

() : Espace – code ASCII '0 x 20'

Accusé de réception OK

(Commande2)()([Identité télé])()(OK)(Données)(x)

* Le moniteur transmet un accusé de réception (ACK) basé sur ce format en cas de réception de données normales. À ce moment, si les données sont en mode de lecture, les données d'état actuelles sont indiquées. Si les données sont en mode d'écriture, elles sont retournées à l'ordinateur.

Accusé de réception d'erreur

(Commande2)()([Identité télé])()(NG)(Données)(x)

* Le moniteur transmet un accusé de réception (ACK) basé sur ce format en cas de réception de données anormales provenant de fonctions non viables ou d'erreurs de communication.

Données 00: Code illégal

Correspondance avec les données réelles (Hexadécimale : Décimale)

* Lorsque vous saisissez les (Données) au format hexadécimal, veuillez consulter la table de conversion suivante.

00 : Étape 0	32 : Étape 50 ([Identité télé] 50)	FE : Étape 254
01 : Étape 1 ([Identité télé] 1)	33 : Étape 51 ([Identité télé] 51)	FF : Étape 255
...	...	...
0A : Étape 10 ([Identité télé] 10)	63 : Étape 99 ([Identité télé] 99)	01 00 : Étape 256
...	...	...
0F : Étape 15 ([Identité télé] 15)	C7 : Étape 199	27 0E : Étape 9998
10 : Étape 16 ([Identité télé] 16)	C8 : Étape 200	27 0F : Étape 9999
...	...	...

1 Alimentation (commande : k a)

- Pour mettre l'appareil sous tension ou hors tension.

Transmission

(k)(a)()([Identité télé])() (Données)(Cr)

Données 00 : [Arrêt]

Données 01 : [Marche]

Accusé de réception

(a)()([Identité télé])() (OK/NG)(Données)(x)

- Pour indiquer si l'affichage est allumé ou *éteint

Transmission

(k)(a)()([Identité télé])() (FF)(Cr)

Accusé de réception

(a)()([Identité télé])() (OK/NG)(Données)(x)

- * De la même façon, si d'autres fonctions transmettent des données « FF » basées sur ce format, la rétroaction de données d'accusé de réception présente l'état de chaque fonction.

- * OK Ack., Error Ack. et d'autres messages peuvent apparaître à l'écran lorsque l'affichage est allumé.

2 [Format de l'image] (commande : k c) (Taille de l'image principale)

- Pour régler le format d'écran. (Format de l'image principale) Vous pouvez également régler le format de l'écran en utilisant les paramètres d'image.

Transmission

(k)(c)()([Identité télé])() (Données)(Cr)

Données 01 : [4:3] (écran normal : signal original désactivé)

Données 02 : [16:9] (format panoramique : signal original désactivé)

Données 06 : [Original] (signal original désactivé)

Données 09 : [Just Scan (Sur mesure)]

Accusé de réception

(c)()([Identité télé])() (OK/NG)(Données)(x)

- * À l'aide de l'entrée PC, vous pouvez modifier le format d'image de l'écran (16:9 ou 4:3).
- * Dans les modes DTV/HDMI/Composante (haute définition), l'option Sur Mesure est disponible.
- * Le mode panoramique peut fonctionner de façon différente selon les modèles. Il est compatible entièrement avec le mode DTV et partiellement avec le mode ATV.

3 Sourdine écran (commande : k d)

- Pour activer/désactiver la sourdine écran.

Transmission

(k)(d)()([Identité télé])() (Données)(Cr)

Données 00 : Sourdine d'écran désactivée (image activée)/sourdine vidéo désactivée

Données 01 : Sourdine d'écran activée (Image désactivée)

Données 10 : Sourdine vidéo activée

Accusé de réception

(d)()([Identité télé])() (OK/NG)(Données)(x)

- * Si seule la sourdine de vidéo est activée, le moniteur montre l'affichage à l'écran (OSD). Mais si l'écran est en sourdine, le moniteur n'affiche pas l'OSD.

4 Sourdine volume (commande : k e)

- Pour activer/désactiver la sourdine de volume. Vous pouvez également activer ou désactiver la sourdine à l'aide de la touche Sourdine de la télécommande.

Transmission

(k)(e)()([Identité télé])() (Données)(Cr)

Données 00 : Sourdine volume activée (volume désactivé)

Données 01 : Sourdine volume désactivée (Volume activé)

Accusé de réception

(e)()([Identité télé])() (OK/NG)(Données)(x)

5 Réglage du volume (commande : k f)

- Pour régler le volume. Vous pouvez également régler le volume à l'aide des touches de volume de la télécommande.

Transmission

(k)(f)()([Identité télé])() (Données)(Cr)

Données Min : 00 à Max. : 64

Accusé de réception

(f)()([Identité télé])() (OK/NG)(Données)(x)

6 [Contraste] (commande : k g)

- Pour régler le contraste de l'écran. Vous pouvez également régler le contraste dans les paramètres d'image.

Transmission

(k)(g)()([Identité télé])() (Données)(Cr)

Données Min : 00 à Max. : 64

Accusé de réception

(g)()([Identité télé])() (OK/NG)(Données)(x)

7 [Luminosité] (commande : k h)

- Pour régler la luminosité de l'écran. Vous pouvez également régler la luminosité dans les paramètres d'image.

Transmission

(k)(h)()([Identité télé])()(Données)(Cr)

Données Min : 00 à Max. : 64

Accusé de réception

(h)()([Identité télé])()(OK/NG)(Données)(x)

8 [Couleur] (commande : k i)

- Pour ajuster la couleur de l'écran. Vous pouvez également régler la couleur dans les paramètres d'image.

Transmission

(k)(i)()([Identité télé])()(Données)(Cr)

Données Min : 00 à Max. : 64

Accusé de réception

(i)()([Identité télé])()(OK/NG)(Données)(x)

9 [Teinte] (commande : k j)

- Pour ajuster la tonalité de couleur de l'écran. Vous pouvez également régler la couleur dans les paramètres d'image.

Transmission

(k)(j)()([Identité télé])()(Données)(Cr)

Données Rouge : 00 à Vert : 64

Accusé de réception

(j)()([Identité télé])()(OK/NG)(Données)(x)

10 [Netteté] (commande : k k)

- Pour ajuster la netteté de l'écran. Vous pouvez également régler la netteté dans les paramètres d'image.

Transmission

(k)(k)()([Identité télé])()(Données)(Cr)

Données Min : 00 à Max. : 32

Accusé de réception

(k)()([Identité télé])()(OK/NG)(Données)(x)

11 Sélection de l'affichage (commande : k l)

- Pour activer ou désactiver l'afficheur (affichage à l'écran) à l'aide de la télécommande.

Transmission

(k)(l)()([Identité télé])()(Données)(Cr)

Données 00 : [Arrêt]

Données 01 : [Marche]

Accusé de réception

(l)()([Identité télé])()(OK/NG)(Données)(x)

12 Mode de verrouillage de la télécommande (commande : k m)

- Pour verrouiller la télécommande et les commandes du panneau avant du moniteur.

Transmission

(k)(m)()([Identité télé])()(Données)(Cr)

Données 00 : [Arrêt]

Données 01 : [Marche]

Accusé de réception

(m)()([Identité télé])()(OK/NG)(Données)(x)

* Si vous n'utilisez pas la télécommande, utilisez ce mode. Lorsque l'alimentation principale est déconnectée et reconnectée (débranchement et branchement, au bout de 20 à 30 secondes), le verrouillage de la commande externe est annulé.

* En mode de mise en veille, (alimentation interrompue par la minuterie d'arrêt ou commande « ka » ou « mc ») et si le fonctionnement par touches est activé, l'affichage n'est pas activé par la touche de mise en marche du récepteur infrarouge et la touche locale.

13 [Équilibre] (commande : k t)

- Pour régler l'équilibre. Vous pouvez également régler l'équilibre dans les paramètres audio.

Transmission

(k)(t)()([Identité télé])()(Données)(Cr)

Données Min : 00 à Max. : 64

Accusé de réception

(t)()([Identité télé])()(OK/NG)(Données)(x)

14 [Température de couleur] (commande : x u)

- Pour régler la température de la couleur. Vous pouvez également régler la température de la couleur dans les paramètres d'image.

Transmission

(x)(u)()([Identité télé])()(Données)(Cr)

Données Min : 00 à Max. : 64

Accusé de réception

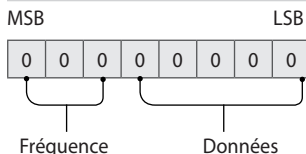
(u)()([Identité télé])()(OK/NG)(Données)(x)

15 [Égaliseur] (commande : j v)

► Permet de régler l'égaliseur de l'appareil.

Transmission

(j)(v)()([Identité télé])()(Données)(Cr)



7	6	5	Fréquence	4	3	2	1	0	Étape
0	0	0	1 ^{re} bande	0	0	0	0	0	0 (décimal)
0	0	1	2 ^e bande	0	0	0	0	1	1 (décimal)
0	1	0	3 ^e bande	...	...	...	...	...	...
0	1	1	4 ^e bande	1	0	0	1	1	19 (décimal)
1	0	0	5 ^e bande	1	0	1	0	0	20 (décimal)

Accusé de réception

(v)()([Identité télé])()(OK/NG)(Données)(x)

* Dépend du modèle et peut être modifié si le mode du son est réglé sur une valeur d'égaliseur ajustable.

16 [Économie d'énergie] (commande : j q)

(Selon le modèle.)

► Pour réduire la consommation énergétique du moniteur. Vous pouvez aussi régler l'option d'économie d'énergie dans les paramètres d'image.

Transmission

(j)(q)()([Identité télé])()(Données)(Cr)

Données 00 : [Arrêt]

Données 01 : [Minimum]

Données 02 : [Moyen]

Données 03 : [Maximum]

Données 04 : [Auto.]

Données 05 : [Écran éteint]

Accusé de réception

(q)()([Identité télé])()(OK/NG)(Données)(x)

17 Touche (commande : m c)

► Pour envoyer le code clé de télécommande IR.

Transmission

(m)(c)()([Identité télé])()(Données)(Cr)

Données : Code clé - page 18

Accusé de réception

(c)()([Identité télé])()(OK/NG)(Données)(x)

18 Commande du rétroéclairage (commande : m g)

► Pour contrôler le rétroéclairage.

Transmission

(m)(g)()([Identité télé])()(Données)(Cr)

Données Min : 00 à Max. : 64

Accusé de réception

(g)()([Identité télé])()(OK/NG)(Données)(x)

19 Sélection d'entrée (commande : x b) (Source image principale)

► Pour sélectionner la source d'entrée pour l'image principale.

Transmission

(x)(b)()([Identité télé])()(Données)(Cr)

Données 90 : HDMI1

Données 91 : HDMI2

Accusé de réception

(b)()([Identité télé])()(OK/NG)(Données)(x)

* Cette fonction peut varier en fonction du modèle et du signal.

Guide d'utilisation de la SORTIE IR

Format de données pour télécommande recommandé/non recommandé

Élément	Code du format de données	Remarque
Format de données recommandé	NEC, format code de répétition Toshiba entier	Seul : Activer Répéter : Activer
	Format de code Philips RC5, RC6	
	Format de code Zenith	
Format de données non recommandé	Format de code Matsushita, RCA	Seul : Activer
	Format de code Sony 12/15/20 bits, Mitsubishi	Répéter : Désactiver
	Format de code Sharp, JVC, R-step, Philips RCMM, RECS-80, XMP	Seul : Désactiver Répéter : Désactiver

Caractéristiques du récepteur IR

Fréquence de l'opérateur	37,9 KHz
Crête de la longueur d'onde	940 nm
Longueur de salve minimale	Min. 300 us
Temps d'écart minimal requis	Min. 350 us
Longueur du mot de données	Max. 100 ms
Temps d'écart minimal requis dans le flux de données	Min. 50 ms

Paramètre	Symbole	Conditions	Minimum	Type	Maximum	Unité
Largeur d'impulsion de sortie de niveau élevé	T _{wh}	Vague de salve = 600 μ s Période = 1,2 ms	400	-	800	μ s
Largeur d'impulsion de sortie de niveau bas	T _{wl}		400	-	800	μ s



Si la télécommande n'est pas utilisée avec les formats de données recommandés, les signaux de sortie seront automatiquement supprimés par le récepteur IR. Dans ce cas, LG ne garantit pas le bon fonctionnement de la fonction IR. Vous trouverez ci-dessous deux méthodes pour en garantir le bon fonctionnement.

- Utiliser la télécommande avec les formats de données appropriés.
- Utiliser le récepteur à clé électronique IR du boîtier décodeur.

Informations sur les logiciels libres

Pour obtenir le code source conformément aux dispositions de la licence publique générale, de la licence publique générale limitée, de la licence publique Mozilla et de toute autre licence régissant les logiciels à code source libre contenus dans cet appareil, visitez le site <http://opensource.lge.com>. En plus du code source, toutes les dispositions de licence, les exonérations de garantie et les avis de droits d'auteurs peuvent aussi être téléchargés.

LG Electronics mettra également à votre disposition le code source libre sur CD-ROM pour un prix couvrant le coût de la distribution (coût du support, de l'expédition et de la manutention) sur simple demande par courriel à l'adresse opensource@lge.com. Cette offre est valable pendant une période de trois ans à compter de la date de la dernière distribution de ce produit. Cette offre est valide pour quiconque possède cette information.

Mise à jour du micrologiciel

(Selon le modèle.)

Vous pouvez mettre à jour le micrologiciel du produit en téléchargeant la version la plus récente.

- 1 Téléchargez-la sur partner.lge.com. (Inscription et ouverture de session requises.)
- 2 Créez un dossier appelé « LG_DTV » ou « lg_dtv » sur une clé USB.
- 3 Déplacez le fichier téléchargé dans le dossier que vous avez créé sur la clé USB.
- 4 Connectez la clé USB au port USB de votre moniteur.
- 5 Lorsqu'une fenêtre contextuelle apparaît, démarrez la mise à jour en suivant les instructions.

Licences

Les licences prises en charge peuvent différer selon le modèle. Pour obtenir de plus amples renseignements sur les licences, visitez le site www.lg.com.

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(Selon le modèle.)



Réglementation

RENSEIGNEMENTS RELATIFS À LA RÉGLEMENTATION DE LA FCC

(Pour les États-Unis)

Cet équipement a été testé et jugé conforme aux limites relatives aux appareils numériques de catégorie B imposées par le paragraphe 15 de la réglementation de la FCC. Ces limites sont établies afin d'offrir une protection raisonnable contre les interférences nuisibles dans une résidence. Cet équipement génère, utilise et peut diffuser de l'énergie de radiofréquences et, s'il n'est pas installé et utilisé conformément aux instructions, il peut causer des interférences nuisibles aux communications radio. Cependant, il n'existe aucune garantie qu'il n'y aura pas d'interférences dans une résidence particulière. Si cet équipement cause des interférences nuisibles à la réception radio ou télévision (pour s'en assurer, il suffit d'éteindre et de rallumer l'appareil), l'utilisateur est invité à essayer de corriger les interférences à l'aide de l'une ou de plusieurs des mesures suivantes :

- Réorienter ou déplacer l'antenne de réception;
- Augmenter la distance entre l'équipement et le récepteur;
- Brancher l'équipement sur un circuit électrique distinct de celui qui alimente le récepteur;
- Consultez le revendeur ou un technicien radio expérimenté pour obtenir de l'aide.

Cet appareil est conforme aux limites imposées par le paragraphe 15 de la réglementation de la FCC. L'exploitation est autorisée aux deux conditions suivantes : (1) cet appareil ne doit pas provoquer de brouillage préjudiciable, et (2) cet appareil doit accepter toutes les interférences reçues, y compris celles pouvant causer un fonctionnement indésirable. Les modifications dans la fabrication de cet appareil qui ne sont pas expressément approuvées par l'autorité responsable de la conformité pourraient annuler l'autorisation accordée à l'utilisateur de faire fonctionner l'équipement.

Exigences de la FCC en matière d'interférences des fréquences radio (pour les appareils UNII)

Les radars à haute puissance sont attribués comme utilisateurs principaux des bandes de fréquences de 5,25 à 5,35 GHz et de 5,65 à 5,85 GHz. Les stations radars peuvent causer des interférences avec cet appareil ou l'endommager. Cet appareil ne peut pas être colocalisé avec tout autre émetteur.

Énoncé de la FCC sur l'exposition aux rayonnements RF

[Pour la fonction sans fil (WLAN, Bluetooth, etc.)]

Cet appareil est conforme aux limites d'exposition aux rayonnements de la FCC pour un environnement non contrôlé. Cet émetteur ne doit pas être colocalisé ni utilisé conjointement avec tout autre émetteur ou antenne. Cet appareil devrait être installé et utilisé de façon à garder une distance minimale de 20 cm (7,8 po) entre le récupérateur et l'utilisateur. Les utilisateurs doivent respecter les directives d'utilisation afin de satisfaire aux critères en matière d'exposition aux rayonnements RF.

Avis d'Industrie Canada

(Pour le Canada)

[Pour la fonction sans fil (WLAN, Bluetooth, etc.)]

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- (1) L'appareil ne doit pas produire de brouillage;
- (2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Avis d'Industrie Canada sur l'exposition aux rayonnements

(Pour le Canada)

[Pour la fonction sans fil (WLAN, Bluetooth, etc.)]

Cet appareil est conforme aux limites d'exposition aux rayonnements d'Industrie Canada pour un environnement non contrôlé. Cet appareil doit être installé de façon à garder une distance minimale de 20 cm (7,8 po) entre la source de rayonnement et votre corps.

REMARQUE : LE FABRICANT N'EST PAS RESPONSABLE DES INTERFÉRENCES RADIOÉLECTRIQUES CAUSÉES PAR DES MODIFICATIONS NON AUTORISÉES APPORTÉES À CET APPAREIL. DE TELLES MODIFICATIONS POURRAIENT ANNULER L'AUTORISATION ACCORDÉE À L'UTILISATEUR DE FAIRE FONCTIONNER L'APPAREIL.

Exigences du CNR-247

(Pour le Canada)

[Pour les produits ayant la fonction sans fil utilisant des bandes de fréquence de 5 GHz]

- (1) les dispositifs fonctionnant dans la bande de 5 150 à 5 250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;
- (2) pour les dispositifs munis d'antennes amovibles, le gain maximal d'antenne permis pour les dispositifs utilisant les bandes de 5 250 à 5 350 MHz et de 5 470 à 5 725 MHz doit être conforme à la limite de la p.i.r.e.;
- (3) pour les dispositifs munis d'antennes amovibles, le gain maximal d'antenne permis (pour les dispositifs utilisant la bande de 5 725 à 5 850 MHz) doit être conforme à la limite de la p.i.r.e. spécifiée, selon le cas;
- (4) [pour des dispositifs fonctionnant dans la bande 5 250-5 350 MHz ayant un p.i.r.e. plus de 200 mW], les types d'antennes (s'il y en a plusieurs), les numéros de modèle de l'antenne et les pires angles d'inclinaison nécessaires pour rester conforme à l'exigence de la p.i.r.e. applicable au masque d'élévation, énoncée à la CNR-247 section 6.2.2.3, doivent être clairement indiqués.

Les utilisateurs doivent également savoir que les radars de grande puissance sont attribués en tant qu'utilisateurs principaux (c'est-à-dire les utilisateurs prioritaires) des bandes de 5 250 à 5 350 MHz et de 5 650 à 5 850 MHz et que ces radars peuvent causer des interférences avec les appareils LE-LAN et/ou les endommager.

REMARQUE À L'ATTENTION DE L'INSTALLATEUR DU MONITEUR/CÂBLE

(Pour les États-Unis et le Canada)

Cette remarque a pour but d'attirer l'attention des installateurs de réseaux câblés sur l'article 820-40 du Code national de l'électricité (NEC). Ce code donne des lignes directrices concernant la mise à la terre appropriée de tels réseaux et, en particulier, il précise que le câble doit être relié à l'installation de mise à la terre du bâtiment, et ce, aussi près que possible de son point d'entrée.

AVERTISSEMENT!

Ne placez jamais un moniteur dans un endroit instable. Le moniteur peut tomber, ce qui peut causer des blessures graves ou la mort. De nombreuses blessures, particulièrement dans le cas d'enfants, peuvent être évitées en prenant des précautions simples comme :

- Utiliser des étagères ou des socles recommandés par le fabricant du moniteur.
- Utiliser uniquement des meubles qui peuvent supporter le moniteur en toute sécurité.
- S'assurer que le moniteur ne dépasse pas le bord du meuble qui le soutient.
- Ne pas placer le moniteur sur des meubles hauts (par exemple, placards ou bibliothèques) sans fixer fermement à la fois le meuble et le moniteur à une surface stable.
- Ne pas placer le moniteur sur un drap ou sur d'autres matériaux qui peuvent se trouver entre le moniteur et le meuble qui le supporte.
- Expliquer aux enfants le danger que représente le fait de grimper sur un meuble pour atteindre le moniteur ou ses commandes.

Si votre moniteur existant est récupéré et déplacé, les précautions susmentionnées doivent à nouveau être appliquées.

Symboles

	Se rapporte au courant alternatif (c.a.).
	Se rapporte au courant continu (c.c.).
	Se rapporte à un appareil de classe II.
	Se rapporte à la mise en veille.
	Se rapporte à la mise en marche (alimentation).
	Se rapporte à une tension dangereuse.



Déclaration de conformité du fournisseur

Appellation commerciale LG

Partie responsable LG Electronics USA, Inc.

Adresse 111 Sylvan Avenue, North Building,
Englewood Cliffs, NJ 07632

Courriel lg.environmental@lge.com

Service à la clientèle LG

Pour toute question ou commentaire, visitez le
www.lg.com ou appelez :

1-888-865-3026 États-Unis, commercial
1-855-286-2456 CANADA

Les numéros de modèle et de série du moniteur sont situés à l'arrière du moniteur et sur l'un de ses côtés. Inscrivez-les ci-dessous au cas où vous auriez besoin d'un service d'entretien ou de réparation.

MODÈLE _____

NUMÉRO

DE SÉRIE _____



USER MANUAL

LG Digital Signage

(MONITOR SIGNAGE)

Please read this manual carefully before operation and retain it for future reference.

webOS 4.0

CONTENTS

SETTINGS4

- Home.....	4
Global Buttons	
Dashboard	
[Content Manager]	
- Ez Setting	5
[Video Wall]	
[On/Off Scheduler]	
[SI Server Setting]	
[Server Setting]	
[Fail Over]	
[Status Mailing]	
[Play via URL]	
[Setting Data Cloning]	
[Sync Mode]	
[Multi Screen]	
[LG ConnectedCare (Signage 365 Care)]	
[LG Business Cloud]	
[Office Meeting Mode]	
- General.....	15
[Language]	
[System Information]	
[Set ID]	
[Time & Date]	
[Power]	
[Network]	
[Safety Mode]	
[Advanced Setting]	
- Display	29
[Picture Mode]	
[Aspect Ratio]	
[Rotation]	

[Advanced Setting]

Video Output Resolution

- How to Set the Screen Protection Mode	37
Step 1: Set [Screen Protection Mode Setting]	
Step 2: Configure the [Network] (when using the video wall mode)	
- Sound	42
[Sound Mode]	
[Sound Out]	
[Audio Out]	
[AV Sync Adjustment]	
[Digital Audio Input]	
- Admin	45
[Lock Mode]	
[Change Password]	
[Enterprise Settings]	
[HDCP Dynamic output control]	
[Factory Reset]	

CONTENT MANAGER 47

- Web Login.....	47
- Content Manager	47
[Player]	
[Scheduler]	
[Editor]	
- Group Manager 2.0	54
- ScreenShare.....	57
- LG Presenter.....	58
Connect	
Screen Share	
Handover	

MANAGEMENT TOOLS..... 61

- Control Manager.....61
- Picture ID.....62

TOUCH 63

- Touch Assistive Menu.....63

**TO CONTROL AN EXTERNAL PC
USING TOUCH SCREEN 64**

- Connecting to a PC.....64
- Prioritized Tasks on the Touch Screen.....64

SMART CALIBRATION 65

- How to Run.....65
- [Manual Calibration]

IR CODE 67**CONTROLLING MULTIPLE
PRODUCTS..... 69**

- Connecting cables.....69
- Communication Parameter70
- Command Reference List.....71
- Transmission/Reception Protocol75

To obtain the source code that is contained in this product, under GPL, LGPL, MPL, and other open source licenses that have the obligation to disclose source code, and to access all referred license terms, copyright notices and other relevant documents, please visit <https://opensource.lge.com>.

LG Electronics will also provide open source code to you on CD-ROM for a charge covering the cost of performing such distribution (such as the cost of media, shipping, and handling) upon email request to opensource@lge.com.

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

! NOTE

- Software-related content may be changed without prior notice due to upgrades of the product functions.
- Some features described in the User Manual may not be supported in certain models and countries.
- SNMP 2.0 is supported.

SETTINGS

Home

Global Buttons

-  [Position]: Navigate to the OSD Output Position Selection screen.
-  [MOBILE URL]: Provides information necessary to access the monitor set through an external device's browser. With this feature, you can view QR code and URL information. In addition, by accessing the URL, you can also run Content Manager and Group Manager 2.0, and Control Manager. (This featured is optimized for Google Chrome.)
-  [Input]: Navigate to the external input selection screen
-  [Setting]: Navigate to the Settings screen
- **FREEZE**: Freezes the screen with the external input image at the moment of key input. This is a LAEC (AIO) only function. (The function may be canceled when switching to some apps. Ex) Other external input apps, multi screen, dsm, si app, player, etc.)

Dashboard

- This feature displays key information about your Signage monitor in the center of the home screen. In the Dashboard, you can manually change settings by selecting the corresponding items.
-  [Manual Download]: Downloads a manual by scanning a QR code.

! NOTE

- If the dashboard is locked, the focus does not move.
- Depending on the QR Code app on your mobile device, you may not be able to access the page. (Use the address provided to access the manual download page.)

[Content Manager]

- [Player]: Play a variety of content including images, videos, and SuperSign content.
- [Scheduler]: Manage schedules for content that will be played at different times.
- [Editor]: You can create your own content using templates and media files.
- [Group Manager 2.0]: Distribute content schedules and setting data to the connected device.

Ez Setting

[Video Wall]

SETTINGS / ⚙️ → [Ez Setting] → [Video Wall]

Set Video Wall options to create a wide visual canvas.

- [Tile Mode]: Turn [Tile Mode] on or off.
- [Tile Mode Settings]: Display a single integrated screen on multiple Signage monitors.
- [Natural Mode]: Display the image excluding the area that overlaps with the monitor's bezel so that the image displayed has a more natural feel to it.
- [Frame Control]: Adjust the sets that run [Scan Inversion] and frame deviation.
 - When running [Scan Inversion], please run [Frame Control] for the sets that do not run [Scan Inversion].
- [Scan Inversion]: Reduce screen deviation between adjoining video walls by changing screen scanning method.
- [White Balance]: Configure white balance settings (White Pattern, R/G/B-Gain, and Backlight).
- [Reset]: Reset to initial settings.
- [Reboot to Apply]: Reboot the set to configure a changed Frame Control/Scan Inversion value.

! NOTE

- When Tile Mode is enabled, automatically set [Frame Control] for odd numbered rows and [Scan Inversion] for even numbered rows.

[On/Off Scheduler]

SETTINGS / ⚙️ → [Ez Setting] → [On/Off Scheduler]

Set a schedule to use your signage by time and day of the week.

- [On/Off Time Setting]: Set on/off times for each day of the week.
- [Holiday Setting]: Set holidays by date and by day of the week.

[SI Server Setting]

SETTINGS / ⚙️ → [Ez Setting] → [SI Server Setting] → [SI Server Setting]

Set up to connect your signage to an external SI server. Set up a server environment for SI app installation.

SETTINGS / ⚙️ → [Ez Setting] → [SI Server Setting] → [Developer Mode & Beanviser]

This feature provides great convenience to the app developers.

Set up to install and activate the Developer mode and BEANVISER app.

! NOTE

- To use these features, an account (ID/PASSWORD) for webOS Signage developer website (<http://webossignage.developer.lge.com/>) is required.

[Server Setting]

SETTINGS / ⚙️ → [Ez Setting] → [Server Setting]

Set up to connect your signage to a SuperSign server.

- CMS Server
- Control Server

[Fail Over]

SETTINGS / ⚙️ → [Ez Setting] → [Fail Over]

Set the priority of the input devices when a fault occurs. Automatically play the content stored in the device or run the set app.

- [On/Off]: Turns [Fail Over] on or off.
- [Input Priority]: Set the priority of input sources for fail over.
- [Backup via storage]: When there is no input signal, this feature automatically plays the content stored in the device or runs the set app. When set to [On], [Auto], [Manual], [SuperSign Contents] items are activated.
 - [Auto]: When the automatic input switches due to taking screenshots of an image or video that is playing at regular intervals, this feature will play back the file. (OLED model is not supported.)
 - > Capture time Interval: The time interval can be set to 30 min, 1 hour, 2 hours and 3 hours.
 - [Manual]: When the automatic input switches due to the image and video file being uploaded, the feature will play back the file.
 - > [Backup media select]: Using the settings button, you can upload a single file in the internal / external memory.
 - > [Preview]: You can preview the uploaded file.
 - [SI App / Play via URL]: Run SI App or Play via URL when automatic input switch occurs.
 - > [SI App]: SI App behavior depends on the settings from [SI SERVER SETTING] menu in [Ez Setting].
 - > [Play via URL]: Play via URL behavior depends on the settings from [Play via URL] menu in [Ez Setting].
 - > If both [Play via URL] and [SI SERVER SETTING] can be run, it runs [Play via URL] when automatic input switch occurs.
 - [SuperSign Contents]: When the automatic input switches, this feature will play the file(s) distributed in SuperSign CMS.
- [reset]: Reset to initial settings.

! NOTE

- Depending on the model, [SI App / Play via URL] feature not be supported.
- If multiple input devices are connected simultaneously, the input device switches automatically to the one with the highest priority among the devices with valid signal, even if a failure does not occur.

[Status Mailing]

SETTINGS /  → [Ez Setting] → [Status Mailing]

This feature configures the system so that the status of the device is assessed and then notified to the administrator by e-mail.

- [On/Off]: Turns [Status Mailing] on or off.
- [Scheduled Mailing], [When a failure occurs]: Sets the email sending interval.
- [User E-mail Address]: Set the user email address of the sender.
- [Sending Server(SMTP)]: Set the address of the SMTP server.
- [ID]: Enter the account ID of the sender.
- [Password]: Enter the password for the sender's account.
- [Receiver E-mail Address]: Set the email address of the recipient.
- [Send message]: Immediately assess the status of the device and deliver the information to the specified email address.
- [reset]: Reset to initial settings.

NOTE

- If the status regarding any of the following items changes or becomes abnormal, a status message can be sent.
 - 1. Temp. Sensor: If the set reaches a dangerous temperature, its current temperature is recorded, and an email containing such information is sent.
 - 2. Temp. Sensor Validation: An email is sent if there is no temperature sensor connected, if the communication status of the temperature sensor is unknown, or if the information provided by the chip provider is abnormal.
 - 3. LAN Status, WiFi Status: An email is sent when the network's connection status is changed. The maximum number of network status changes that can be saved is limited to 50. The saved value is reset once the power turns off.
 - 4. No Signal Check: Checks whether there is a signal. If there are no signals for more than 10 seconds, an email is sent.
 - 5. Schedule Play Status: An email is sent if content cannot be played between the scheduled start time and end time in either Content Management Schedule status or SuperSign Content status. However, this does not apply when terminated using the remote control.
 - 6. Fail Over Status: An email is sent in case of failure or automatic switch to the input device with the highest priority. (Input switches by the user (RC, RS232C, SuperSign) are excepted.)
 - 7. Motion Detection Status: When the product detects movement or shock caused by the external environment, an e-mail is sent to you.
 - 8. Angle Detection Status: An e-mail is sent if a change in inclination is detected in the product, such as tilting or tipping over. (Supported features may vary by model.)
- Only SMTP ports 25, 465, and 587 are supported.
- The occurrence of internal input switches, excluding external input switches (RC, RS232C, SuperSign), are considered as Fail Over Status.
- One email containing the "Failover status : Failover" message is sent when switching to Fail Over Status, and the following status emails sent regularly or upon status changes contain the message "Failover status : None".

[Play via URL]

SETTINGS / ⚙️ → [Ez Setting] → [Play via URL]

Play content you want to play automatically through the built-in web browser.

- [URL Loader]: Turns [Play via URL] on or off.
- [Set URL]: Enter the URL address to display automatically.
- [Preview]: Preview your desired website by accessing the specified URL.
- [Save]: Save the specified URL.
- [Reboot to Apply]: Restarts the monitor set after saving the specified URL.
- [Reset]: Reset to initial settings.



NOTE

- This feature does not apply when [Screen Rotation] is enabled, and using this feature disables [Preview].
- If [Time & Date] is not set to [Set Automatically], website navigation may be difficult.
 - **SETTINGS / ⚙️ → Check [General] → [Time & Date] → [Set Automatically]**

[Setting Data Cloning]

SETTINGS / ⚙️ → [Ez Setting] → [Settings Data Cloning]

This feature is used to copy and import the settings of the device to other devices.

- [Export Setting Data]: Export the settings of the device to another device.
- [Import Setting Data]: Import the settings of another device into the device.

[Sync Mode]

SETTINGS / ⚙️ → [Ez Setting] → [Sync Mode]

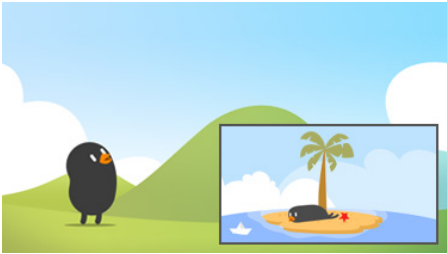
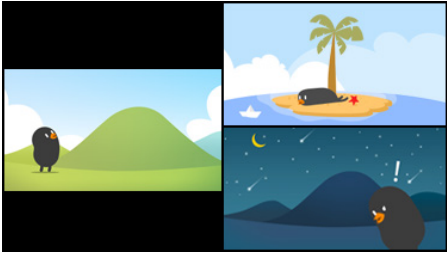
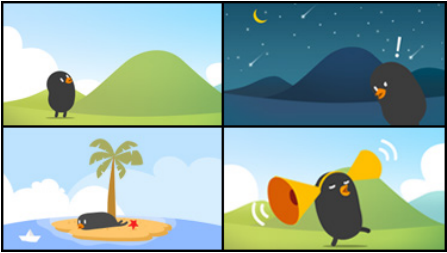
Sync up time and content among multiple signage.

- [RS-232C Sync]: Sync up multiple signage connected by RS-232C.
- [Backlight Sync]: Shares values to control backlights using illumination sensors between devices connected by RS-232C.
- [Network contents sync]: Sync up multiple signage connected to the same network.

[Multi Screen]

SETTINGS / ⚙️ → [Ez Setting] → [Multi Screen]

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

PIP Mode	PBP Mode
	
3-Screen Split Mode	4-Screen Split Mode
	



! NOTE

- In multi-screen mode, the DP daisy chain feature is not supported.
- The available number/shape of split screens may vary depending on the model.

Selecting Screen Layout

When you enter multi-screen mode without having set any screen layout, the screen layout selection menu appears. When the screen layout selection menu is not displayed on the screen, go to the screen layout menu bar by pressing the up arrow key on your remote control and select your desired screen layout.

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.
- The PIP mode works only when External Input Rotation is set to Off and Screen Rotation is set to Off or 180.
- In the PIP mode, supported resolutions for subscreen are as follows: Other resolutions are not supported.
 - 1680 x 1050 / 1920 x 1080
- Interlaced formats are not supported. E.g. 1080i
- This applies to both External Input/Media.
- Models with 4-screen split mode support external input resolution of 3840 x 2160 on PIP Sub screens.
- According to the model If there is no  button, enter the Change Input button in the screen configuration menu to select the screen and select the desired input.

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.

! NOTE

- Videos created with HEVC, MPEG-2, H.264, or VP9 codecs can be played on split screens. When using PIP mode, the following combinations cannot be used.

Main	Sub
HEVC	HEVC
H.264	HEVC
MPEG2	HEVC
VP9	VP9
H.264 4K	MPEG2
H.264 4K	VP9

- The limitations of 3 and 4-screen split are as below.

When Using 4K	It supports only up to 2 videos. A combination of max. 4K @ 60 fps + 2K @ 60 fps is available. However, H.264 4K supports max. 30 fps.	
When Using Only 2K	60fps	You can combine up to 1 MPEG2, 2 H.264, and 4 other codecs.
	30fps	You can combine up to 2 MPEG2 and 4 other codecs.

- Recommended Framerate: 24, 25, 30, 60 (including 23.9, 24.9, 29.9, 59.9)
We do not guarantee performance when you play contents with other framerates.
- According to the model If there is no  button, enter the Change Input button in the screen configuration menu to select the screen and then select the desired video.

[LG ConnectedCare (Signage 365 Care)]

SETTINGS / ⚙️ → [Ez Setting] → [LG ConnectedCare (Signage 365 Care)]

You can install the LG ConnectedCare (fault diagnosis) solution for fault diagnosis and prediction service.

- [Install]: Installs the LG ConnectedCare solution.
 - 1) [ENTER ACCOUNT NUMBER]: Enters the 6-digit account number to install the LG ConnectedCare solution.
 - Account Number: The number assigned when the LG ConnectedCare solution is registered. When the account number is entered, the account name corresponding to the number is obtained.
 - 2) [CONFIRM ACCOUNT NUMBER]: Displays the account number and the account name corresponding to the account number and validates the account number.
 - If the account number is registered, the account name corresponding to the account number is displayed, and you can continue to install the LG ConnectedCare solution.
 - If the account number is not registered, "Unknown" is displayed as the account name, and you cannot continue to install the solution.
- [Enable]/[Disable]: Sets whether to Enable/Disable the LG ConnectedCare solution.
- [Account]: Displays user's currently connected account number and name.
- [Version]: Displays the version of the LG ConnectedCare solution.
- [Check for Update]: Checks for available updates in the server.
- [Update]: Updates the LG ConnectedCare solution to the latest version.
- [Server Status]: Displays the status of connection between the set and server.
 - [Connected]: Displayed when the set and server are connected.
 - [Not Connected]: Displayed when the set and server are disconnected.
 - [Waiting for Approval]: Displayed when the server is waiting for approval.
 - [Rejected]: Displayed when the server rejected the connection.
- [Reset]: Deletes the installed LG ConnectedCare solution.

[LG Business Cloud]

SETTINGS / ⚙️ → [Ez Setting] → [LG Business Cloud]

You can install the [LG Business Cloud] solution for fault diagnosis and prediction service.

- [Installation Type]: Selects the type to install the [LG Business Cloud] solution.
- [Installation Code]: Installs the [LG Business Cloud] solution using the number provided by each workspace created in [LG Business Cloud].
- [Install]: Installs the [LG Business Cloud] solution.
 - 1) [ENTER INSTALLATION CODE]: Enters the 6-digit installation code to install the [LG Business Cloud] solution.
 - When the installation code is entered, the workspace information corresponding to the installation code is obtained.
 - 2) [CONFIRM INSTALLATION CODE]: Displays the installation code and the workspace information corresponding to the installation code.
 - If the installation code is registered, the workspace information corresponding to the installation code is displayed, and you can continue to install the [LG Business Cloud] solution.
 - If the installation code is not registered, "Unknown" is displayed as the workspace information, and you cannot continue to install the solution.
- [Workspace]: Displays the user's currently connected business and workspace information.
- [Version]: Displays the version of the [LG Business Cloud] solution.
- [Details]: Displays the version of supported solutions.
- [Server Status]: Displays the status of connection between the set and server.
 - [Connected]: Displayed when the set and server are connected.
 - [Not Connected]: Displayed when the set and server are disconnected.
 - [Waiting for Approval]: Displayed when the server is waiting for approval.
 - [Rejected]: Displayed when the server rejected the connection.
- [Reset]: Resets the installed [LG Business Cloud] solution.

[Office Meeting Mode]

SETTINGS / ⚙️ → [Ez Setting] → [Office Meeting Mode]

You can set up Quick Functions to use the product in a conference room.

- Office Meeting Mode: Turning on this feature enables you to set functions related to the conference room meeting mode.
- Meeting Guide Screen
 - Meeting Guide Screen: Turning on this feature will allow you to use the conference information screen. This feature is for outputting a background image when there is no external input. Turning on this feature turns on the [No Signal Image] feature.
 - Meeting Room Name: When the conference information screen is on, you can change the conference room name displayed on the screen or select whether or not to display the conference room name.
 - Time: When the conference information screen is on, you can select whether or not to display the current time on the screen.
- Advanced Settings
 - Auto Bright: Turning on this feature will automatically adjust the monitor screen brightness to match the surrounding environment.
 - Picture Mode: Set the same picture mode for all external input supported by this product.
 - Input Auto Switching: When an external input has been inserted, this feature automatically switches to the relevant external input. Turning on this feature ends the [Ez Setting] → [Fail Over] feature.
 - Auto Power Off: Switch the power off automatically. When this feature is turned on, the [No Signal Power Off(15Min)] and [No IR Power Off (4hour)] features will be turned on.
 - Edit Input Name: Change the name of each external input.
 - Presentation Timer: Use the presentation timer. Turning on this feature will display the [Presentation Timer] on the screen for selecting an external input.
 - > **INPUT /  → [Presentation Timer]**
 - > The time of operation can be set up to 120 minutes in intervals of ten minutes. When the time has been set, press [Start] to begin the timer.
 - > Press the yellow button on the remote control to pause the timer. When the timer is paused, the time is displayed in blue.
 - > Press the yellow button on the remote control to restart the timer.
 - > The time is displayed in red when the remaining time is less than three minutes. The time will blink when the remaining time is less than one minute.
 - > Press the blue button on the remote control to end the timer.
 - > The UI automatically disappears 10 minutes after the timer ends.
 - > The product may turn off while the timer is still in operation due to the auto-off and power saving settings.

NOTE

- If the No Signal image has been downloaded, turning on [Meeting Guide Screen] will display the downloaded image first when there is no signal.
- If using the [Meeting Room Name] and [Time] items in the [Meeting Guide Screen], and if using the downloaded image as the No Signal image, it is recommended to use a brightly-colored image in accordance with the optimal resolution of the Signage model.

General

[Language]

SETTINGS / ⚙️ → [General] → [Language]

You can select the menu language to be displayed on the screen.

- [Menu Language]: Sets the language of your Signage monitor.
- [Keyboard Language]: Sets the language of the keyboard displayed on the screen.

[System Information]

SETTINGS / ⚙️ → [General] → [System Information]

This feature displays information such as the device name, software version, and storage space.

[Set ID]

SETTINGS / ⚙️ → [General] → [Set ID]

- [Set ID] (1-1000): Assigns a unique Set ID number to each product when several products are connected via RS-232C. Assign numbers ranging from 1 to 1000 and exit the option. You can control each product separately by using the Set ID you assigned to each product.
- [Auto Set ID]: Automatically assigns a unique Set ID number to each product when several products are connected for display.
- [Reset Set ID]: Reset the Set ID of the product to 1.

[Time & Date]

SETTINGS / ⚙️ → [General] → [Time & Date]

This feature enables you to view and change the time and date on the device.

- [Set Automatically]: Set [Time] and [Date].
- [Daylight Saving Time]: Set the start and end times for Daylight Saving Time. The DST start/end times function only when you set them more than one day apart from each other.
- [NTP Server Setting]: Allows you to set other NTP servers other than the basic NTP server.
- [Time Zone]: Allows you to change the time zone based on continent, country/region, city or user settings.

[Power]

SETTINGS / ⚙️ → [General] → [Power]

Power-related feature settings

[No Signal Power Off (15 Min)]

Set whether to use the 15 Min Auto Off feature.

- You can set this option to [On] or [Off].
- If you set this feature to [On], the product turns off after it's remained in No Signal status for 15 minutes.
- If you set this feature to [Off], the 15 Min Force Off feature is disabled.
- It is recommended that you set this feature to [Off] if you intend to use the product for long periods of time as the feature turns the power of the product off.

[No IR Power Off (4hour)]

Set whether to use 4 Hours Off feature.

- You can set this option to [On] or [Off].
- If you set this feature to [On] the product turns off if there is no input from the remote control for 4 hours.
- If you set this feature to [Off], the 4 Hours Off feature is disabled.
- It is recommended that you set this feature to [Off] if you intend to use the product for long periods of time as the feature turns the power of the product off.

[DPM] / [DPM (Standby Mode)]

Set the Display Power Management (DPM) mode.

- If this feature is not set to [Off], the monitor will enter DPM mode when there is no input signal.
- If you set this feature to [Off], [DPM] / [DPM (Standby Mode)] is disabled.

[DPM Wake Up Control] / [DPM (Standby Mode) Wake Up Control]

Turns on the set according to the digital signal processing of the connected DVI-D/HDMI port.

- When set to [Clock], the set only checks for digital clock signals and turns on once it finds the clock signal.
- When set to [Clock+DATA], the set turns on if the digital clock and data signals are both input.

[PM Mode]

- [Power Off (Default)]: Set the normal DC off mode.
- [Sustain Aspect Ratio]: The PC retains the Extended Display Identification Data (EDID) even when the power is off.
- [Screen Off]: Switches to [Screen Off] status when entering DPM, Auto Power Off (15 min, 4 hours), or Abnormal Shut Down mode.
- [Screen Off Always]: Switches to [Screen Off] status when entering DPM, Auto Power Off (15 min, 4 hours), Off Time Scheduling, or Abnormal Shut Down mode, or when there is input from the remote control's Power button or the monitor's Off button.
- [Screen Off & Backlight On]: Partially turns on the backlight to keep the display at a proper temperature when in Screen Off status.
- [Network Ready]: Monitor is turned off, but you can control power internally through the network.

! NOTE

- In order for the screen to switch from [Screen Off] to On status, there must be input from the remote control's Power or Input button, or the monitor's On button.

[Power On Delay](0-250)

- This feature prevents overload by implementing a power-on delay when multiple monitor sets turn on.
- You can set the delay interval in the range of 0 to 250 seconds.

[Power On Status]

- Select the operating status of the monitor when the main power has turned on.
- You can choose from among [PWR (Power On)], [STD (Standby)], and [LST (Last Status)].
- [PWR (Power On)] keep the monitor powered on when the main power has turned on.
- [STD (Standby)] switch the monitor to Standby status when the main power has turned on.
- [LST (Last Status)] switches the monitor back to its previous status.

[Wake On LAN] / [Wake On LAN (Networked Standby Mode)]

- Set whether to use [Wake On LAN] / [Wake On LAN (Networked Standby Mode)].
- You can set the feature to On or Off for each wired/wireless network.
- [Wired]: When set to [On], the [Wake On LAN] / [Wake On LAN (Networked Standby Mode)] feature is enabled, letting you turn the product on remotely through a wired network.
- [Wireless]: When set to [On], the [Wake On LAN] / [Wake On LAN (Networked Standby Mode)] feature is enabled, letting you turn the product on remotely through a wireless network.

[Power Indicator]

- This function enables you to change the [Power Indicator] settings.
- Setting to [On] will turn on [Power Indicator].
- Setting to [Off] will turn off [Power Indicator].
- Regardless of [On] or [Off] settings in [Power Indicator], [Power Indicator] will be turned on for approximately 15 seconds.

[Power On/Off History]

Display the device's power on/off history.

[Network]

SETTINGS / ⚙️ → [General] → [Network]

[Wired Connection (Ethernet)]

- **Wired Connection:** Connects the monitor to a local area network (LAN) via the LAN port and configures wired network settings. Only wired network connections are supported. After setting up a physical connection, the display will automatically connect without any adjustments on most networks. A small number of networks may require the display settings to be adjusted. For detailed information, contact your Internet provider or consult your router manual.
- **802.1X EAP:** Authentication based on IEEE 802.1X is available for wired connection. Select the desired EAP type and Phase 2 Authentication, enter the ID/Password registered with the authentication server, and press the CONNECT button to attempt the connection.

[Wi-Fi Connection]

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

- **[Add a Hidden Wireless Network]:** You can add a wireless network by manually typing in its name.
- **[Connect via WPS PBC]:** Press the button on the wireless router that supports PBC to easily connect to the router.
- **[Connect via WPS PIN]:** Enter the PIN number in the web page of the PIN-supporting wireless router to connect to the router in a simple manner.
- **[Advanced Wi-Fi Settings]:** You can change the settings of the connected wireless network.

[Certificate Download]

- Download the certificates used for 802.1X EAP stored in USB.
- Only pem file extension can be downloaded.

**NOTE**

- On models that support Wi-Fi dongles, the Wireless Network Connection menu is enabled only when a Wi-Fi dongle is connected.
- When connected to a network that supports IPv6, you can select IPv4 / IPv6 in the wired / wireless network connection. But, IPv6 connection only supports automatic connection.

[LAN Daisy Chain]

- LAN Daisy Chain forms a daisy chain of LAN ports so that even if you connect only one monitor set to a network, the other sets in the daisy chain are connected to the network.
- However, the first monitor set in the daisy chain must be connected to the network through a port that is not used for the daisy chain connection.

[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.

- The SoftAP and ScreenShare features cannot be used 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.
- Wi-Fi Channel: You can directly select a Wi-Fi channel.
- SoftAp Access 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
 - Connected Devices Count: Shows the number of devices currently connected to your Signage device via a Wi-Fi connection. Up to 10 devices are supported.

[UPnP]

Open and block UDP port 1900, which is used for UPnP.

- The default setting is [On]. Setting this feature to [Off] blocks UDP port 1900, making the UPnP function unavailable.
- If you set this feature to [Off], Sync Mode's "Network" option will be deactivated. When the value for Sync Mode is "Network," the value switches to "Off," deactivating the "Network" option.
- If you change the UPnP value, the change will not be applied before a [reboot].
- If you set UPnP to [Off], you cannot use Group Manager 2.0 properly.

[Ping Test]

Check your network status with the ping test.

[Port Control]

Unused ports can be blocked for network security.

[Connection Domain]

Change domain for checking network connection.

! NOTE

- A reboot is recommended for the settings to be applied properly.

Tips for Network Settings

- Use a standard LAN cable (Cat5 or higher with an 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 or Internet connection failures due to communication errors/ malfunctions associated with your Internet connection or other connected equipment.
- LG is not responsible for problems within your INTERNET connection.
- You may experience undesired results if the network connection speed does not meet the requirements of the content being accessed.
- Some INTERNET connection operations may not be possible due to certain restrictions set by the Internet service provider (ISP) supplying your Internet connection.
- Any fees charged by an ISP including, without limitation, connection charges are your responsibility.

**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 phone 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 connected to physical network.

Tips for When Configuring Wireless Network Settings

- The wireless network may be affected by interference from a device that uses 2.4 GHz frequency, such as a wireless telephone, Bluetooth device or microwave. Interference may also be caused by a device that uses 5 GHz frequency such as Wi-Fi devices.
- The wireless network service may run slowly depending on the surrounding wireless environment.
- Some devices may have a network traffic jam if any local home networks are turned on.
- To connect to a wireless router, a router that supports wireless connection is necessary; the wireless connection function of the corresponding router must also be activated. Ask the router manufacturer whether the router supports wireless connection.
- To connect to a wireless router, verify the SSID and security settings of the wireless router. Please refer to the user guide of the corresponding router regarding SSID and security settings of the wireless router.
- The monitor may not work properly if network devices (wire/wireless router or hub, etc.) are incorrectly set up. Be sure to install the devices correctly by referring to their user guides before configuring the network connection.
- The connection method may vary according to the manufacturer of the wireless router.

[Safety Mode]

SETTINGS /  → [General] → [Safety Mode]

Set to this function for safe performance.

[ISM Method]

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

[Mode]

- Sets the [ISM Method] mode.
- [Off]: Disable the Brightness Control function.
- [Orbiter]: To prevent afterimage on the screen, the screen location moves by 4 pixels in a regular order. (This item is inactivated when the current input is No Signal.) (It only supports the models for exterior use.)
- [White Wash]: Displays a white pattern to remove image sticking.
- [User Image]: Plays your photos or movies using a USB storage device.
- [User Video]: Plays your photos or movies using a USB storage device.

Repeat Daily

- [Off, Just 1 Time]: Select this mode and click Complete to run the ISM function immediately.
- [On]: Performs the ISM function for the amount of time set in duration if the still image is maintained for the period set in standby.
- [On, with moving detection]: It only applies in the [Orbiter] mode. When the still image remains for the [StandBy] time, the afterimage prevention function works for the [Duration] time.
- [On, without moving detection]: It only applies in the [Orbiter] mode. When you tap the [DONE] button, the afterimage prevention function immediately applies and operates continuously.
- [Schedule]: Enable the ISM feature from start time to end time on the set day.

[StandBy]

- You can set the period between 1 and 24 hours.
- This option is available only when [Repeat] is set to [Schedule].
- The ISM function is performed if the still image is maintained for the set period.

[Duration]

- You can select from among 1 - 10 min / 20 min / 30 min / 60 min / 90 min / 120 min / 180 min / 240 min.
- This option is available only when [Repeat] is set to [Schedule].
- The ISM function is performed for the set time.

[Select Day]

- You can set the date.
- This option is available only when [Repeat] is set to [Schedule].

[Start Time]

- Set the Start time.
- This option is available only when [Repeat] is set to [Schedule].
- You cannot set the same time for Start time and End time.

[End Time]

- Set the End time.
- This option is available only when [Repeat] is set to [Schedule].
- You cannot set the same time for Start time and End time.

[Action Cycle]

You can select from among 1 - 10 min / 20 min / 30 min / 60 min / 90 min / 120 min / 180 min / 240 min.

- This option is only available when [Orbiter] is selected.
- [Orbiter]: The screen location moves at every set interval.

[User Image Download]

- In order to download an image, there must be an image file in "ISM" folder on your USB storage device.
- Delete the existing images stored on internal memory before downloading a new image file.
- Supported image file formats: BMP, JPG, JPEG and PNG
- You can download up to 4 images. (The maximum resolution is 1920 x 1080.)
- If a bar image is deleted or does not exist, the default image is used. (The default image is a white background)
- This option is only available when [User Image] is selected.

[User Video Download]

- In order to download a video, there must be a video file in the "ISM" folder on your USB storage device.
- Delete the existing contents stored on the internal memory before downloading a new video file.
- Supported video file formats: "MP4", "AVI", "FLV", "MKV", "MPEG", "TS"
- You can download only 1 video.
- If a video is deleted or does not exist, the default video is used. (The default video is a white background image)
- This option is only available when [User Image] is selected.

*** How to reset or delete User Image / User Video**

- Reset using **SETTINGS / ⚙** > [Admin] > [Factory Reset]
- Open the Player app > Click "Delete" button at the top right of the screen > Delete downloaded image / video

[Screen Fault Detection]

- The screen fault detection feature determines whether there is an abnormality at the end of screen; R, G, and B OSDs are created in the upper left-hand corner of the panel at intervals of about one second, and then a pixel sensor checks the area.
- Setting to [On] enables the screen fault detection feature.
- Setting to [Off] disables the screen fault detection feature.

[Advanced Setting]

SETTINGS /  → [General] → [Advanced Setting]

[Beacon]

- This option enables BLE Beacon, one of Bluetooth 4.0's features.
- Beacon Mode (On/Off Toggle): enables the Beacon feature.
- The LG Beacon/iBeacon/Eddystone Type Beacon features are supported.
- iBeacon
 - Beacon UUID (hex): Set the UUID.
 1. Field1: 4byte hex value (8 digits)
 2. Field2: 2byte hex value (4 digits)
 3. Field3: 2byte hex value (4 digits)
 4. Field4: 2byte hex value (4 digits)
 5. Field5: 6byte hex value (12 digits)
 - Major (0-65535): Sets the Major value.
 - Minor (0-65535): Sets the Minor value.
- Eddystone
 - Frame: Set UUID or URL.
- 1. Setting the UUID method
 - Beacon UUID (hex): Set the UUID.
 - 1 - Field1: 10byte hex value (20 digits)
 - 2 - Field2: 6byte hex value (12 digits)
- 2. Setting the URL method
 - URL Prefix: Sets the prefix of the URL.
 - URL Suffix: Set the suffix of the URL.
 - Play via URL URL: Enter the part of the URL that excludes the prefix and suffix.
 - URL string length is limited to 15 characters.
- [Check] button: The button used to complete and apply the Beacon settings.

! NOTE

- Some models do not support background screening services in iOS.
- A reboot is recommended for the settings to be applied properly.
- The UUID value is hexadecimal and the exact number of digits must be entered.
- The distance to Beacon may vary depending on the device.
- The distance to Beacon may vary depending on the application used in the device.
- The Beacon function is affected by radio waves because it employs the Bluetooth Low Energy (BLE) technology. It may not function properly if the frequency range is not around 2.4GHz.
- When you set iBeacon, LG Beacon will be set to be the same as the value of iBeacon field. But the LG Beacon setting item won't be provided separately.

[Control Interface]

Devices connected to the display can be controlled via the interface.

- [PC/OPS Power Control]: Enable you to control the power of PC or OPS as you turn the display on and off.
 - [Disable]: Disable [PC/OPS Power Control].
 - [Sync(On)]: Set the PC/OPS power to be turned on when the display is turned on.
 - [Sync(On/Off)]: Set the PC/OPS power to be turned on when the display is turned on and set the PC/OPS power to be turned off when the display is turned off.
- [Control Interface Selection]: Select the serial communication path between the display and the connected devices.
 - [Display]: Serial communication is available via a display RS-232C IN terminal.
 - [OPS]: Serial communication is available with the OPS installed in the display.
 - [HDBaseT]: Serial communication is available with the display via HDBaseT equipment.

! NOTE

- Depending on the model, it can be displayed as [PC/OPS Control].
- Depending on the supported interface, the sub-menu of [Control Interface Selection] may be different.
- The PC products that support the power control are MP500/MP700, and you have to purchase them separately if necessary.
- If you change [Control Interface Selection], the [RS-232C Sync] feature of [Sync Mode] may be restricted.

[Background Image]

This feature enables you to set the default background image.

- [Bootting Logo Image]: Change the logo image that appears when the device boots up. If you set this option to Off, no logo image appears when the device boots up. Download or initialize an image file on the storage device.
- [No Signal Image]: Change the image that appears when there is no signal. If you set this option to Off, no image appears when there is no signal. Download or initialize an image file on the storage device.

! NOTE

- To download an image, an image file must exist in a folder named "LG_MONITOR" or "lg_monitor" in the external memory (USB).
- Supported image file formats : "BMP", "JPG"
- The maximum downloadable resolution is as follows, depending on the model.
- Signage LED models do not support the boot logo feature.
- The maximum downloadable resolution of a no-signal image is the same as the resolution of the model panel.

	Boot logo image	No signal image
Full HD	1920 x 1080	1920 x 1080
Ultra HD	1920 x 1080	3840 x 2160
86 "Ultra Stretch	1920 x 300	3840 x 600
88 "Ultra Stretch	1920 x 540	3840 x 1080

[Input Manager]

You can set the PC or DTV label for each external input.

[SIMPLINK Setup]

- When the [SIMPLINK Setup] is set to [On], you can use the SIMPLINK provided by LG Signage.
- [Device ID]: Set the ID of the device connected via CEC wiring. You can choose a value between [All] and [E].
- [StandBy]: Sets the scenarios for sending and receiving the Standby command. Detailed scenarios are as follows:

	Transmission	Reception
All	O	O
Send Only	O	X
Receive Only	X	O

[Display power (On/Off) sync]

(Depending on model)

(This function is only supported by the Signage box)

- This is a function to control the power of the Display connected to the HDMI OUT to be synchronized with the power of the Signage box.
- When the power of the Signage box is changed from Off to On, it turns on the Display and tries to switch the input to the Signage box screen.
- When the power of the Signage box is changed from On to Off, it turns off the Display.
- [On/Off]: Enable/Disable this function

! NOTE

- It is necessary to enable the CEC function on the Display

[Crestron]

(Depending on model)

Crestron Connected V1

- This function enables synchronization with applications provided by Crestron.
- Server: This menu sets the server's IP address for the network connection with the server (equipment provided by Crestron).
- Port (1024~65535): This menu sets the port for the network connection with the server. The default port number is 41794.
- IP ID (3-254): This menu sets a unique ID for synchronizing with the application.

Crestron Connected V2

- The connection status of the server type shall be indicated by pictures and phrases. (Disconnected, Connecting, Connected)
- Type: You can select the server type you want to connect to (Off, Control System, Virtual Control, Fusion)
- CONNECT: If you press the button once, a set tries to connect to the server and the button phrase is changed into DISCONNECT. In this case, the upper items are immutable. To disconnect and change upper items, pressing the button again is needed.
- Information for connecting with the server
 - Type: Control System
 - Server: Enter the IP information of the server
 - Port: Enter the Port information for the server
 - IP ID: A unique ID that distinguishes crestron equipment from server
 - Type: Virtual Control
 - Room ID: A unique ID that distinguishes room from server. If the IP ID is the same, but the Room ID is different, the server recognizes it as a different crestron equipment.
 - Server, Port, IP ID are the same as Control System's.

- Type: Fusion
- Method: Connection direction can be selected. (Device to Fusion, Fusion to Device)
 - Device to Fusion: How to connect from set to server
 - URL: Server URL
 - Port: Server Port
 - Fusion to Device : How to connect from server to set
- Auto Discovery: The ability to locate other Crestron equipment in the network
- SSL: Communication security with server can be established. The following items are meaningful only at SSL on
 - User, Password: When the Authentication function is turned on on the server, User and Password must be entered to connect with the server.
 - Verify Certificate: A feature that checks whether a certificate installed on a server is valid. If it is not valid, it does not connect to the server
 - Certificate Download: The certificate must be stored in the set to perform the Verify Certificate function. Only certificates with extensions .pem, .crt in the USB root directory are recognized and can be added or deleted through the menu. All certificates stored at the time of Factory Reset are deleted.

XiO Cloud

- The connection status with XiO Cloud is displayed. (Disconnected, Connecting, Connected)
- CONNECT: If you press the button once, a set tries to connect to the server and the button phrase is changed into DISCONNECT. To disconnect, pressing the button again is needed.

[LED Controller]

Allows a specific LED display manufacturer to remotely control some features of the linked display.

[USB2 to HDBaseT]

This function transfers the data received from the USB2 terminal of the display to HDBaseT.

- [On]: Transfer the data of the device connected to USB2 to the HDBaseT equipment.
- [Off]: Receive the data of the HDBaseT equipment to Signage.



NOTE

- The HDBaseT function will be temporarily interrupted when the setting is changed.

[Quiet Mode]

This mode is used to reduce the noise of the fan.

Adjusted to the set fan control and brightness.

[LG promota]

This feature allows connection of promota app on mobile device.

For more information on how to use it, please visit the promota website (<https://www.promota.net/>)

Autorun promota App function automatically runs promota after booting.

[Pointer Options]

You can set the speed and size of the pointer that appears on the screen to your liking.

- Speed: You can set the movement speed of the pointer.
- Pointer Size: You can set the size of the pointer.

Display

[Picture Mode]

SETTINGS / ⚙️ → [Display] → [Picture Mode]

[Mode]

This feature enables you to choose the optimal picture mode for your installation environment.

- [Mall/QSR], [Transportation], [Education], [Gov./Corp.]: Display the picture optimally for your installation environment.
- [General]: Display the picture at normal contrast, brightness, and sharpness.
- [Auto Power Save]: Adjust the screen brightness to reduce power consumption.
- [Expert], [Calibration]: Allow an expert, or anyone who loves picture quality, to manually tune to the best picture quality.
- [Hospital]: An image setting mode optimized for medical images.

! NOTE

- The type of [Picture Mode] you can select may vary depending on the model or input signal.
- [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.

[HDR]

This feature enables you to choose the optimal picture mode for your installation environment.

- [Mall/QSR]: sharpens the image by increasing the contrast, brightness and sharpness.
- [General]: In a normal viewing environment, it opens a screen that can properly show the expressiveness and brightness of HDR.
- [Gov./Corp.]: The screen appears brighter and clearer than of the General screen.
- [Education]: Suitable picture for gameplay.

[Customize]

- [Backlight]: Adjust the brightness of the screen by adjusting the brightness of the backlight. The closer the value is to 100, the brighter the screen is.
- [OLED Light]: Adjusts the brightness of the LED panel to control the brightness of the screen.
- [LED Light]: Adjust screen brightness by tuning the LED Light. Higher values increase brightness.
- [Contrast]: Adjust the difference between the light and dark areas of the picture. The closer the value is to 100, the greater the difference is.
- [Brightness]: Adjust the overall brightness of the screen. The closer the value is to 100, the brighter the screen is.
- [Sharpness]: Adjust the sharpness of the edges of objects. The closer the value is to 50, the clearer and the sharper the edge becomes.
- [Color]: Soften or deepen the tints on the screen. The closer the value is to 100, the deeper the colors become.
- [Tint]: Adjust the balance between red and green levels displayed on the screen. The closer to Red 50, the redder the color will be. The closer to Green 50, the greener the color will be.
- [Color Temperature]: The higher you set the color temperature, the cooler the colors on the screen will feel. The lower you set the color temperature, the warmer the colors on the screen will feel.
- [Advanced Controls] / [Expert Controls]: Customize the advanced options.
 - [Dynamic Contrast]: Optimize the difference between the light and dark parts of the screen according to the brightness of the image.
 - [Super Resolution]: Sharpen the areas of the screen that are blurry or barely distinguishable.
 - [Color Gamut]: Select the range of colors available.
 - [Dynamic Color]: Adjust the tint and saturation of the image for a more vivid and lively display.
 - [Color Filter]: Accurately adjust color and tint by filtering a specific color area of RGB space.
 - [Preferred Color]: Adjust the skin tint, grass tint, and sky tint to your preference.
 - [Gamma]: Adjust gamma settings to compensate for the brightness of the input signal.
 - [White Balance]: Adjust the overall color fidelity of the screen to your liking. 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. In a normal picture, you may not notice the color changes you have made.
 - [Dynamic tone mapping]: Suitable contrast settings based on image brightness of the HDR content.

- [Picture Option]: Customize the picture options.
 - [CamSync(V-Sync)]: To reduce scanline artifacts that may occur during camera shooting. You can fine-tune the LED's output frame. Genlock, Phase Shift, and Frame Control functions cannot be used when using this function. (Supported by some LED models)
 - [Noise Reduction]: Remove randomly popping dots to make the picture look clearer.
 - [MPEG Noise Reduction]: Reduce the noise generated in the process of creating a digital video signal.
 - [Black Level]: Adjust the brightness and contrast of the screen by adjusting the black level of the screen. (Recommended settings based on input signals: Backlight 0 - 255 High, RGB 16 - 235: Low, YCbCr: Low)
 - [Real Cinema]: Optimize the video image for a cinematic look.
 - [Motion Eye Care]: Reduce eye fatigue by adjusting brightness levels and lessening blurriness based on the displayed image.
 - [LED Local Dimming]: Make the light areas of the screen lighter and the dark areas darker for maximum contrast. Setting this feature to Off may increase the monitor's power consumption.
 - [TruMotion]: Reduce image shaking and image sticking that can occur with /moving images. (If you set the [External Input Rotation], this feature is unavailable.)
- [Apply to all inputs]: Copies the current value of the detailed setting menu to the entire input, and applies only to the selected picture mode.
- [Reset]: Reset the picture settings. Because the picture settings are reset according to the monitor's picture mode, please select the picture mode before resetting the picture settings.

[Aspect Ratio]

SETTINGS / ⚙️ → [Display] → [Aspect Ratio]

This feature enables you to change the picture size to view the picture at its optimal resolution.

- [Full Wide]: Stretch the picture to fill the screen.
- [Original]: Display the picture at its original resolution.

[Rotation]

SETTINGS / ⚙️ → [Display] → [Rotation]

[Screen Rotation]

- This feature rotates the screen clockwise.
- You can set this feature to Off/90/180/270.
- When set to off, this feature is deactivated.
- It is recommended that you use content designed to be used in Portrait mode.
- When the screen rotation is enabled, the PIP mode of the multi-screen is unavailable.



NOTE

- Depending on the model, the automatic screen rotation feature may not be supported.

[External Input Rotation]

- This feature rotates the screen clockwise.
- You can set this feature to Off/90/180/270.
- When this feature is set to On (90 or 270 degrees), as for ARC, the picture is resized to be [Full Wide].
- If [External Input Rotation] is enabled during WiDi operation, the position of the mouse cursor may not be displayed accurately.
- Please note that the degradation of picture quality that occurs when you have enabled [External Input Rotation] during the use of external input has nothing to do with the product itself.
- When External Input Rotation is set to On, Multi Screen's PIP mode is disabled.
- If External Input Rotation is enabled on models that support touch, touch may not work properly.
- To use Ultra Stretch products in optimum picture quality, please refer to the User Manual's Contents Creation & Use Guide.
- For Ultra Stretch products, content picture quality may be compromised depending on the conditions of content creation and product settings (screen split/rotate).

[Mirror Mode]

- Set the screen to rotate 180 degrees.

[Advanced Setting]

SETTINGS / ⚙️ → [Display] → [Advanced Setting]

[UHD Deep Color]

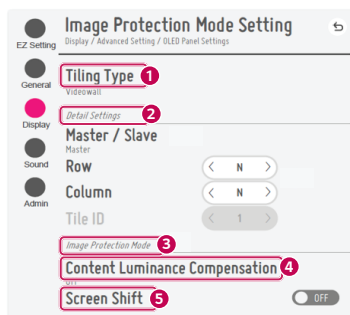
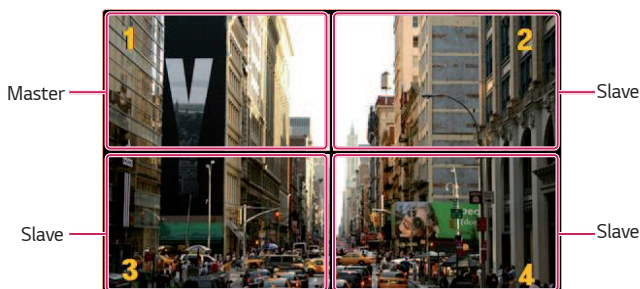
If you connect an HDMI, DP, or OPS device to one of the Deep Color adjustable ports, you can select between UHD Deep Color On (6G) or Off (3G) in the UHD Deep Color settings menu.

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

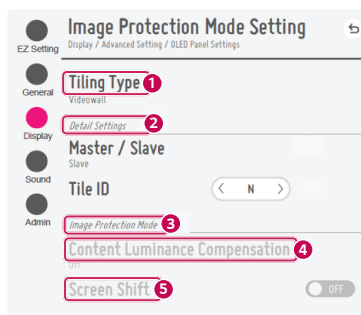
- HDMI, DP, and OPS specifications may vary depending on the input port. Check the specifications of each device before connecting.
- HDMI input port 1,2 is best suited for high definition videos that are 4K@60 Hz (4:4:4, 4:2:2). However, video or audio may not be supported depending on the specifications of the external device. If this is the case, please connect the device to a different HDMI port.
- This feature may not be available on some models.

[OLED Panel Settings]

- [Clear Panel Noise]: Correct issues that may arise on the screen when it is turned on for a long period of time.
- [Screen Protection Mode Setting]: This feature analyzes the characteristics of the image from the external input to prevent afterimages on the screen.



When Master is selected



When Slave is selected

No.	Item	Description
①	[Tiling Type]	Select and set the mode according to the installation type of your Signage. • Stand-alone: Select and use this mode when you use only one unit. • Video Wall: Select and use this mode when using two or more multi-screen configurations. This mode requires advanced settings.
②	[Detail Settings]	Select Master or Slave. • When Master is selected: Enter the number of rows and columns for the entire multi-screen. • When Slave is selected: Enter the multi-tile ID number for the individual set.
③	[Screen Protection Mode]	This feature enables you to set the content correction level and to set whether to use the Screen Switch feature. • ④ [Content Luminance Compensation]: Select a high or low correction level to use. • ⑤ [Screen Shift]: Set whether to use the Screen Switch feature.

[Energy Saving]

- [Smart Energy Saving]: Automatically adjust the brightness of the screen according to the brightness of the picture to save energy.
 - [On]: Enable the Smart Energy Saving feature.
 - [Off]: Disable the Smart Energy Saving feature.
- [Brightness Control]: Adjust the brightness of the screen to save energy.
 - [Auto]: Automatically adjust the brightness of the screen according to ambient light.
 - [Off]: Disable energy saving.
 - Minimum/Medium/Maximum: Use energy saving according to the energy saving level set for the monitor.
- [Brightness Range Adjustment]: Sets the min/max values of the brightness range for the backlights adjusted by the illumination sensors.
 - [Min Backlight]: Sets the min value of the backlights.
 - [Max Backlight]: Sets the max value of the backlights.
- [Brightness Scheduling]: Adjust the backlight at specified times.
 - You can set this feature to [On/Off].
 - Add schedule by setting the schedule time and backlight / OLED Light / LED Light value.
 - If the current time has not been set, [Brightness Scheduling] is disabled.
 - You can add up to six schedules, and they are sorted in ascending order by time.
 - You can edit a schedule by selecting it from the list and pressing the [OK] button.

! NOTE

- Return to default settings by clicking [Admin] > [Factory Reset].

[Smart Brightness Compensation]

The brightness value is adjusted to 3,000 nits, enabling continuous long-time use without brightness drops.
(49/55XE4F models Only)

[HDMI IT Content]

Set the HDMI IT Contents function.

- [Off]: Disable the HDMI IT Contents function.
- [On]: Enable the HDMI IT Contents function.

This feature automatically changes the monitor's picture mode based on HDMI Contents information when an HDMI signal is entered.

Even if the monitor's picture mode has been changed by the HDMI IT Contents feature, you can change the picture mode again manually.

As this has a higher priority than the picture mode set by the user, the existing picture mode may be changed when the HDMI signal changes.

[Color Calibration]

Sets the screen color to match the actual color temperature.

- [Off]: Disables the Color Calibration feature. The screen color is set to the default value.
- [On]: Enables the Color Calibration feature. The screen color is set to match the actual color temperature.

! NOTE

- The screen color may change if you enable or disable the feature.
- If the Picture Mode is 'Calibration', this feature will not be available.

[LED Local Dimming]

Make the light areas of the screen lighter and the dark areas darker for maximum contrast.

! NOTE

- Return to default settings by clicking [Admin] > [Factory Reset].

[Low Latency]

Reduces frame delay in the LED Signage.

[Factory Calibration]

Retrieves factory pixel calibration data of the LED Signage and reflects it on the screen. Calibration needs to be done once during the initial installation and should also be carried out when relocating or replacing the LDM.

[Genlock]

When the Genlock signal is connected to the REF IN port and the Genlock feature is turned on, the monitor can use the video signal synchronisation feature.

- [Off] : Genlock is disabled
- [On] : Genlock is enabled

! NOTE

- Genlock setting of video source equipment is more important than Genlock of LED System Controller.
- This function may not be supported depending on the model.

[Phase Shift]

Phase Shift can make adjustment of LED screen output timing.

LED screen can adjust timing manually to remove visual artefacts with Phase Shift, if camera recoding result make double image(double frame).

- Range : 0~360.
 - 0: Don't use Phase Shift
 - When [Frame Control] is used :
 - * 1 : 1/360 Frame delay added
 - * 180 : 1/2 Frame delay added
 - When [Frame Control] is not used :
 - * 1 : 1+1/360 Frame delay added
 - * 180 : 1.5 Frame delay added

**NOTE**

- Camera sync shift is more good to control visual atrefacts than LED screen. (ex: ARRI camera's Sync Shift)

10



10

Camera capture image has double frame image

Camera capture image has single frame image
: Phase Shift can fine control

- Genlock, Phase Shift, and Frame Control can be used individually.
- The CamSync (V-Sync) function cannot be used when Genlock, Phase Shift, or Frame Control functions are used. (Supported by some LED models)
- Frame Control : When low latency mode is enabled, it can be used for matching LED screen by adding 1 frame delay.
[Off]: Don't add 1 Frame delay. [On]: Add 1 Frame delay.

**NOTE**

- This function is only supported by LED Assistant S/W
- This function will be activated when low latency mode is enabled.
- Low latency mode is enabled when external input label is set to [PC] or [Picture Mode] is set to [Education].
- [Frame Control] function may not be supported depending on the model.

Video Output Resolution

SETTINGS / → [Display] → [Video Output Resolution]

You can set the resolution of webOS BOX.

How to Set the Screen Protection Mode

- [Screen Protection Mode Setting]: Prevents after-images on the screen by analysing the characteristics of the external input images.
-  (SETTINGS) → [Display] → [Advanced Settings] → [OLED Panel Settings] → [Screen Protection Mode Setting]

Step 1: Set [Screen Protection Mode Setting]

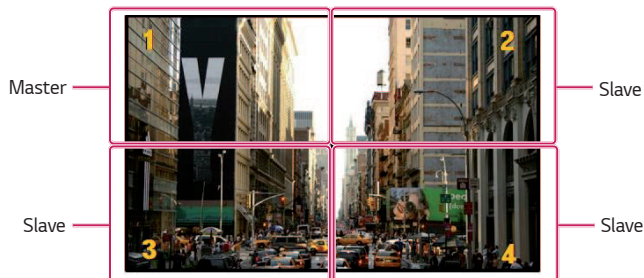
When using a single monitor

- 1 Video Wall Mode: Select [Standalone].
- 2 Content Brightness Correction: Select one from [Off] / [Low] / [High].
- 3 Screen Shift: Select activate or deactivate.

NOTE

- The [Screen Protection Mode] function is supported for external input images.
 - The [Screen Protection Mode] function is not enabled for playing images in USB devices.
 - The [Screen Protection Mode] function is not enabled when interlaces signals are input.
 - The [Screen Protection Mode Setting] menu is not supported when [External Input Rotation] is set.
 - It is recommended that you use content designed to be used in Portrait mode.
- It is recommended to use contents with 10 minutes of playback time. (The [Screen Protection Mode] function may not work smoothly for the content with the duration longer than 10 minutes.)
- For the [Screen Protection Mode] feature to work normally, the Dithering feature should be turned OFF on the external input player or the graphics chip/card you are using.
- To enable the [Screen Protection Mode] function, it needs time to recognize the pattern of the content. (The time may vary depending on the duration of the content.)

When using the Video Wall Mode



- 1 Video Wall Mode: Select [Video Wall].
 - 2 Master/Slave: Select [Master] for the upper left monitor and [Slave] for the rest.
 - 3 [Row], [Column]
 - Master Monitor: Set [Row] and [Column] using the same settings as in [Tile Mode].
 - Slave Monitor: Disable the slave monitor.
 - 4 Multi-tile ID
 - Master Monitor: Disable the master monitor (set as Tile ID 1 automatically).
 - Slave Monitor: Set Tile ID 2 and onwards in the same order as installed.
 - 5 Content Brightness Correction: Select one from [Off] / [Low] / [High].
 - 6 Screen Shift: Select activate or deactivate.
- When the settings are complete, the feature runs when DC is switched from Off to On.

! NOTE

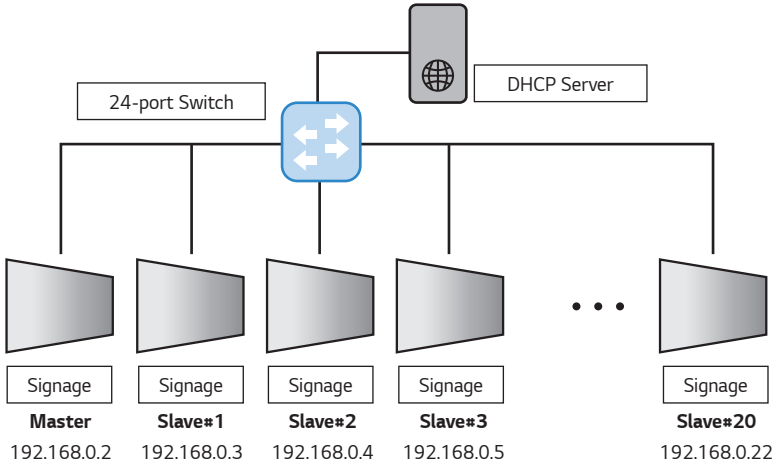
- For [Screen Protection Mode] to work in the video wall, the monitors must be connected to the same network on the LAN. However, some operations may be available when [LAN Daisy Chain] is connected and used. In this case, use a router or a network switch.
- How to check the connection: Check the IP address in **⚙️ (SETTINGS)** → [General] → [Network] → [Wired Connection (Ethernet)]. For more information, refer to Step 2: Configure the [Network].

Step 2: Configure the [Network] (when using the video wall mode)

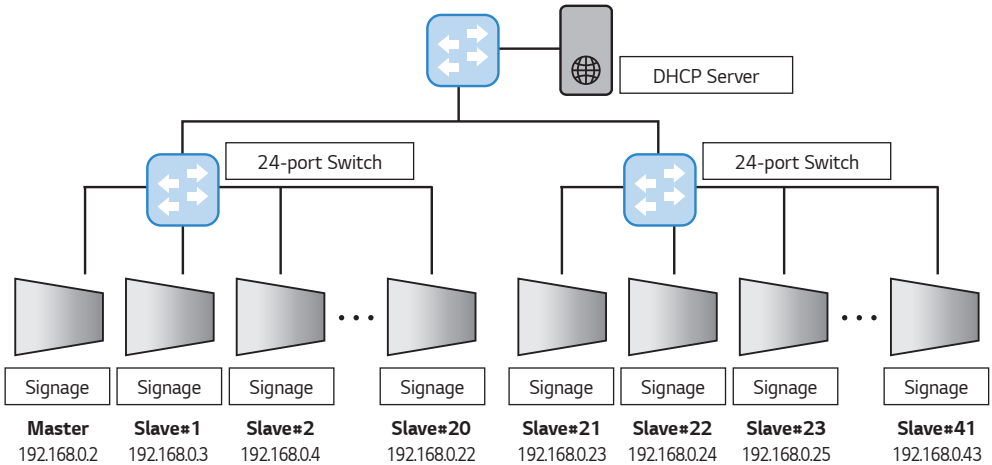
- 1 Check the required equipment.
 - Router or network switch router
 - DHCP Server
 - Used to allocate IP addresses in the network. Included in the router.
 - Additionally required to configure the network with a network switch.
 - Network cable (Ethernet cable)
 - Used to connect the Ethernet port of the router (or network switch) and the Ethernet port of the Signage.
- 2 Check the network connection of the Signage.
 - **⚙️ (SETTINGS)** → [General] → [Network] → [Wired Connection (Ethernet)]
 - When the router is connected to the Internet: Make sure the connection status shows "Connected to Internet".
 - When the router is not connected to the Internet: Make sure the connection status shows "No Internet via Ethernet".
- 3 Check the IP address of the Signage.
 - Check the IP address in **⚙️ (SETTINGS)** → [General] → [Network] → [Wired Connection (Ethernet)].

Examples of Network connection

- 1 When all Signage units can be connected by a single switch: Connectable without degrading the network performance.



- 2 When using multiple switches: Configure the network in the 2-tier mode.



- Connect a Signage unit to each Tier-2 switch, and connect the Tier-2 switches to the Tier-1 switch.
- For the DHCP server; it is best to connect it directly to the Tier-1 switch.

! NOTE

- The [Tiling Type] and [Detail Settings] menu items are not available for models that do not support the tile mode.
- [Screen Protection Mode] does not work with the functions [TruMotion] / [Noise Reduction] / [MPEG Noise Reduction].
 - To enable the functions [TruMotion] / [Noise Reduction] / [MPEG Noise Reduction] in the DTV input mode, ensure that the [Screen Protection Mode] menu is set to (Off).
- To enable the [Screen Protection Mode] feature in Video Wall, the screens must be connected to the same network through a LAN.

However, some operations may not be available when the screens are connected to [LAN Daisy Chain]. In this case, we recommend using a router or network switch.
- If [Screen Protection Mode Settings] is all set and in operation, and the settings are changed or the [Screen Protection Mode] function is discontinued, the function restarts next time the product is turned on.
- The [Screen Shift] feature is supported only for the stand-alone configuration or for use in a single DP daisy chain. That is, if [Tile Mode] is enabled, the [Screen Shift] feature only works properly when the values of [Row] and [Column] in [Tile Mode Setting] are the same as those of [Row] and [Column] in [Detail Settings].
- When [Content Luminance Compensation] is set to [High], there may be differences in brightness than when it is set to [Low].
- Return to default settings by clicking [Admin] → [Factory Reset].
- When using the Screen Shift function, the location of the touched and operated area may be slightly different.

Sound

[Sound Mode]

SETTINGS / ⚙️ → [Sound] → [Sound Mode]

[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]: Optimize sound for watching movies.
- [Clear Voice III] Enhance voices so they can be heard more clearly.
- [Sports]: Optimize sound for watching sports.
- [Music]: Optimize sound for listening to music.
- [Game]: Optimize sound for playing video games.

[Balance]

- [Balance]: Adjust the output volume for the left speaker and the right speaker.

[Equalizer]

- [Equalizer]: Manually adjust sound by using the equalizer.

[Reset]

- [Reset]: Resets sound settings.

[Sound Out]

SETTINGS /  → [Sound] → [Sound Out]

- [Internal Speaker] / [External Speaker]: You can output audio either through your Signage monitor's internal speaker or through an external speaker connected to it.
 - [Use Speaker Sound]: Enables you to turn the speaker on and off. If you are using an external audio device, turning off this feature allows you to play sound through the external audio device only.
- [SIMPLINK External Speaker]: This function connects Home Theater device by SIMPLINK. When it is set to Home Theater device input, it outputs voice through the connected device. This option is activated when SIMPLINK has been set to On.
- [LG Sound Sync / Bluetooth]: Enables you to connect Bluetooth audio devices or Bluetooth headsets wirelessly to your monitor so that you can enjoy richer audio conveniently.
- [Optical]: applied only to the models with digital optical sound output ports. You can output audio through external speaker audio devices connected to the digital audio output port.

NOTE

- Some recently connected devices may automatically attempt to reconnect to the Signage monitor when it is turned on.
- It is recommended that you set LG audio devices that support LG Sound Sync to LG TV mode or LG Sound Sync mode before connecting.
- Press Device Selection to view the devices that are or that can be connected and connect other devices.
- You can use the signage remote control to adjust the volume of the connected device.
- If the audio device fails to connect, check that it is switched on and available for connection.
- Depending on the type of the Bluetooth device, the device may not connect correctly or an abnormal behavior may occur such as unsynchronized video and audio.
- Sound may stutter or sound quality may be reduced if:
 - The Bluetooth device is too far from the Signage monitor.
 - There is an obstructing object between the Bluetooth device and the Signage monitor.
 - The Bluetooth device is used together with radio equipment such as a microwave oven or wireless LAN.

[Audio Out]

SETTINGS / ⚙️ → [Sound] → [Audio Out]

- [Off]: Disables the use of [Audio Out]. (No audio outputted.)
- [Variable]: You can specify an output range for the external audio device connected to the monitor and adjust the volume within the range. You can change the volume of an external audio device within the range of 0 to 100 (the same as the Signage speaker volume). However, there may be a difference in the actual volume level outputted.
- [Fixed]: Sets a fixed audio output level for the external audio device.
 - If there is no external input, no external audio is outputted.
 - The variable audio output level 100 is the same as the fixed audio output level.

[AV Sync Adjustment]

SETTINGS / ⚙️ → [Sound] → [AV Sync Adjustment]

This feature adjusts audio timing to synchronize video and audio.

- [External Speaker] (0~15): Adjust 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. The larger the number is, the slower the voice output is than the default value.
- [Internal Speaker] (0~15): Adjust the sync of sound from the internal speakers. The larger the number is, the slower the voice output is than the default value.
- [Bypass]: Output the broadcast signals or the sound from external devices without any audio delay. Audio may be outputted earlier than video due to the processing time for video that is inputted into the monitor.

[Digital Audio Input]

SETTINGS / ⚙️ → [Sound] → [Digital Audio Input]

This feature enables you to choose an input source for audio output.

- [Digital]: Output the audio contained in the digital signal inputted from the connected digital input source (HDMI, DISPLAYPORT, OPS).
- [Analog]: Output audio from the digital input source (HDMI, DISPLAYPORT, OPS) connected to the monitor through the Audio In port.

Admin

[Lock Mode]

SETTINGS / ⚙️ → [Admin] → [Lock Mode]

[Home Dashboard Lock]

When you set the Home Dashboard Lock, you can limit the change in the settings of the Home Dashboard.

[USB Lock]

This feature enables you to configure the USB lock feature so that settings or content cannot be changed.

[OSD Lock]

This feature enables you to configure the OSD lock feature so that settings or content cannot be changed.

- Press and hold the Settings key for at least 10 seconds and enter password to access the settings menu in OSD Lock.

[IR Operation Lock]

- If you set this feature to [Off (Normal)], you can use your remote control.
- If you set this feature to [On (Power Key Only)], you can only use the power key.
- If you set this feature to [On (Block All)], you cannot use your remote control. (However, Power On feature is available.)
- Press and hold the Settings key for at least 10 seconds and enter password to access the settings menu in IR Operation Lock.

[Local Key Lock]

This feature enables you to configure the Local Key Operation Lock feature so that settings or content cannot be changed.

- If you set this feature to [Off (Normal)], you can use the local keys on the monitor.
- If you set this feature to [On (Power Key Only)], you can only use the power key. (When you use a joystick, press and hold a local key to turn on/off the monitor.)
- If you set this feature to [On (Block All)], you cannot use the local keys. (However, Power On feature is available.)

[Wi-Fi Lock]

This feature enables you to turn the Wi-Fi feature on or off.

[Wired Connection Lock]

This feature enables you to turn the Wired network connection on or off.

[Screen Share Lock]

This feature enables you to turn the Screen Share feature on or off.

If the Screen Share Lock value is changed, the function is not applied without a reboot.

[Change Password]

You can change the admin password. (The default password: 000000)

- 1 Enter your current password.
- 2 Enter a new 6-digit password.
- 3 Enter the same password again in the Confirm Password field for confirmation.

[Enterprise Settings]

- Enter your company account code to apply the corresponding enterprise settings.
- When your code has been entered, the monitor set gets reset, thereby applying the corresponding enterprise settings.
- This feature does not get activated if a code has already been entered.

[HDCP Dynamic output control]

- Only HDCP protected content will be encrypted delivered when you set 'On'.
- Every content will be encrypted delivered when you set 'Off'.

[Factory Reset]

Initializes all settings in [Setting] and files from the internal storage.

The exceptions are RGB gain value of [Calibration] mode, [Video Wall]([Tile Mode], [Tile Mode Setting], [Natural Mode], [Frame Control], [Scan Inversion]) and [Server Setting] items of [Ez Setting], and [Set ID] items of [General].

NOTE

- It keeps the existing settings because the Off / On button in the User menu only affects the active / inactive status of the submenu.

CONTENT MANAGER

Web Login

- Different features are supported depending on the product.
- This Signage product comes with a feature that enables you to access it on your PC or mobile device.
- Content Manager, Group Manager 2.0, Control Manager, Log Out, Change Password menus are provided.
 - URL: <https://set ip:3777>
 - You can check the initial password in **HOME / ⬆** -> [Mobile URL] menu.

CAUTION

- Supported resolutions (this program is optimized for the following resolutions):
 - PC: 1920 x 1080
 - Mobile: 360 x 640(1440 x 2560, 1080 x 1920), DPR
- Supported browsers (this program is optimized for the following browsers):
 - Chrome 85 or later (recommended)
- For security, please Login with the initial password and change the password.
- After the initial password has been changed, the password is not displayed in the **HOME / ⬆** -> [Mobile URL] menu.

Content Manager

[Player]

HOME / ⬆ →  (Player)

The Content Manager app's player feature enables you to play/manage contents of video, image, template, SuperSign and playlist in an integrated way. (The OLED models do not support the playback and management of image content and template content.)

[Continuous Play]

- 1 Select your desired type of content from the tab on the left and then select your desired content.
- 2 Click [Play] in the upper right-hand corner of the screen and enjoy the content you have selected.

[Export]

- 1 Select your desired type of content from the tab on the left and click [Export] in the upper right-hand corner of the screen.
- 2 Select the content you wish to export.
- 3 Click [Copy]/[Move] in the upper right-hand corner of the screen and select the device to which you wish to export the content. (If a content file stored on the target device has been selected, the processing of the content file is skipped.)
- 4 You can see that the content has been moved/copied to the device.

[Delete]

- 1 Select your desired type of content from the tab on the left and click [Delete] in the upper right-hand corner of the screen.
- 2 Select the content you wish to delete.
- 3 Click [Delete] in the upper right-hand corner of the screen.
- 4 You can see that the content has been deleted.

[Filter / Sort]

- 1 Click [Filter / Sort] in the upper right-hand corner of the screen.
- 2 1) Choose your desired sort criterion to sort content files either by file name or in the order they have been played (the most recently played file shown at the top of the list).
2) It is possible to only view the content stored on your desired device by filtering content files by device.
3) It is possible to only view the content of your desired type by filtering content files by content type.

[Create Playlist]

When creating a playlist, *, /, ", ;, ?, <, >, |, \, ,, # cannot be used in the playlist file name. In addition, if the playlist contains content files whose names include such characters, you cannot move or copy the playlist.

- 1 Select the [Playlist] tap from the tab on the left and click [Create Playlist] in the upper right-hand of the screen.
- 2 Select the content you wish to add to the playlist and click [NEXT] in the upper right-hand of the screen.
- 3 Set a play time for each piece of content (applicable only for photo and template content), as well as other items such as Conversion Effect, Ratio, and Auto Playback, and then click [DONE] button in the upper right-hand corner of the screen.
- 4 You can see a new [Playlist] has been created.

[Distribution]

- 1 Click [Distribute] in the upper right-hand corner of the screen.
- 2 Go to the Group Manager app to distribute the created playlists.

! NOTE

- The Distribute button shows only when playlist is selected as media type.

[Scheduler]

HOME /  →  (Scheduler)

The Content Manager app's scheduler feature enables certain content to be played at a scheduled time through a playlist or external input.

[Creating a Schedule]

- 1 Click [New Schedule] in the upper right-hand corner of the screen.
- 2 Choose between [Playlist] and [Input Source].
- 3 1) If you have selected [Playlist], select the playlist you wish to schedule the playback of.
2) If you have selected [Input Source], select the external input source you wish to schedule the playback of.
- 4 Enter schedule information and create a new schedule. (When creating a schedule, *, /, ", ;, <, >, |, \, ., # cannot be used in the schedule file name. In addition, if the playlist linked to the schedule contains content files whose names include such characters, you cannot move or copy the playlist.)
- 5 Watch the playlist or external input you selected play back at its scheduled time.

[Importing a Schedule]

- 1 Click [Import] in the upper right-hand corner of the screen.
- 2 Select the external storage device from which you wish to import a schedule.
- 3 Select the schedule you wish to import to your monitor. (You can only choose a single schedule.)
- 4 Click [Select] in the upper right-hand corner of the screen.
- 5 Check that the schedule has been imported to the monitor's internal storage memory.

[Exporting a Schedule]

- 1 Click [Export] in the upper right-hand corner of the screen.
- 2 Select the external storage device to which you wish to export a schedule.
- 3 Select the schedule you wish to export from your monitor. (You can choose multiple schedules.)
- 4 Click [Select] in the upper right-hand corner of the screen.
- 5 Check that the schedule has been exported to the external storage device you selected.

[Delete Schedule]

- 1 Click [DELETE] in the upper right-hand corner of the screen.
- 2 Select the schedules you wish to delete.
- 3 Click [DELETE].
- 4 Check that the schedules have been deleted.

[Calendar View]

- 1 When you have registered schedules, click [Calendar View].
- 2 You can see that the schedules registered are displayed in the form of a timetable.

[Distribute]

- 1 Click [Distribute] in the upper right-hand corner of the screen.
- 2 Go to the Group Manager app to distribute the created schedules.

**NOTE**

- If the schedule creation time overlaps, the previously created schedule is deleted.
- Schedule does not work while Scheduling list app is running.

[Editor]

HOME /  →  (Editor)

The Content Manager app's editor feature enables you to add your desired templates.

- 1 Select the template of your desired format. (You can choose between Landscape mode and Portrait mode.)
- 2 Modify the template's text.
 - 2-1. Apply your desired font style (Size, Weight, Underline, Italic)
- 3 Modify the media file.
 - 3-1. Select and apply the rate you want.
- 4 Save the template by clicking [Save] in the top right-hand corner of the screen.
- 5 Check that the template you saved is shown in the template list.

Supported Photo & Video Files

! NOTE

- Subtitles are not supported.
- The photo feature is not supported in OLED model.

Supported video codecs

Extension	Codec	
.asf, .wmv	Video	VC-1 Advanced Profile (except for WMVA), VC-1 Simple and Main Profiles
	Audio	WMA Standard (excluding WMA v1/WMA Speech)
.avi	Video	Xvid (excluding 3 warp-point GMC), H.264/AVC, Motion Jpeg, MPEG-4
	Audio	MPEG-1 Layer I, II, MPEG-1 Layer III (MP3), Dolby Digital, LPCM, ADPCM, DTS
.mp4, .m4v, .mov	Video	H.264/AVC, MPEG-4, HEVC
	Audio	Dolby Digital, Dolby Digital Plus, AAC, MPEG-1 Layer III (MP3)
.3gp	Video	H.264/AVC, MPEG-4
.3g2	Audio	AAC, AMR-NB, AMR-WB
.mkv	Video	MPEG-2, MPEG-4, H.264/AVC, VP8, VP9, HEVC
	Audio	Dolby Digital, Dolby Digital Plus, AAC, PCM, DTS, MPEG-1 Layer I, II, MPEG-1 Layer III (MP3)
.ts, .trp, .tp, .mts	Video	H.264/AVC, MPEG-2, HEVC
	Audio	MPEG-1 Layer I, II, MPEG-1 Layer III (MP3), Dolby Digital, Dolby Digital Plus, AAC, PCM
.mpg, .mpeg, .dat	Video	MPEG-1, MPEG-2
	Audio	MPEG-1 Layer I, II, MPEG-1 Layer III (MP3)
.vob	Video	MPEG-1, MPEG-2
	Audio	Dolby Digital, MPEG-1 Layer I, II, DVD-LPCM

Maximum transmit ratio

Full HD movie	H.264 1920 x 1080@60P BP/MP/HP@L4.2 40Mbps HEVC 1920 x 1080@60P Main/Main10@L4.1 40Mbps
ULTRA HD movie (UHD models only.)	H.264 3840 x 2160@30P BP/MP/HP@L5.1 50Mbps HEVC 3840 x 2160@60P Main/Main10@L5.1 60Mbps

Supported Photo File Formats

File type	Format	Resolution
.jpeg, .jpg, .jpe	JPEG	• Minimum: Min: 64 x 64 • Maximum: Normal Type: 15360 (W) x 8640 (H) Progressive Type: 1920 (W) x 1440 (H)
.png	PNG	• Minimum: Min: 64 x 64 • Maximum: 5760 (W) x 5760 (H)
.bmp	BMP	• Minimum: Min: 64 x 64 • Maximum: 1920 (W) x 1080 (H)

Tips for using USB storage devices

- Only USB storage devices are recognized.
- USB storage devices connected to the monitor through a USB hub may not work properly.
- USB storage devices that use an automatic recognition program may not be recognized.
- USB storage devices that use their own drivers may not be recognized.
- The recognition speed of a USB storage device may depend on each device.
- Please do not turn off the display or unplug the USB device when the connected USB storage device is working. When the device is suddenly separated or unplugged, the stored files or the USB storage device may be damaged.
- Please do not connect the USB storage device which was artificially maneuvered on the PC. The device may cause the product to malfunction or fail to be played. Remember to only use USB storage devices that store normal music, image, and/or movie files.
- Storage devices formatted with utility programs that are not supported by Windows may not be recognized.
- Please connect power to a USB storage device (over 0.5 A) which requires an external power supply. Otherwise, the device may not be recognized.
- Please connect a USB storage device with the cable offered by the device maker.
- Some USB storage devices may not be supported or operated smoothly.
- File alignment methods of the USB storage device is similar to Windows XP and filenames can include up to 100 English characters.
- Be sure to back up important files since data stored in a USB memory device may be damaged. We will not be responsible for any data loss.
- If the USB HDD does not have an external power source, the USB device may not be detected. So make sure to connect it to an external power source.
 - Please use a power adapter for an external power source. No USB cable is provided for an external power source.
- Please use only USB storage devices formatted with the FAT32 or NTFS file system provided by Windows.

- 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 memory 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, remove it and connect it again.
- If the USB storage device is connected in Standby Mode, a specific hard disk will automatically be loaded when the display is turned on.
- The recommended capacity is 1 TB or less for a USB external hard disk and 32 GB or less for USB memory.
- Any device with more than the recommended capacity may not work properly.
- If a USB external hard disk with an energy saving feature does not work, turn the hard disk off and on again to make it work properly.
- USB storage devices (USB 2.0 or below) are also supported. However, they may not work properly in the videos list.
- A maximum of 999 folders or files can be recognized under one folder.
- When distributing contents to USB while playing a video in UHD resolution, the video might experience temporary stuttering.
- USB storage devices supported by a mobile device may not be recognized.
- Even if multiple USB storage devices are connected, only one USB storage device can be used.

Group Manager 2.0

This feature enables you to group together multiple monitor sets on a single network into the same group and to distribute content (schedules and playlists) or copy setting data on a group basis. This feature has two modes, Master and Slave, and it can access the browser on your PC or mobile device.

[Master]

- Add, edit, and delete group.
- Clone your device's settings data.
- Distribute [Schedule] and [Playlists] on a group basis.
- All monitor sets initially come in Master mode.

[Slave]

- Play [Schedule] and [Playlists] distributed in Master mode.
- Remove monitor sets for their groups.
- Monitor sets that have been added to a group are automatically switched to Slave mode. Conversely, when a monitor set has been deleted from a group, it is automatically initialized and switched to Master mode.
- If a new Slave has been added to an existing group, or if the [Data Cloning] or the distribution of [schedule]/[Playlist] has not been properly performed, the [Data Cloning] or [Sync] button will be activated.
- You can duplicate the master device's setting data to the group by using [Data Cloning].
- You can re-download the content distributed to the group by using [Sync].

[GROUP MANAGEMENT]

- Creating a New Group
 1. Click [Add New Group].
 2. Enter a group name.
 3. Click [Add Device], select the devices you wish to add to the group, and add them.
 4. Click [Done], and you will see that a new group has been created.
- Editing a Group
 1. Click the group you wish to edit.
 2. Add a new device by using [Add Device].
 3. Delete a device by using [Delete Device].
 4. Check whether the devices in the group are connected to a network by using [Device Check].
 5. If there are any sets of devices in the group that are not [Data Cloning] or content synchronized, [Data Cloning] or [Sync] button will be activated.
 6. You can re-copy the master device's setting data to the group by using [Data Cloning].
 7. You can re-distribute the content distributed to the group by using [Sync].
- Deleting a Group
 1. Click [Delete Group].
 2. Select the group you wish to delete and click [Delete].
 3. Check that the group you selected has been deleted.
- All Devices View: This page enables you to manage all slave monitor sets that are connected to the same network.
 1. Click [All Devices View].
 2. Click [Reset Device Mode].
 3. Select the slave monitor set whose device mode you wish to change and click [Reset].

[Setting Data Cloning]

- 1 Select your desired group and click Clone.
- 2 Check that the data have been copied on the slave sets.

[Content Distribute]

- 1 Select the type of content you wish to distribute (Schedules or Playlists).
- 2 Select the content you wish to distribute.
- 3 Select the group to which you wish to distribute the content and click [Distribute].
- 4 Run the Content Manager app on the slave sets and check that the content has been distributed.

How to Use

- Monitor: Run, add, delete or edit app on the home screen.
- Mobile: Mobile devices: Run the app in the Launcher bar or access the app from a mobile device using the QR code or URL provided.

**CAUTION**

- You can create up to 25 groups.
- You can add up to 12 slave devices to a group.
- You can distribute the schedules stored on external devices after executing Content Manager's import operation.
- Make sure to delete all schedules stored on the slave sets before distributing any schedules.
- A list of devices you can add to your desired group appears only when the following conditions have been met:
 - The devices you wish to add must be on the same network as the master device.
 - The devices you wish to add must be in Master mode, and they must not belong to any existing group.
 - The UPnP feature must be enabled (go to [General] > [Network] > UPnP and set it to [On]).
- It may not work properly in wireless network environments. It is recommended you use a wired network.
- Run the initial settings for Slave function when deleting the group.

ScreenShare

This feature 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.

How to Use [ScreenShare]

INPUT /  →  → [ScreenShare]

- 1 Connect according to the instructions provided by the guide that can be accessed through the CONNECTION GUIDE button in the upper right.
- 2 Once the connection is established, Screen Share between the user device and the monitor is enabled.

NOTE

- For the information on how to use Intel WiDi, visit PC/laptop manufacturer webpage.
- This feature only works properly with WiDi 3.5 or later versions.
- This feature only works on Windows 8.1 or later.

LG Presenter

This feature is to display the PC (Windows or Mac OS) screen on the Signage monitor with wired/wireless connection to the PC. To use this feature, you need to install LG Presenter PC Client ("Client") on the PC.

You can use LG Presenter in the following ways.

- Connect: Enter the PIN code to connect your Signage device to the Client.
- Screen Share: Share the PC screen of the connected Client with your Signage device.
- Hand over: If a Client is already connected and another Client needs to share screen, you can request for a hand over to the connected Client to get permission to share screen.
- Settings: You can see the information of the Client or change the language used by the Client.



NOTE

- This feature may not be available on some models.
- Only sharing PC screen is supported and not voice sharing.

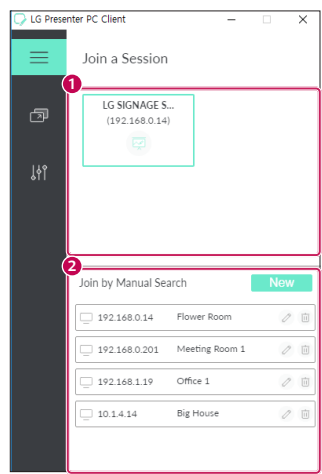
Connect

On Signage

INPUT /  → [LG Presenter]

On PC

- 1 Go to www.lge.com/LGP to download the Client.
- 2 Install and run the downloaded Client.
- 3 Enter the username you want and press the button .
- 4 Select either auto search or manual search to connect your device.
 - Auto search
 - When the list of Signage devices found in the network appears, select the one you want to connect to.
 - Manual search
 - Click “New”, type the name of the device you want to connect and the IP address shown on Signage and click [Connect].
- 5 Enter the PIN code you see on your Signage device into the PIN code field on the Client.



No.	Item	Description
1	Auto search	Automatically search Signage in the same network.
2	Manual search	Type the IP address and name manually, or select the device you want to connect in the connection list.

CAUTION

- Signage and the PC need to be in the network that they can be connected to each other.
- If a certain port (UDP 1900) of Signage is blocked, Client program cannot automatically search Signage.
- Client program might not be able to connect to or share the screen with Signage via manual search, depending on the network configuration.

Screen Share

- 1 Select the screen you want to share and press the "Share" button.
- 2 To leave Screen Share, press the [STOP] button.



CAUTION

- if Screen Share does not work or won't connect to the Signage device, check the firewall settings on your PC.

Handover

PC1: The PC where the client currently connected to your Signage device is running.

PC2: The PC you want to connect to the Signage device connected to PC1.

On PC2

- 1 Run Client program to connect Signage that PC1 is connected to.

On PC1

- 1 When the hand over request pop-up appears on PC2, select whether to approve or deny the request.
- 2 If you approve the request for hand over, the Signage device will be disconnected, and the Client on PC2 will be connected to the Signage device.
- 3 If you deny the request for hand over, the Signage device will remain connected, so you can continue to use the features of LG Presenter.

MANAGEMENT TOOLS

Control Manager

Control and check the status of the display through the Web browser.

This function is available for PCs and mobile devices.

Different features are supported depending on the product.

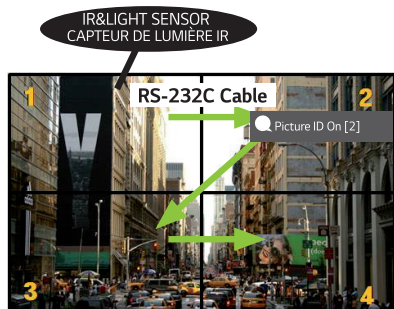
Function

- [Dashboard]: Display a summary of the product's status and provides links to each page.
- [Display & sound]: Provides features such as Screen Brightness, Sound, Input, and Reboot.
- [Time & Date]: Enable/disable Set Automatically feature and displays/changes the time set for the product.
- [Network]: Set the name and IP address of your Signage monitor.
- [Tile Mode]: Display the tile mode settings of the product.
- [Fail Over]: Turns the Fail Over feature on or off and sets related items.
- [Play via URL]: Turn Play via URL on or off and set URLs.
- [S/W Update]: Update the firmware of the product.
- [Charts]: Output the product's status information such as its temperature and fan status.
- [Log]: Output product malfunction records.
- [System Information]: Output information such as the product's software version and model name.

Picture ID

[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. Setting [Picture ID] allows you to only use the remote control with monitors with a [Set ID] that matches the [Picture ID].

- 1 Assign [Set ID] to the installed monitors as shown below:



- 2 Press the red [Picture ID] [On] button on the remote control.
 - 3 Make sure that the Picture ID you set is identical to the [Set ID] of the monitor you wish to control.
- A set with a [Set ID] that is different from the [Picture ID] cannot be controlled by IR signals.

! NOTE

- If [Picture ID] has been 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 [Picture ID] [Off] button on your remote control, the [Picture ID] 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 their [Set ID]'s.

TOUCH

Touch Assistive Menu

This touch-exclusive feature allows the user to configure settings without a remote control.

Touching the screen for a certain period of time or pressing the Touch Assistive Menu local key brings up the Touch Assistive Menu on the screen.

Different features are supported depending on the product.

Function

-  : Navigates to the Home screen.
-  : Navigate to the external input selection screen.
-  : Navigates to the Settings screen.
-  : Go to SI App Selection screen
 -  : Run SI Apps installed with ZIP Type
 -  : Run SI Apps installed with IPK Type
 -  : Go to Developer Mode
 -  : Go to SI Server Setting
-  : Go to the volume control screen

TO CONTROL AN EXTERNAL PC USING TOUCH SCREEN

- This only applies to certain models.

Connecting to a PC

Connecting this product to a PC with a USB cable (Type A to Type B) allows you to control the connected PC by touching the screen of the product.

For a PC that supports USB-C, use a USB-C cable to connect this product to the PC and control the PC using the touch screen.

You can control the installed OPS by touching the screen of the product even with the OPS installed.

Prioritized Tasks on the Touch Screen

Priority	States	Operation Conditions	Device performing the task when the screen is touched
1	• External input rotation set to 90°/180°/270° • Menu, App, dashboard, etc. displayed • Pop-up message displayed	Only one of the states is shown	Screen of the product
2	• Equipped with OPS • External input configured for OPS	All states are shown	OPS
3	• Connected to a PC with a USB-C cable • External input configured for USB-C	All states are shown	PC connected with USB-C
4	• External input configured (except for OPS/USB-C) • PC connected to the front of the product with a touch cable	All states are shown	PC connected to the front of the product with a touch cable
5	• External input configured (except for OPS/USB-C) • PC connected to the rear of the product with a touch cable	All states are shown	PC connected to the rear of the product with a touch cable

! NOTE

- When connecting to an external PC and using it with a touch screen, it may take a while to recognize your touch on the touch screen device upon switching the connection for the touch function between external PCs.

SMART CALIBRATION

How to Run

W.BAL → [Smart Calibration]

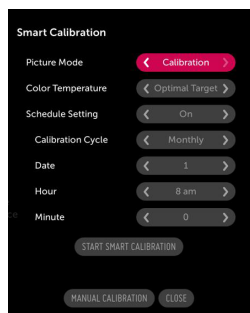
- 1 Set the Set ID of each set.
- 2 Select the [Picture Mode] to execute Smart Calibration.

When you set [Picture mode] to [Calibration] mode, you can set [Color Temperature] among [3000 K / Optimal Target / Original].

- [Optimal Target]: Set the optimal color value of the installed set as the target.
- Please set the target to 3,000K in the broadcasting station environment.

When you set [Picture mode] except [Calibration] mode, you can set [Color Temperature] within 3200K~13000K. You can adjust it in units of 100K.

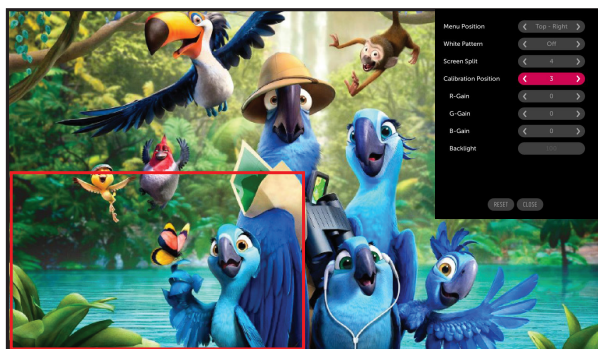
- 3 With [START SMART CALIBRATION], you can correct the color/brightness.
- 4 If you set the [Schedule Setting] menu, calibration is performed automatically on a regular basis.



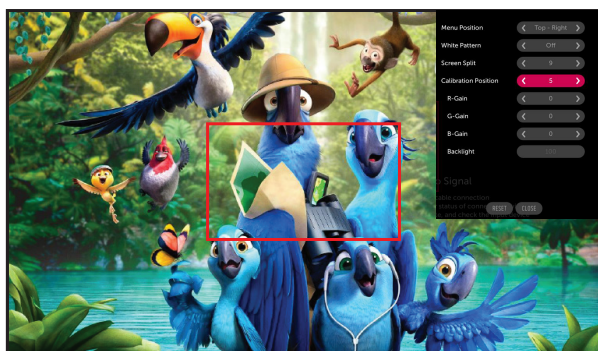
[Manual Calibration]

You can manually adjust the color of the selected location.

- [Screen Split]: Set the manual adjustment area.
- [Calibration Position]: Select the manual adjustment location.



Screen Split: 4, Calibration Position: 3



Screen Split: 9, Calibration Position: 5

IR CODE

- 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 (Select 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	 (Vol +)	Remote control button
03	 (Vol -)	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	 SIMPLINK	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 Configuration	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
5F	W.Bal	Remote control button
3F	 (S.Menu)	Remote control button
7C	 (Home)	Remote control button
97	Swap	Remote control button
96	Mirror	Remote control button

CONTROLLING MULTIPLE PRODUCTS

- This 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.

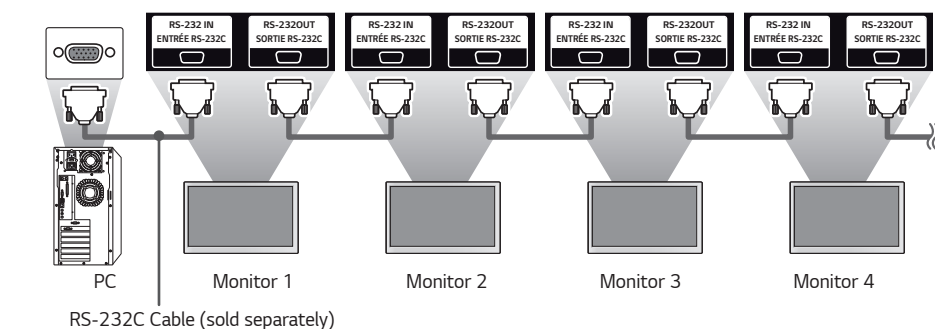
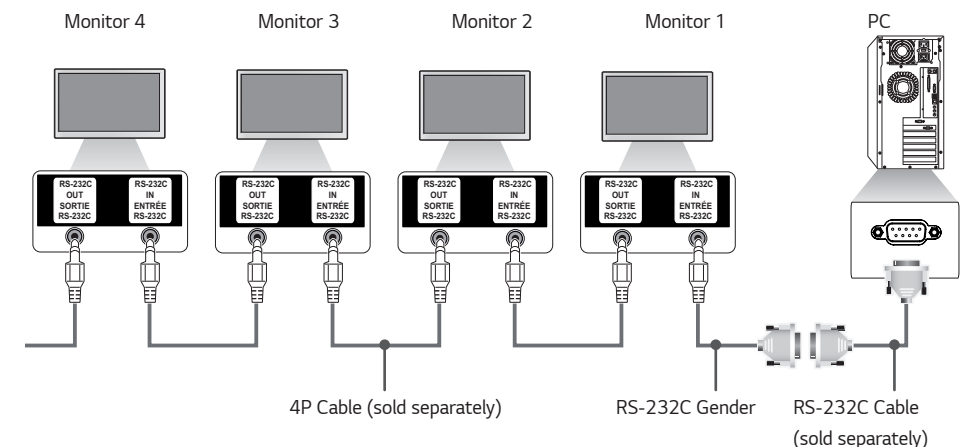
In the Option menu, the Set ID must be between 1 and 1000 without being duplicated.

Connecting cables

- Images may differ 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/off, select an input source and adjust the OSD menu from your PC.



Communication Parameter

Baud Rate: 9600 BPS

Data Length: 8 bits

Parity Bit: None

Stop Bit: 1 bit

Flow Control: None

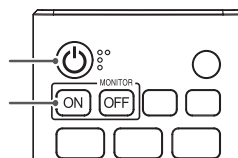
Communication Code: ASCII

! NOTE

- When using 3-wire connections (non-standard), an IR daisy chain cannot be used.
- Be sure to only use the provided gender to connect properly.
- When you have daisy-chained multiple Signage products to control them simultaneously, if you attempt to turn on/off the master device in a continuous manner, some products 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 (Hexadecimal)
		1	2	
01	[Power]	k	a	00 to 02
02	Select Input	x	b	See Select Input
03	[Aspect Ratio]	k	c	See [Aspect Ratio]
04	[Brightness Control]	j	q	00 to 04
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	70 to D2
12	[Balance]	k	t	00 to 64
13	[Sound Mode]	d	y	See [Sound Mode]
14	[Mute on]	k	e	00 to 01
15	Volume Control	k	f	00 to 64
16	[Current Time] 1 (year/month/day)	f	a	See [Current Time] 1
17	[Current Time] 2 (hour/minute/second)	f	x	See [Current Time] 2
18	[No Signal Power Off (15 Min)]	f	g	00 to 01
19	[No IR Power Off (4hour)]	m	n	00 to 01
20	[Language]	f	i	See [Language]
21	Default Settings	f	k	00 - 02
22	Current Temperature	d	n	FF
23	[Key]	m	c	See [Key]
24	Time Elapsed	d	l	FF
25	Check product serial number	f	y	FF
26	[Software Version]	f	z	FF
27	[White Balance] Red Gain	j	m	00 to FE
28	[White Balance] Green Gain	j	n	00 to FE
29	[White Balance] Blue Gain	j	o	00 to FE
30	[White Balance] Red Offset	s	x	00 to 7F
31	[White Balance] Green Offset	s	y	00 to 7F
32	[White Balance] Blue Offset	s	z	00 to 7F
33	[Backlight]	m	g	00 to 64
34	[Screen Off]	k	d	00 to 01
35	[Tile Mode]	d	d	00 to FF
36	Check [Tile Mode]	d	z	FF
37	[Tile ID]	d	i	See [Tile ID]
38	[Natural Mode]	d	j	00 to 01

		Command		Data (Hexadecimal)
		1	2	
39	[DPM] / [DPM (Standby Mode)]	f	j	See [DPM] / [DPM (Standby Mode)]
40	Remote Control/Local Key Lock	k	m	00 to 01
41	[Power On Delay]	f	h	00 to FA
42	Select [Fail Over] Mode	m	i	00 to 02
43	Select [Fail Over] Input	m	j	See Select [Fail Over] Input
44	Remote Control Key Lock	t	p	00 to 02
45	Local Key Lock	t	o	00 to 02
46	[Status Check]	s	v	See [Status Check]
47	[Daylight Saving Time]	s	d	See [Daylight Saving Time]
48	[PM Mode]	s	n, 0c	00 to 05
49	[ISM Method]	j	p	See [ISM Method]
50	[Network Setting]	s	n, 80(81) (82)	See [Network Setting]
51	[Power On Status]	t	r	00 to 02
52	Wired [Wake On LAN] / [Wake On LAN (Networked Standby Mode)]	f	w	00 to 01
53	[Screen Rotation]	t	h	00 to 03
54	[Time Sync]	s	n, 16	00 to 01
55	[Contents Sync]	t	g	00 to 01
56	[LAN Daisy Chain]	s	n, 84	00 to 01
57	[External Input Rotation]	s	n, 85	00 to 03
58	[Beacon]	s	n, 88	00 to 01
59	[Brightness Scheduling] Mode	s	m	00 to 01
60	[Brightness Scheduling]	s	s	See [Brightness Scheduling]
61	[Multi Screen] Mode & Input	x	c	See [Multi-screen] Mode & Input
62	[Aspect Ratio] (Multi screen)	x	d	See [Aspect Ratio] (Multi screen)
63	[Screen Off] (Multi screen)	x	e	See [SCREEN OFF] (Multi screen)
64	[Screen Off Always]	s	n, 0d	00 to 01
65	Stop Video	k	x	00 to 01
66	Wireless [Wake On LAN] / [Wake On LAN (Networked Standby Mode)]	s	n, 90	00 to 01
67	[OSD Lock]	k	l	00 to 01
68	[HDMI IT Content]	s	n, 99	00 to 01
69	[Holiday Setting]	s	n, 9b	See [Holiday Setting]
70	[UPnP]	s	n, 9c	00 to 01
71	[Home Dashboard Lock]	s	n, 9d	00 to 01
72	[USB Lock]	s	n, 9e	00 to 01
73	[Wi-Fi Lock]	s	n, 9f	00 to 01

		Command		Data (Hexadecimal)
		1	2	
74	[Screen Share Lock]	s	n, a0	00 to 01
75	[Backup via Storage]	s	n, a1	See [Backup via Storage]
76	[Digital Audio Input]	s	n, a2	00 to 01
77	[Bootimg Logo Image]	s	n, a3	00 to 01
78	[SoftAP]	s	n, a4	00 to 01
79	[Natural Size]	s	n, a5	00 to 64
80	Play Saved Internal Media	s	n, a8	See Playback of Saved Internal Media
81	[No Signal Image]	s	n, a9	00 to 01
82	[Audio Out]	s	n, aa	00 to 02
83	[DPM Wake Up Control] / [DPM (Standby Mode) Wake Up Control]	s	n, 0b	00 to 01
84	Check [Fan] Failure	d	w	FF
85	[Apply to all inputs]	s	n, 52	01
86	[Timer Power On]	f	d	See [Timer Power On]
87	[Timer Power Off]	f	e	See [Timer Power Off]
88	LCIN008 Control	s	n,b8	See LCIN008 Control
89	[Transfer Control]	s	n,cb	See Transfer Control
90	Multichannel	s	n,76	01 to 09
91	Change Setid	j	x	See Change Setid
92	[Gamma]	s	n,ad	00 to 03
93	[Black Level]	s	n,ae	00 to 02
94	[UHD Deep Color]	s	n,af	See [UHD Deep Color]
95	[Sync Mode]	s	n,b0	00 to 01

		Command		Data (Hexadecimal)
		1	2	
96	[Input Manager]	s	n,b1	See [Input Manager]
97	[PC/OPS Power Control]	s	n,8b	00 to 02
98	[LED Local Dimming]	s	n,c1	00 to 01
99	[Scan Inversion]	s	n,87	00 to 01
100	[Frame Control]	s	n,b7	00 to 01
101	[Average Picture Level Auto Control]	s	n,be	00 to 01
102	Read Brightness Value	m	u	FF
103	[Screen Fault Detection]	t	z	00 to 01
104	[Stereo Mode]	s	n,c2	00 to 02
105	[HDR Picture Mode]	s	n,c4	See [HDR Picture Mode]
106	[Dynamic Tone Mapping]	s	n,c5	00 to 01
107	[LED Local Dimming]	s	n,c6	00 to 03
108	[USB2 to HDBaseT]	s	n,c3	00 to 01
109	[Change Password]	s	n,a7	See [Change Password]
110	[Brightness Range Adjustment]	s	n,ab	See [Brightness Range Adjustment]
111	[Color Calibration]	s	n,d6	00 to 01
112	[Quiet Mode]	s	n,c7	00 to 01

* Note Commands may not work when there is no external input used.

* Some commands may not be supported on some models.

Transmission/Reception Protocol

Transmission

(Command1)(Command2)()(Set ID)()(Data)(Cr)

- * (Command1): This command is used to identify between the adjustment setting or the user adjustment modes.
- * (Command2): This command is used to control the monitor.
- * (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 to 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. This parameter corresponds to '0 x 0D' in ASCII code.
- * (): White Space. This parameter corresponds to '0 x 20' in ASCII code.

Acknowledgment

(Command2)()(Set ID)()(OK/NG)(Data)(x)

- * The product transmits an ACK (acknowledgment) based on this format when receiving normal data. At this point, 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' (=0 x 00), the data is reflected to all monitors and they do not send an acknowledgment (ACK).
- * If you send "FF" as the value of the data in control mode via RS-232C, you can check the value currently set for the relevant feature (not applicable to some features).
- * Some commands may not be supported on some models.

01. [Power] (Command: k a)

Controls the power on/off status of the monitor.

Transmission

(k)(a)() (Set ID)() (Data)(Cr)

Data 00: [Off]
01: [On]
02: Restart

Acknowledgment

(a)() (Set ID)() (OK/NG)(Data)(x)

- * The Acknowledgment signal is returned properly only when the monitor is fully powered on.
- * There may be a delay between the Transmission and Acknowledgment signals.
- * This feature may not be available for all models.

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 (DTV)
A1: HDMI2 (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)
97: HDMI3/HDMI2/DVI-D (DTV)
A7: HDMI3/HDMI2/DVI-D (PC)
98: OPS (DTV)
A8: OPS (PC)
99: HDMI2/OPS (DTV)
A9: HDMI2/OPS (PC)
C0: DISPLAYPORT (DTV)
D0: DISPLAYPORT (PC)
C1: DISPLAYPORT/USB-C (DTV)
D1: DISPLAYPORT/USB-C (PC)
C2: HDMI3 (DTV)
D2: HDMI3 (PC)
C3: HDBaseT (DTV)
D3: HDBaseT (PC)
E0: SuperSign webOS Player
E1: Others
E2: Multi Screen
E3: Play via URL

Acknowledgment

(b)() (Set ID)() (OK/NG)(Data)(x)

- * Some input signals may not be available for all models.
- * If it is not distributed from SuperSign W, WebOS Player returns NG.
- * If it says "Read" from the IDB mode, it will respond as a PC Label type.

03. [Aspect Ratio] (Command: k c)

Adjusts the aspect ratio of your monitor.

Transmission

(k)(c)() (Set ID)() (Data)(Cr)

Data 02: [Full Screen]
06: [Original]

Acknowledgment

(c)() (Set ID)() (OK/NG)(Data)(x)

- * The aspect ratio may differ depending on the model's input configuration.

04. [Brightness] (Command: j q)

Sets the brightness of your monitor.

Transmission

(j)(q)() (Set ID)() (Data)(Cr)

Data 00: [Off]
01: [Minimum]
02: [Medium]
03: [Maximum]
04: [Auto]

Acknowledgment

(q)() (Set ID)() (OK/NG)(Data)(x)

- * This feature may not be available for all models.

05. [Picture Mode] (Command: d x)

Selects a picture mode.

Transmission

(d)(x)() (Set ID)() (Data)(Cr)

Data 00: [Mall/QSR]
01: [General]
02: [Gov./Corp.]
03: [Transportation]
04: [Education]
05: [Expert1]
08: [Auto Power Save]
11: [Calibration]
12: [Hospital]

Acknowledgment

(x)() (Set ID)() (OK/NG)(Data)(x)

- * Some picture modes may not be available for all models.

06. [Contrast] (Command: k g)

Adjusts the screen contrast.

Transmission**(k)(g)() (Set ID)() (Data)(Cr)**

Data 00-64: Contrast 0-100

Acknowledgment**(g)() (Set ID)() (OK/NG)(Data)(x)****07. [Brightness] (Command: k h)**

Adjusts the screen brightness.

Transmission**(k)(h)() (Set ID)() (Data)(Cr)**

Data 00-64: Brightness 0-100

Acknowledgment**(h)() (Set ID)() (OK/NG)(Data)(x)****08. [Sharpness] (Command: k k)**

Adjusts the screen sharpness.

Transmission**(k)(k)() (Set ID)() (Data)(Cr)**

Data 00-32: Sharpness 0-50

Acknowledgment**(k)() (Set ID)() (OK/NG)(Data)(x)****09. [Color] (Command: k i)**

Adjusts the screen colors.

Transmission**(k)(i)() (Set ID)() (Data)(Cr)**

Data 00-64: Color 0-100

Acknowledgment**(i)() (Set ID)() (OK/NG)(Data)(x)****10. [Tint] (Command: k j)**

Adjusts the screen tints.

Transmission**(k)(j)() (Set ID)() (Data)(Cr)**

Data 00-64: Tint Red 50-Green 50

Acknowledgment**(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 70-D2: 3200K-13000K

Acknowledgment**(u)() (Set ID)() (OK/NG)(Data)(x)****12. [Balance] (Command: k t)**

Adjusts the sound balance.

Transmission**(k)(t)() (Set ID)() (Data)(Cr)**

Data 00-64: Left 50-Right 50

Acknowledgment**(t)() (Set ID)() (OK/NG)(Data)(x)**

* This feature may not be available for all models.

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)]

Acknowledgment

(y)() (Set ID)() (OK/NG)(Data)(x)

* This feature may not be available for all models.

14. [Mute on] (Command: k e)

Mutes/unmutes audio.

Transmission

(k)(e)() (Set ID)() (Data)(Cr)
 Data 00: [Mute] (Volume off)
 01: Mute off (Volume on)

Acknowledgment

(e)() (Set ID)() (OK/NG)(Data)(x)

* This feature may not be available for all models.

15. Volume Control (Command: k f)

Adjusts the playback volume.

Transmission

(k)(f)() (Set ID)() (Data)(Cr)
 Data 00-64: Volume 0-100

Acknowledgment

(f)() (Set ID)() (OK/NG)(Data)(x)

* This feature may not be available for all models.

16. [Current Time] 1 (year/month/day) (Command: f a)

Sets the Clock 1 (year/month/day) values and Auto Time.

Transmission

1. (f)(a)() (Set ID)() (Data1)() (Data2)() (Data3)(Cr)
 2. (f)(a)() (Set ID)() (0)(0)() (Data1)(Cr)

1. When setting Clock 1 (year/month/day)

Data1 00-: 2010 -

Data2 01-0C: January - December

Data3 01-1F: 1-31

* The minimum and maximum values for Data1 differ depending on the product's release year.

* Enter "fa [Set ID] ff" to view Clock 1 (year/month/day) settings.

2. When Setting Auto Time

Data1 00: [Auto]

01: [Manual]

* To view the set value of the Auto time, enter "fa [Set ID] 00 ff".

Acknowledgment

1. (a)() (Set ID)() (OK/NG)(Data1)(Data2)(Data3)(x)
 2. (a)() (Set ID)() (OK/NG)(0)(0)(Data1)(x)

17. [Current Time] 2 (hour/minute/second) (Command: f x)

Sets the Clock 2 values (hour/minute/second).

Transmission

(f)(x)() (Set ID)() (Data1)() (Data2)() (Data3)(Cr)

Data1 00-17: 00-23 hours

Data2 00-3B: 00 - 59 minutes

Data3 00-3B: 00-59 seconds

* Enter "fx [Set ID] ff" to view the Time 2 (hour/minute/second) settings.

* This feature is only available when Clock 1 (year/month/day) has been set.

Acknowledgment

(x)() (Set ID)() (OK/NG)(Data1)(Data2)(Data3)(x)

18. [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]

Acknowledgment

(g)() (Set ID)() (OK/NG)(Data)(x)

19. [No IR Power Off] (Command: m n)

Activates Auto Power Off when there is no IR signal for 4 hours.

Transmission

(m)(n)() (Set ID)() (Data)(Cr)

Data 00: [Off]
01: [On]

Acknowledgment

(n)() (Set ID)() (OK/NG)(Data)(x)

20. [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)
13: Arabic
14: Turkish

Acknowledgment

(i)() (Set ID)() (OK/NG)(Data)(x)

* Some languages may not be available for all models.

21. [Default] Settings (Command: f k)

Executes Reset.

(Initialize Screen can only be executed in RGB input mode.)

Transmission

(f)(k)() (Set ID)() (Data)(Cr)

Data 00: [Picture Reset]
02: [Reset to Initial Settings]

Acknowledgment

(k)() (Set ID)() (OK/NG)(Data)(x)

* This feature may not be available for all models.

22. Current Temperature (Command: d n)

Checks the current temperature of the product.

Transmission

(d)(n)() (Set ID)() (Data)(Cr)

Data FF: Status Check

Acknowledgment

(n)() (Set ID)() (OK/NG)(Data)(x)

* The temperature is displayed in hexadecimal.

23. [Key] (Command: m c)

Sends a key code for the IR remote control.

Transmission

(m)(c)() (Set ID)() (Data)(Cr)

Data IR_KEY_CODE

Acknowledgment

(c)() (Set ID)() (OK/NG)(Data)(x)

* For key codes, see IR Codes.

* Some key codes may not be supported depending on the model.

24. Time Elapsed (Command: d l)

Displays the time that has elapsed after your monitor has turned on.

Transmission

```
(d)(l)( )(Set ID)( )(Data)(Cr)
```

Data FF: Read status

Acknowledgment

```
(l)( )(Set ID)( )(OK/NG)(Data)(x)
```

* The data received is displayed in hexadecimal.

25. Product Serial Number Check (Command: f y)

Checks the serial number of the product.

Transmission

```
(f)(y)( )(Set ID)( )(Data)(Cr)
```

Data FF: Check product serial number

Acknowledgment

```
(y)( )(Set ID)( )(OK/NG)(Data)(x)
```

* Data is in ASCII format.

26. [Software Version] (Command: f z)

Checks the software version of the product.

Transmission

```
(f)(z)( )(Set ID)( )(Data)(Cr)
```

Data FF: Check the software version

Acknowledgment

```
(z)( )(Set ID)( )(OK/NG)(Data)(x)
```

27. [White Balance] Red Gain (Command: j m)

Adjusts the red gain value for white balance.

Transmission

```
(j)(m)( )(Set ID)( )(Data)(Cr)
```

Data 00-FE: Red Gain 0-254

FF: Checks red gain value

Acknowledgment

```
(m)( )(Set ID)( )(OK/NG)(Data)(x)
```

28. [White Balance] Green Gain (Command: j n)

Adjusts the green gain value for white balance.

Transmission

```
(j)(n)( )(Set ID)( )(Data)(Cr)
```

Data 00-FE: Green Gain 0-254

FF: Checks green gain value

Acknowledgment

```
(n)( )(Set ID)( )(OK/NG)(Data)(x)
```

29. [White Balance] Blue Gain (Command: j o)

Adjusts the blue gain value for white balance.

Transmission

```
(j)(o)( )(Set ID)( )(Data)(Cr)
```

Data 00-FE: Blue Gain 0-254

FF: Checks blue gain value

Acknowledgment

```
(o)( )(Set ID)( )(OK/NG)(Data)(x)
```

30. [White Balance] Red Offset (Command: s x)

Adjusts the red offset value for white balance.

Transmission

(s)(x)()(Set ID)()(Data)(Cr)

Data 00-7F: Red Offset 0-127

FF: Checks red offset value

Acknowledgment

(x)()(Set ID)()(OK/NG)(Data)(x)

31. [White Balance] Green Offset (Command: s y)

Adjusts the green offset value for white balance.

Transmission

(s)(y)()(Set ID)()(Data)(Cr)

Data 00-7F: Green Offset 0-127

FF: Checks green offset value

Acknowledgment

(y)()(Set ID)()(OK/NG)(Data)(x)

32. [White Balance] Blue Offset (Command: s z)

Adjusts the blue offset value for white balance.

Transmission

(s)(z)()(Set ID)()(Data)(Cr)

Data 00-7F: Blue Offset 0-127

FF: Checks blue offset value

Acknowledgment

(z)()(Set ID)()(OK/NG)(Data)(x)

33. [Backlight] (Command: m g)

Adjusts the backlight brightness.

Transmission

(m)(g)()(Set ID)()(Data)(Cr)

Data 00-64: Backlight 0-100

Acknowledgment

(g)()(Set ID)()(OK/NG)(Data)(x)

34. [SCREEN OFF] (Command: k d)

Turns off/off the screen.

Transmission

(k)(d)()(Set ID)()(Data)(Cr)

Data 00: Screen On

01: Screen Off

Acknowledgment

(d)()(Set ID)()(OK/NG)(Data)(x)

* This feature may not be available for all models.

35. [Tile Mode] (Command: d d)

Sets a tile mode and values for the tile rows and columns.

Transmission

(d)(d)()(Set ID)()(Data)(Cr)

Data 00-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.

Acknowledgment

(d)()(Set ID)()(OK/NG)(Data)(x)

* This feature may not be available for all models.

* If you change the values on a Video Wall model, please reboot for it to work normally.

36. [Tile Mode] Check (Command: d z)

Checks the tile mode.

Transmission**(d)(z)()(Set ID)()(Data)(Cr)**

Data FF: Check Tile Mode

Acknowledgment**(z)()(Set ID)()(OK/NG)(Data1)(Data2)(Data3)(x)**

Data1 00: Tile Mode off

01: Tile Mode on

Data2 00-0F: Tile column

Data3 00-0F: Tile row

* This feature may not be available for all models.

37. [Tile ID] (Command: d i)

Sets the tile ID value of the product.

Transmission**(d)(i)()(Set ID)()(Data)(Cr)**

Data 01-E1: Tile ID 1-225

FF: Checks the Tile ID

* The data value cannot exceed the value of row x column.

Acknowledgment**(i)()(Set ID)()(OK/NG)(Data)(x)**

* If you enter a value that exceeds the value of row x column for the Data parameter (except for 0xFF), Ack becomes NG.

* This feature may not be available for all models.

* If you change the values on a Video Wall model, please reboot for it to work normally.

38. [Natural Mode] (In Tile Mode) (Command: d j)

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

Transmission**(d)(j)()(Set ID)()(Data)(Cr)**

Data 00: [Off]

01: [On]

Acknowledgment**(j)()(Set ID)()(OK/NG)(Data)(x)**

* This feature may not be available for all models.

39. [DPM] / [DPM (Standby Mode)] (Command: f j)

Sets the DPM(Display Power Management) function.

Transmission**(f)(j)()(Set ID)()(Data)(Cr)**

Data 00: [Off]

02: 10 seconds

04: 1 minute

05: 3 minutes

06: 5 minutes

07: 10 minutes

Acknowledgment**(j)()(Set ID)()(OK/NG)(Data)(x)**

* This feature may not be available for all models.

40. Remote Control/Local Key Operation 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.

Acknowledgment**(m)()(Set ID)()(OK/NG)(Data)(x)**

* This feature may not be available for all models.

41. [Power On Delay] (Command: f h)

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

Transmission**(f)(h)()(Set ID)()(Data)(Cr)**

Data 00-FA: Min 0- Max 250 (sec)

Acknowledgment**(h)()(Set ID)()(OK/NG)(Data)(x)**

* The maximum value may differ depending on the model.

42. [Fail Over] Mode (Command: m i)

Selects a sound mode.

Transmission

(m)(i)()(Set ID)()(Data)(Cr)

Data 00: [Off]
01: [Auto]
02: [User Setting]

Acknowledgment

(i)()(Set ID)()(OK/NG)(Data)(x)

43. [Fail Over] Input Select (Command: m j)

Selects an input source for fail over. (This feature is only available when Fail Over is set to Custom.)

Transmission

(m)(j)()(Set ID)()(Data1)()(Data2)()(Data3)()(Data4)
... ()(DataN)(Cr)

Data1-N (Input priority 1-N)
60: RGB
70: DVI-D
90: HDMI1
91: HDMI2
92: OPS/HDMI3/DVI-D
95: OPS/DVI-D
96: HDMI3/DVI-D
97: HDMI3/HDMI2/DVI-D
98: OPS
99: HDMI2/OPS
C0: DISPLAYPORT
C1: DISPLAYPORT/USB-C
C2: HDMI3
C3: HDBaseT

Acknowledgment

(j)()(Set ID)()(OK/NG)(Data1)(Data2)(Data3)(Data4)
... (DataN)(x)

- * Some input signals may not be available for all models.
- * The data number (N) may vary depending on the model. (The data number depends on the number of supported input signals.)
- * This feature operates as the last input, and supports data in DTV format.

44. Remote Control Key Lock (Command: t p)

Configures the settings of the product's remote control key.

Transmission

(t)(p)()(Set ID)()(Data)(Cr)

Data 00: Unlocks all keys
01: Locks all keys except Power key
02: Locks all keys

Acknowledgment

(p)()(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.

45. [Local Key Operation Lock] (Command: t o)

Configures the local key operation settings of the product.

Transmission

(t)(o)()(Set ID)()(Data)(Cr)

Data 00: Unlocks all keys
01: Locks all keys except Power key
02: Locks all keys

Acknowledgment

(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.
- * This feature may not be available for all models.

46. Status Check (Command: s v)

Checks the current signal of the product.

Transmission

(s)(v)()(Set ID)()(Data)()(FF)(Cr)

- Data 02: Check whether there is a signal
 03: The monitor is currently in PM Mode
 07: Checks whether the Top, Bottom and Main temperature sensors are functioning normally.
 09: Fan Speed
 10: RGB Sensing OK/NG (screen fault detection)
 16: Check the humidity value
 17: Check the value of the intensity of illumination
 18: Check the status value of the slope of the product

Acknowledgment

(v)()(Set ID)()(OK/NG)(Data)(Data1)(x)

Data 02 (when a signal is found)

Data1 00: No signal
 01: Signal present

Data 03 (when the monitor is currently in PM mode)

Data1 00: Screen is on
 01: Screen is off
 02: Screen Off Always is activated
 03: Sustain Aspect Ratio is activated
 04: Screen Off & Backlight On is activated

Data 07 (when checking whether the Top, Bottom and Main temperature sensors are working properly)

Data1 00: All temperature sensors are faulty
 01: Top normal, Bottom faulty, Main faulty
 02: Top faulty, Bottom normal, Main faulty
 03: Top normal, Bottom normal, 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 10 (when executing Screen Fault Detection)

Data 1 00: Screen Fault Detection result NG
 07: Screen Fault Detection result OK

* When screen Fault Detection is set to Off or not supported, execution results are rendered "NG."

Data 16 (for checking the humidity value)
 Data 1 0~100: Reads the %RH value of the current humidity (indicated as a Hex value).

Data 17 (for checking the value of the intensity of illumination)

Data 1 1~1000: Reads the Lux value of the current intensity of illumination (indicated as a Hex value).

Data 18 (for checking the status value of the slope of the product)

Data 1 00: 0 degrees
 01: 90 degrees
 02: 180 degrees
 03: 270 degrees
 04: Fallen forward
 05: Fallen backward

Data 09 (when checking the fan speed)

Acknowledgement

(v)()(Set ID)()(OK/NG)(Data)(Data1_1)(Data1_2) ... (DataN_1)(DataN_2)(x)

Data1_1: 00-ff: First fan speed top 1 Byte
 Data1_2: 00-ff: First fan speed bottom 1 Byte
 ...
 DataN_1: 00-ff: Nth fan speed top 1 Byte
 DataN_2: 00-ff: Nth fan speed bottom 1 Byte

Fan Speed: Hex 0~2008, Decimal 0~8200

* The data number (N) may vary depending on the model.

* This feature may not be available for all models.

47. [Daylight Saving Time] (Command: s d)

Sets Daylight Savings Time.

Transmission

(s)(d)()(Set ID)()(Data1)()(Data2)() (Data3)()(Data4)()(Data5)()(Cr)

Data1 00: Off (Data2-5: FF)
 01: Start Time
 02: End Time

Data2 01~0C: January - December

Data3 01~06: Week 1 - 6

* The maximum value of [Data3] may vary depending on the date.

Data4 00~06: (Sunday - Saturday)

Data5 00~17: 00 - 23 hours

* If you wish to read the start/end times, enter FF for parameters [Data2] through [Data5].

(Example 1: sd 01 01 ff ff ff ff - Checks the start time.

Example 2: sd 01 02 ff ff ff ff - Checks the end time.)

* This feature only works when Clock 1 (year/month/day) and Clock 2 (hour/minute/second) have been set.

Acknowledgment

(d)()(Set ID)()(OK/NG)(Data1)(Data2) (Data3)(Data4)(Data5)(x)

* This feature may not be available for all models.

48. [PM Mode] (Command: s n, 0c)

Sets the PM mode.

Transmission**(s)(n)()(Set ID)()(0c)()(Data)(Cr)**

Data 00: [Power Off] (Basic)
 01: [Sustain Aspect Ratio]
 02: [Screen Off]
 03: [Screen Off Always]
 04: [Screen Off & Backlight On]
 05: [Network Ready]

Acknowledgment**(n)()(Set ID)()(OK/NG)(0c)(Data)(x)**

* This feature may not be available for all models.

49. [ISM Method] (Command: j p)

Selects an ISM method.

Transmission**(j)(p)()(Set ID)()(Data)(Cr)**

Data 02: [Orbiter]
 04: [White Wash]
 08: [Off]
 90: [User Image]
 91: [User Video]

Acknowledgment**(p)()(Set ID)()(OK/NG)(Data)(x)**

* This feature may not be available for all models.

* "02: [Orbiter]" is not supported while "91: [User Video]" is turned on.

50. [Network Setting] (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: Displays the temporary DNS address.

* If Data1 is 82,

Data2 80: Applies the temporary IP mode (Auto/Manual), subnet mask, and gateway.
 81: Applies the temporary DNS address
 FF: Information on the current network (IP, subnet gateway and DNS)

* An example 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.

Acknowledgment**(n)()(Set ID)()(OK/NG)(Data1)(Data)(x)**

* This feature is available only for wired networks.

* This feature may not be available for all models.

51. [Power On Status] (Command: t r)

Sets the Power On status of the monitor.

Transmission

(t)(r)()(Set ID)()(Data)(Cr)

Data 00: [LST(Last Status)]

01: [STD(Standby)]

02: [PWR(Power On)]

Acknowledgment

(r)()(Set ID)()(OK/NG)(Data)(x)

52. Wired [Wake On LAN] / [Wake On LAN (Networked Standby Mode)] (Command: f w)

Selects a Wired Wake On LAN option.

Transmission

(f)(w)()(Set ID)()(Data)(Cr)

Data 00: [Off]

01: [On]

Acknowledgment

(w)()(Set ID)()(OK/NG)(Data)(x)

53. [OSD Rotation] (Command: t h)

Sets the Screen Rotation feature.

Transmission

(t)(h)()(Set ID)()(Data)(Cr)

Data 00: [Off]

01: 90 degrees

02: 270 degrees

03: 180 degrees

Acknowledgment

(h)()(Set ID)()(OK/NG)(Data)(x)

* This feature may not be available for all models.

54. [Time Sync] (Command: s n, 16)

Sets Time Sync.

Transmission

(s)(n)()(Set ID)()(1)(6)()(Data)(Cr)

Data 00: [Off]

01: [On]

* This feature only works when the monitor is in Master mode.

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

Acknowledgment

(n)()(Set ID)()(OK/NG)(1)(6)(Data)(x)

* This feature may not be available for all models.

55. [Contents Sync] (Command: t g)

Sets Content Sync.

Transmission

(t)(g)()(Set ID)()(Data)(Cr)

Data 00: [Off]

01: [On]

Acknowledgment

(g)()(Set ID)()(OK/NG)(Data)(x)

* This feature may not be available for all models.

56. [LAN Daisy Chain] (Command: s n, 84)

Turns on/off LAN Daisy Chain.

Transmission

(s)(n)()(Set ID)()(8)(4)()(Data)(Cr)

Data 00: [Off]

01: [On]

Acknowledgment

(n)()(Set ID)()(OK/NG)(8)(4)(Data)(x)

* This feature may not be available for all models.

57. [External Input Rotation] (Command: s n, 85)

Sets the External Input Rotation feature.

Transmission`(s)(n)( )(Set ID)( )(8)(5)( )(Data)(Cr)`

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

Acknowledgment`(n)( )(Set ID)( )(OK/NG)(8)(5)(Data)(x)`

* This feature may not be available for all models.

58. [Beacon] (Command: s n, 88)

Turns on/off Beacon.

Transmission`(s)(n)( )(Set ID)( )(8)(8)( )(Data)(Cr)`

Data 00: [Off]
 01: [On]

Acknowledgment`(n)( )(Set ID)( )(OK/NG)(8)(8)(Data)(x)`

* This feature may not be available for all models.

59. [Brightness Scheduling] Mode (Command: s m)

Selects a Brightness Scheduling mode.

Transmission`(s)(m)( )(Set ID)( )(Data)(Cr)`

Data 00: [Off]
 01: [On]

Acknowledgment`(m)( )(Set ID)( )(OK/NG)(Data)(x)`

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

* This feature may not be available for all models.

60. [Brightness Scheduling] (Command: s s)

Sets Brightness Scheduling.

Transmission`(s)(s)( )(Set ID)( )(Data1)( )(Data2)( )(Data3)(Cr)`

Data 1
 1. f1 to f6 (data reading)
 F1: Reads the 1st brightness schedule's data.
 F2: Reads the 2nd brightness schedule's data.
 F3: Reads the 3rd brightness schedule's data.
 F4: Reads the 4th brightness schedule's data.
 F5: Reads the 5th brightness schedule's data.
 F6: Reads the 6th brightness schedule's data.

2. FF: Reads all stored lists

3. e1 to e6 (Deletes one index), e0 (Deletes all indexes)
 E0: Deletes all brightness schedules.
 E1: Deletes the 1st brightness schedule.
 E2: Deletes the 2nd brightness schedule.
 E3: Deletes the 3rd brightness schedule.
 E4: Deletes the 4th brightness schedule.
 E5: Deletes the 5th brightness schedule.
 E6: Deletes the 6th brightness schedule.

4. 00-17: 00 - 23 hours

Data 2 00-3B: 00 - 59 minutes

Data 3 00-64: Backlight 0 - 100

* To read or delete a brightness schedule you have set, (Data2) (Data3) must be set to FF.

* If you want to read all configured brightness schedules through FF, do not enter any values in (Data2)(Data3).

* When retrieving all items of the set Brightness Scheduling list through FF, OK will be acknowledged (ACK) even if there is no saved list.

ex1: ss 01 f1 ff ff - Reads the 1st index data in Brightness Schedule.

ex2: ss 01 ff - Reads all index data in Brightness Schedule.

ex3: ss 01 e1 ff ff - Deletes the 1st index data in Brightness Schedule.

ex4: 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 available for all models.

61. [Multi Screen] Mode & Input (Command: x c)

Saves and controls Multi Screen modes and inputs.

Transmission

(x)(c)()(Set ID)()(Data1)()(Data2)()(Data3)()(Data4)
()(Data5)()(Cr)

Data1 (Sets MultiScreen mode)

- 10: PIP
- 22: PBP2
- 23: PBP3
- 24: PBP4
- 25: PBP3 (1:2:1)

Data2 (Sets the Main input of Multi screen)

Data3 (Sets the Sub1 input of Multi screen)

Data4 (Sets the Sub2 input of Multi screen)

Data5 (Sets the Sub3 input of Multi screen)

- 80: DVI-D
- 90: HDMI1
- 91: HDMI2
- 92: OPS/HDMI3/DVI-D
- 95: OPS/DVI-D
- 96: HDMI3/DVI-D
- 97: HDMI3/HDMI2/DVI-D
- 98: OPS
- 99: HDMI2/OPS
- C0: DISPLAYPORT
- C1: DISPLAYPORT/USB-C
- C2: HDMI3
- C3: HDBaseT

Acknowledgment

(c)()(Set ID)()(OK/NG)()(Data1)(Data2)(Data3)
(Data4)(Data5)(x)

- * This feature may not be available for all models.
- * Only the input modes supported by the model works.
- * This feature operates as the last input, and supports data in DTV format.
- * When the Read operation is performed, 00 is returned if it is not for an external input.

62. [Aspect Ratio] (Multi screen) (Command: x d)

Controls the aspect ratio of Multi 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 Screen
- 01: Original

Acknowledgment

(d)()(Set ID)()(OK/NG)(Data1)(Data2)(x)

- * This feature may not be available for all models.

63. [SCREEN OFF] (Multi screen) (Command: x e)

Turns on/off each screen in the Multi Screen.

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: Screen On
- 01: Screen Off

- * This feature only works when the Multi Screen app is running.
- * This feature does not work when there is no signal.

Acknowledgment

(e)()(Set ID)()(OK/NG)(Data1)(Data2)(x)

- * This feature may not be available for all models.

64. [Screen Off Always] (Command: s n, 0d)

If you activate the Screen Off Always feature, the monitor enters Screen Off mode regardless of whether or not you have activated PM mode.

Transmission

(s)(n)()(Set ID)()(0)(d)()(Data)(Cr)

- Data 00: [Off]
- 01: [On]

Acknowledgment

(n)()(Set ID)()(OK/NG)(0)(d)(Data)(x)

- * This feature may not be available for all models.

65. Stop Video (Command: k x)

Controls Stop Video.

Transmission

(k)(x)()(Set ID)()(Data)(Cr)

Data 00: The Stop Video feature is on.

01: The Stop Video feature is off.

* This feature only works in single input mode.

Acknowledgment

(x)()(Set ID)()(OK/NG)(Data)(x)

* This feature may not be available for all models.

66. Wireless [Wake On LAN] / [Wake On LAN (Networked Standby Mode)] (Command: s n, 90)

Sets the Wireless Wake-on-LAN feature.

Transmission

(s)(n)()(Set ID)()(9)(0)()(Data)(Cr)

Data 00: [Off]

01: [On]

Acknowledgment

(n)()(Set ID)()(OK/NG)(9)(0)(Data)(x)

* This feature may not be available for all models.

67. [OSD Lock] (Command: k l)

Sets OSD Lock.

Transmission

(k)(l)()(Set ID)()(Data)(Cr)

Data 00: OSD Lock

01: Unlock OSD Lock

Acknowledgment

(l)()(Set ID)()(OK/NG)(Data)(x)

68. [HDMI IT Content] (Command: s n, 99)

Automatically sets the picture mode based on HDMI data.

Transmission

(s)(n)()(Set ID)()(9)(9)()(Data)(Cr)

Data 00: [Off]

01: [On]

Acknowledgment

(n)()(Set ID)()(OK/NG)(9)(9)(Data)(x)

* This feature may not be available for all models.

69. [Holiday Setting] (Command: s n, 9b)

Sets holidays.

Transmission

1. (s)(n)()(Set ID)()(9)(b)()

(Data1)()(Data2)()(Data3)()

(Data4)()(Data5)()(Data6)(Cr)

2. (s)(n)()(Set ID)()(9)(b)()(Data1)()(Data2)(Cr)

3. (s)(n)()(Set ID)()(9)(b)()(Data1)(Cr)

1. Setting a Holiday

Data1 Start year

00:- 2010-

Data2 Start month

01 - 0c: January - December

Data3 Start date

01 - 1F: 01 - 31

Data4 For how long from the start year/month/date

01-07: For 1 to 7 days

Data5 Repetition

00: None

01: Every month

02: Every Year

Data6 Repeats the schedule on a date/day-of-the-week basis.

01: On a date basis.

02: On a day-of-the-week basis.

* The minimum and maximum values for Data1 differ depending on the product's release year.

* You can input a value for [Data 6] only when a value has already been set for [Data 5] (every year or every month).

2. Checking a Schedule

Data1 Select the desired schedule.

F1: Reads the 1st schedule

F2: Reads the 2nd schedule

F3: Reads the 3rd schedule

F4: Reads the 4th schedule

F5: Reads the 5th schedule

F6: Reads the 6th schedule

F7: Reads the 7th schedule

Data2

FF

3. Deleting a Schedule

- E0: Deletes all holiday schedules
- E1: Deletes the 1st holiday schedule
- E2: Deletes the 2nd holiday schedule
- E3: Deletes the 3rd holiday schedule
- E4: Deletes the 4th holiday schedule
- E5: Deletes the 5th holiday schedule
- E6: Deletes the 6th holiday schedule
- E7: Deletes the 7th holiday schedule

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

Acknowledgment

1. (n)()(Set ID)()(OK/NG)(9)(b)
(Data1)(Data2)(Data3)(Data4)(Data5)(Data6)(x)
2. (n)()(Set ID)()(OK/NG)(9)(b)(f)(1~7)
(Data1)(Data2)(Data3)(Data4)(Data5)(Data6)(x)
3. (n)()(Set ID)()(OK/NG)(9)(b)(Data1)(x)

* This feature may not be available for all models.

70. [UPnP] (Command: s n, 9c)

Sets UPnP mode.

Transmission

(s)(n)()(Set ID)()(9)(c)()(Data)(Cr)

Data 00: [Off]

01: [On]

Acknowledgment

(n)()(Set ID)()(OK/NG)(9)(c)(Data)(x)

* This feature may not be available for all models.

* Changing UPnP mode results in a reboot.

71. [Home Dashboard Lock] (Command: s n, 9d)

Sets Home Dashboard Lock.

Transmission

(s)(n)()(Set ID)()(9)(d)()(Data)(Cr)

Data 00: Home Dashboard Unlock

01: Home Dashboard Lock

Acknowledgment

(n)()(Set ID)()(OK/NG)(9)(d)(Data)(x)

* This feature may not be available for all models.

72. [USB Lock] (Command: s n, 9e)

Sets USB Lock.

Transmission

(s)(n)()(Set ID)()(9)(e)()(Data)(Cr)

Data 00: USB Unlock

01: USB Lock

Acknowledgment

(n)()(Set ID)()(OK/NG)(9)(e)(Data)(x)

* This feature may not be available for all models.

73. [Wi-Fi Lock] (Command: s n, 9f)

Sets Wi-Fi Lock.

Transmission`(s)(n)( )(Set ID)( )(9)(f)( )(Data)(Cr)`

Data 00: Wi-Fi Unlock

01: Wi-Fi Lock

Acknowledgment`(n)( )(Set ID)( )(OK/NG)(9)(f)(Data)(x)`

* This feature may not be available for all models.

74. [Screen Share Lock] (Command: s n, a0)

Sets Screen Share Lock.

Transmission`(s)(n)( )(Set ID)( )(a)(0)( )(Data)(Cr)`

Data 00: Screen Share Unlock

01: Screen Share Lock

Acknowledgment`(n)( )(Set ID)( )(OK/NG)(a)(0)(Data)(x)`

* This feature may not be available for all models.

* Changing Screen Share Lock mode results in a reboot.

75. See [Backup via Storage] (Command: s n, a1)

Sets Backup via Storage.

Transmission1. `(s)(n)( )(Set ID)( )(a)(1)( )(Data1)(Cr)`2. `(s)(n)( )(Set ID)( )(a)(1)( )(Data1)(Data2)(Cr)`

1. Disabling Backup via Storage.

Data1 00: Off

2. Setting Backup via Storage to Auto

Data1 01: Auto

Data2 01: 30 minute

02: 1 hour

03: 2 hours

04: 3 hours

3. Setting Backup via Storage to Manual

Data1 02: Manual

4. Setting Backup via Storage to SuperSign Content

Data1 03: SuperSign Contents

5. Set to SI App / Play via URL

Data 1 04: [SI App / Play via URL]

Acknowledgment1. `(n)( )(Set ID)( )(OK/NG)(a)(1)(Data1)(x)`2. `(n)( )(Set ID)( )(OK/NG)(a)(1)(Data1)(Data2)(x)`

* This feature may not be available for all models.

76. [Digital Audio Input] (Command: s n, a2)

Sets Digital Audio Input.

Transmission

(s)(n)()(Set ID)()(a)(2)()(Data)(Cr)

Data 00: Digital

01: Analog

Acknowledgment

(n)()(Set ID)()(OK/NG)(a)(2)(Data)(x)

* This feature may not be available for all models.

77. [Booting Logo Image] (Command: s n, a3)

Sets Booting Logo Image.

Transmission

(s)(n)()(Set ID)()(a)(3)()(Data)(Cr)

Data 00: [Off]

01: [On]

Acknowledgment

(n)()(Set ID)()(OK/NG)(a)(3)(Data)(x)

* This feature may not be available for all models.

78. [SoftAP] (Command: s n, a4)

Sets SoftAP Mode.

Transmission

(s)(n)()(Set ID)()(a)(4)()(Data)(Cr)

Data 00: [Off]

01: [On]

Acknowledgment

(n)()(Set ID)()(OK/NG)(a)(4)(Data)(x)

* This feature may not be available for all models.

79. [Natural Size] (Command: s n, a5)

Sets the Natural Size feature.

Transmission

(s)(n)()(Set ID)()(a)(5)()(Data)(Cr)

Data 00-64: Natural Size 0 - 100

Acknowledgment

(n)()(Set ID)()(OK/NG)(a)(5)(Data)(x)

* This feature may not be available for all models.

80. Play Saved Internal Media (Command: s n, a8)

Plays media files saved on internal storage. Internal storage media: videos and images stored on the monitor's internal storage after being exported via Contents Management Player.

* Not applicable: Template content, SuperSign content, and playlist content.

Transmission

(s)(n)()(Set ID)()(a)(8)()(Data)(Cr)

Data 01: Play

Acknowledgment

(n)()(Set ID)()(OK/NG)(a)(8)()(Data)(x)

* This feature may not be available for all models.

81. [No Signal Image] (Command: s n, a9)

Sets the No Signal Image feature.

Transmission

(s)(n)()(Set ID)()(a)(9)()(Data)(Cr)

Data 00: [Off]

01: [On]

Acknowledgment

(n)()(Set ID)()(OK/NG)(a)(9)(Data)(x)

* This feature may not be available for all models.

82. [Audio Out] (Command: s n, aa)

Sets Audio Out to Off/Variable/Fixed.

Transmission

(s)(n)()(Set ID)()(a)()(Data)(Cr)

Data 00: [Off]
01: [Variable]
02: [Fixed]

Acknowledgment

(n)()(Set ID)()(OK/NG)(a)(Data)(x)

* This feature may not be available for all models.

85. [Apply to all inputs] (Command: s n, 52)

Apply the video mode and low value of the current input to the same video value of all inputs.

Transmission

(s)(n)()(Set ID)()(5)(2)()(Data)(Cr)

Data 01: Apply

Acknowledgment

(n)()(Set ID)()(OK/NG)(5)(2)(Data)(x)

* This feature may not be available for all models.

* Other commands do not work for a certain time after applying.

83. [DPM Wake Up Control] / [DPM (Standby Mode) Wake Up Control] (Command: s n, 0b)

Controls the DPM Wake Up Control settings.

Transmission

(s)(n)()(Set ID)()(0)(b)()(Data)(Cr)

Data 00: [Clock]
01: [Clock+DATA]

Acknowledgment

(n)()(Set ID)()(OK/NG)(0)(b)(Data)(x)

* This feature may not be available for all models.

84. [Fan] Failure Check (Command: d w)

Check the fan malfunction.

Transmission

(d)(w)()(Set ID)()(Data)(Cr)

Data FF: Read status

Acknowledgment

(w)()(Set ID)()(OK/NG)(Data1)(Data2)(x)

Data1 00: Fan failure
01: Fan normal
Data2 00: 0 faults (Fan Normal)
01: 1 fault
02: 2 faults
03: 3 faults
04: 4 faults
05: 5 faults
06: 6 faults
07: 7 faults
08: 8 faults
09: 9 faults
0A: 10 faults

* This feature may not be available for all models.

86. [Timer Power On] Scheduling (Command: f d)

Sets On Timer settings.

Transmission

(f)(d)()(Set ID)()(Data1)()(Data2)()(Data3)(Cr)

Data1

1. f1h to f7h (data reading)

F1: Reads the 1st Timer Power On's data

F2: Reads the 2nd Timer Power On's data

F3: Reads the 3rd Timer Power On's data

F4: Reads the 4th Timer Power On's data

F5: Reads the 5th Timer Power On's data

F6: Reads the 6th Timer Power On's data

F7: Reads the 7th Timer Power On's data

2. e1h to e7h (Deletes one index), e0h (Deletes all indexes)

E0: Delete all Timer Power On's

E1: Delete the 1st Timer Power On

E2: Delete the 2nd Timer Power On

E3: Delete the 3rd Timer Power On

E4: Delete the 4th Timer Power On

E5: Delete the 5th Timer Power On

E6: Delete the 6th Timer Power On

E7: Delete the 7th Timer Power On

3. 01h to 0ch (Timer Power On days setting)
 02: Repeat Daily
 03: Repeat from Monday to Friday
 04: Repeat from Monday to Saturday
 05: Repeat from Saturday to Sunday
 06: Repeat on Sunday
 07: Repeat on Monday
 08: Repeat on Tuesday
 09: Repeat on Wednesday
 0A: Repeat on Thursday
 0B: Repeat on Friday
 0C: Repeat on Saturday
 Data2 00-17: 00 - 23 hours
 Data3 00-3B: 00 - 59 minutes

* To read or delete a Timer Power On you have set, [Data2] [Data3] must be set to FFH.

Example 1: fd 01 f1 ff ff - Reads the 1st index data in Timer Power On.

Example 2: fd 01 e1 ff ff - Reads the 1st index data in Timer Power On.

Example 3: fd 01 04 02 03 - Sets the Timer Power On as Monday - Saturday 02:03.

* This feature only works when Clock 1 (year/month/day) and Clock 2 (hour/minute/second) have been set.

Acknowledgment

(d)()(Set ID)()(OK/NG)(Data1)(Data2)(Data3)(x)

87. [Time to OFF] Scheduling (Command: f e)

Sets Off Timer settings.

Transmission

(f)(e)()(Set ID)()(Data1)()(Data2)()(Data3)(Cr)

Data1

1. f1h to f7h (data reading)

F1: Reads the 1st Timer Power Off's data

F2: Reads the 2nd Timer Power Off's data

F3: Reads the 3rd Timer Power Off's data

F4: Reads the 4th Timer Power Off's data

F5: Reads the 5th Timer Power Off's data

F6: Reads the 6th Timer Power Off's data

F7: Reads the 7th Timer Power Off's data

2. e1h to e7h (Deletes one index), e0h (Deletes all indexes)

E0: Delete all Timer Power Off's

E1: Delete the 1st Timer Power Off

E2: Delete the 2nd Timer Power Off

E3: Delete the 3rd Timer Power Off

E4: Delete the 4th Timer Power Off

E5: Delete the 5th Timer Power Off

E6: Delete the 6th Timer Power Off

E7: Delete the 7th Timer Power Off

3. 01h to 0ch (Timer Power Off days setting)

02: Repeat Daily

03: Repeat from Monday to Friday

04: Repeat from Monday to Saturday

05: Repeat from Saturday to Sunday

06: Repeat on Sunday

07: Repeat on Monday

08: Repeat on Tuesday

09: Repeat on Wednesday

0A: Repeat on Thursday

0B: Repeat on Friday

0C: Repeat on Saturday

Data2 00-17: 00 - 23 hours

Data3 00-3B: 00 - 59 minutes

* To read or delete a Timer Power Off you have set, [Data2] [Data3] must be set to FFH.

Example 1: fe 01 f1 ff ff - Reads the 1st index data in Timer Power Off.

Example 2: fe 01 e1 ff ff - Reads the 1st index data in Timer Power Off.

Example 3: fe 01 04 02 03 - Sets the Timer Power Off as Monday - Saturday 02:03.

* This feature only works when Clock 1 (year/month/day) and Clock 2 (hour/minute/second) have been set.

Acknowledgment

(e)()(Set ID)()(OK/NG)(Data1)(Data2)(Data3)(x)

88. LCIN008 Control (Command: s n, b8)

It controls the LCIN008 device.

Transmission

(s)(n)()(Set ID)()(b)(8)()(Data1)(Data2)(Cr)

Data 1 00: LCIN008 Power

01: LCIN008 Brightness

Data 2

1. For Power

0 x 00: Off

0 x 01: On

2. For Brightness

0 x ff: Read

0 x 00 ~ 0 x 64: Applies a set value

Acknowledgement

(n)()(Set ID)()(OK/NG)(b)(8)(Data1)(Data2)(x)

* This feature may not be available for all models.

* Other commands do not work for a certain time after applying.

89. [Transfer Control] (Command: s n, cb)

It transfers the command to RS232C out.

Transmission

(s)(n)()(Set ID)()(c)(b)()(Data)(Cr)

Data Data that goes out to RS232C out

Acknowledgment

(n)()(Set ID)()(OK/NG)(c)(b)(Data)(x)

Data Response value of Data transferred to RS232C out

* This feature may not be available for all models.

* Other commands do not work for a certain time after applying.

90. Multichannel (Command: s n, 76)

It changes the channel.

Transmission

(s)(n)()(Set ID)()(7)(6)()(Data)(Cr)

Data 01 ~ 09: Channel to switch to

Acknowledgment

(n)()(Set ID)()(OK/NG)(7)(6)(Data)(x)

* This feature may not be available for all models.

91. Change Setid (Command: j x)

Changes and checks Setid.

1. When it is a general LED model

Transmission

(j)(x)()(Set ID)()(Data1)()(Data2)(Cr)

Data1 Data2 : 00 01 ~ 03 e8 (1~1000)

Acknowledgment

(x)()(Set ID)()(OK/NG)(Data1)(Data2)(x)

2. When it is another model (read only)

Transmission

(j)(x)()(Set ID)()(Data)(Cr)

Data FF: Check the value of Setid

The returned value is indicated as a value of hexadecimal numbers corresponding to the ASCII code value.

(Return when Setid is 1: x 01 OK31x

Return when Setid is 1000: x 3e8 OK31303030x)

Acknowledgment

(x)()(Set ID)()(OK/NG)(Data)(x)

* It works even if the Setid does not match.

92. [Gamma] (Command: s n, ad)

Sets Gamma Mode.

Transmission

(s)(n)()(Set ID)()(a)(d)()(Data)(Cr)

Data 00: [low](1.9)

01: [medium](2.2)

02: [High1](2.4)

03: [High2](BT.1886)

Acknowledgment

(n)()(Set ID)()(OK/NG)(a)(d)(Data)(x)

* This feature may not be available for all models.

93. [Black Level] (Command: s n, ae)

It sets the Black Level mode.

Transmission

(s)(n)()(Set ID)()(a)(e)()(Data)(Cr)

Data 00: Low

01: High

02: Auto

Acknowledgment

(n)()(Set ID)()(OK/NG)(a)(e)(Data)(x)

* This feature may not be available for all models.

94. [UHD Deep Color] (Command: s n, af)

It sets the UHD Deep Color mode for each input.

Transmission

(s)(n)()(Set ID)()(a)(f)(Data1)()(Data2)(Cr)

Data1 70: DVI-D
90: HDMI1
91: HDMI2
92: OPS/HDMI3/DVI-D
95: OPS/DVI-D
96: HDMI3/DVI-D
97: HDMI3/HDMI2/DVI-D
98: OPS
99: HDMI2/OPS
C0: DISPLAYPORT
C1: DISPLAYPORT/USB-C
C2: HDMI3
C3: HDBaseT

Data2 00: [Off]
01: [On]

Acknowledgment

(n)()(Set ID)()(OK/NG)(a)(f)(Data1)(Data2)(x)

* This feature may not be available for all models.

95. [Sync Mode] (Command: s n, b0)

Sets Sync Mode.

Transmission

(s)(n)()(Set ID)()(b)(0)()(Data)(Cr)

Data 00: [Slave Mode]
01: [Master Mode]

Acknowledgment

(n)()(Set ID)()(OK/NG)(b)(0)(Data)(x)

* This feature may not be available for all models.

96. [Input Manager] (Command: s n, b1)

It sets labels by input.

Transmission

(s)(n)()(Set ID)()(b)(1)()(Data1)()(Data2)(Cr)

Data1 90: HDMI1
91: HDMI2
92: OPS/HDMI3/DVI-D
95: OPS/DVI-D
96: HDMI3/DVI-D
97: HDMI3/HDMI2/DVI-D
98: OPS
99: HDMI2/OPS
C0: DISPLAYPORT
C1: DISPLAYPORT/USB-C
C2: HDMI3
C3: HDBaseT

Data2 00: DTV
01: PC

Acknowledgment

(n)()(Set ID)()(OK/NG)(b)(1)(Data1)(Data2)(x)

* This feature may not be available for all models.

97. [PC/OPS Power Control] (Command: s n, 8b)

It sets the OPS/PC Power Control mode.

Transmission

(s)(n)()(Set ID)()(8)(b)()(Data)(Cr)

Data 00: [Disable]
01: [Sync(On)]
02: [Sync(On/Off)]

Acknowledgment

(n)()(Set ID)()(OK/NG)(8)(b)(Data)(x)

* This feature may not be available for all models.

98. [LED Local Dimming] (Command: s n, c1)

It sets [LED Local Dimming].

(A feature to set the LED Local Dimming in a sub-item under [Settings] → [Display] → [Expert Controls])

Transmission

(s)(n)()(Set ID)()(c)(1)()(Data)(Cr)

Data 00: [Off]
01: [On]

Acknowledgment

(n)()(Set ID)()(OK/NG)(c)(1)(Data)(x)

* This feature may not be available for all models.

99. [Scan Inversion] (Command: s n, 87)

It controls the on/off status of Scan Inversion.

Transmission

(s)(n)()(Set ID)()(8)(7)()(Data)(Cr)

Data 00: Off

01: On

Acknowledgment

(n)()(Set ID)()(OK/NG)(8)(7)(Data)(x)

* This feature may not be available for all models.

* If you change the values on a Video Wall model, please reboot for it to work normally.

100. [Frame Control] (Command: s n, b7)

It controls the Frame Control.

Transmission

(s)(n)()(Set ID)()(b)(7)()(Data)(Cr)

Data 00: Off

01: On

Acknowledgment

(n)()(Set ID)()(OK/NG)(b)(7)(Data)(x)

* This feature may not be available for all models.

* If you change the values on a Video Wall model, please reboot for it to work normally.

101. [Average Picture Level Auto Control] (Command: s n, be)

Sets Average Picture Level Auto Control.

Transmission

(s)(n)()(Set ID)()(b)(e)()(Data)(Cr)

Data 00: [Off]

01: [On]

Acknowledgment

(n)()(Set ID)()(OK/NG)(b)(e)(Data)(x)

* This feature may not be available for all models.

102. Read Brightness Value (Command: m u)

Checks the brightness value.

Transmission

(m)(u)()(Set ID)()(FF)(Cr)

Acknowledgment

(u)()(Set ID)()(OK/NG)(Data1)(Data2)(Data3)(Data4)

(Data5)(Data6)(Data7)(x)

Data 1 00-64: Backlight PWM figure 0-100

Data 2 00-ff: The upper 1-byte of the value measured by the CA210.

Data 3 00-ff: The lower 1-byte of the value measured by the CA210.

The CA210 measurement is Hex: 0000-ffff, Decimal: 0 - 65535

Data 4 00-ff: The upper 1-byte of the value measured by BLU 1 Sensor.

Data 5 00-ff: The lower 1-byte of the value measured by BLU 1 Sensor

Data 6 00-ff: The upper 1-byte of the value measured by BLU 2 Sensor

Data 7 00-ff: The lower 1-byte of the value measured by BLU 2 Sensor

The BLU measurement is Hex: 0000-ffff, Decimal: 0 - 65535

* The CA210 measurement is entered as "Calibration" when the product is released from the factory. It is Default 0 before the calibration.

* This feature may not be available for all models.

103. [Screen Fault Detection] (Command: t z)

Sets the Screen Fault Detection feature.

Transmission

(t)(z)()(Set ID)()(Data)(Cr)

Data 00: [Off]

01: [On]

Acknowledgment

(z)()(Set ID)()(OK/NG)(Data)(x)

* This feature may not be available for all models.

104. [Stereo Mode] (Command: s n, c2)

Controls Stereo Mode.

Transmission

(s)(n)()(Set ID)()(c)(2)()(Data)(Cr)

Data 00: Left/Right

01: Left/Left

02: Right/Right

Acknowledgment

(n)()(Set ID)()(OK/NG)(c)(2)(Data)(x)

* This feature may not be available for all models.

105. [HDR Picture Mode] (Command: s n, c4)

Selects a HDR Picture Mode.

Transmission

(s)(n)()(Set ID)()(c)(4)()(Data)(Cr)

Data 00: Mall/QSR
01: General
02: Gov./Corp.
04: Education

Acknowledgment

(n)()(Set ID)()(OK/NG)(c)(4)(Data)(x)

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

* It works only when the HDR content is running.

106. [Dynamic Tone Mapping] (Command: s n, c5)

Selects Dynamic Tone Mapping.

Transmission

(s)(n)()(Set ID)()(c)(5)()(Data)(Cr)

Data 00: [Off]
01: [On]

Acknowledgment

(n)()(Set ID)()(OK/NG)(c)(5)(Data)(x)

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

* It works only when the HDR content is running.

107. [LED Local Dimming] (Command: s n, c6)

Sets the LED Local Dimming.

(A feature to set the LED Local Dimming in a sub-item under [Settings] → [Display] → [Picture Mode] → [Picture Options])

Transmission

(s)(n)()(Set ID)()(c)(6)()(Data)(Cr)

Data 00: [Off]
01: [Low]
02: [Medium]
03: [High]

Acknowledgment

(n)()(Set ID)()(OK/NG)(c)(6)(Data)(x)

* This feature may not be available for all models.

108. [USB2 to HDBaseT] (Command: s n, c3)

Sets USB2 to HDBaseT.

Transmission

(s)(n)()(Set ID)()(c)(3)()(Data)(Cr)

Data 00: [Off]
01: [On]

Acknowledgment

(n)()(Set ID)()(OK/NG)(c)(3)(Data)(x)

* This feature may not be available for all models.

109. [Change Password] (Command: s n, a7)

Changes password.

Transmission

(s)(n)()(Set ID)()(a)(7)()(Data1)(Data2)(Data3)
(Data4)(Data5)(Data6)()(Data7)(Data8)(Data9)
(Data10)(Data11)(Data12)(Cr)

Data 1-6 : 0-9(Previously set password)
Data 7-12 : 0-9(New password)

Acknowledgment

(n)()(Set ID)()(OK/NG)(a)(7)()(Data1)(Data2)(Data3)
(Data4)(Data5)(Data6)()(Data7)(Data8)(Data9)
(Data10)(Data11)(Data12)(x)

* This feature may not be available for all models.

110. [Brightness Range Adjustment] (Command: s n, ab)

Adjust the brightness range.

Transmission

(s)(n)()(Set ID)()(a)(b)()(Data1)()(Data2)(Cr)

Data 1 00: Minimum brightness control
01: Maximum brightness control
Data 1 00-64: Range control

Acknowledgment

(n)()(Set ID)()(OK/NG)(a)(b)(Data1)(Data2)(x)

* This feature may not be available for all models.

* Data2 only supports Hex values that are multiples of 5.

* The range of minimum brightness value cannot exceed the range of maximum brightness, and the range of maximum brightness value cannot be less than the range of minimum brightness.

111. [Color Calibration] (Command: s n, d6)

Selects Color Calibration.

Transmission

(s)(n)()(Set ID)()(d)(6)()(Data)(Cr)

Data 00: Off

01: On

Acknowledgement

(n)()(Set ID)()(OK/NG)(d)(6)(Data)(x)

* It may not be supported depending on the model.

112. [Quiet Mode] (Command: s n, c7)

Selects Quiet Mode.

Transmission

(s)(n)()(Set ID)()(c)(7)()(Data)(Cr)

Data 00: Off

01: On

Acknowledgement

(n)()(Set ID)()(OK/NG)(c)(7)(Data)(x)

* It may not be supported depending on the model.

