

QUADHD84

User Manual
Portrait

020-000714-01

Important Precautions

Please read these safety precautions carefully before using the display.



Warning

Failure to follow those warnings may result in death, serious injury or damage to the display or other property.



Electrical Power Related Precautions



Warning

- **Use only the power cord supplied with the unit or another manufacturer's authorized cord.**
 - Failure to do so may result in fire or electrical shock or damage to the display.
- **Use only a properly grounded plug and receptacle.**
 - If you do not, you may be electrocuted or injured. Or the display might be damaged.
- **Do not use a damaged or loose plug.**
 - This may cause electrical shock or fire.
- **Operate the display only from a power source (i.e. voltage) indicated in the product specification.**
 - Otherwise, the display can be damaged, fire can occur or you may be electrocuted. If you are not sure what type of power supply you have, consult a certified electrician.
- **In the presence of thunder and lightning, never touch the power cord and signal cable because it can be very dangerous.**
 - It can cause electric shock.
- **Do not connect several extension cords, electrical appliances or electrical heaters to a single outlet. Use a power bar with a grounding terminal designed for exclusive use with the display.**
 - A fire can break out due to overheating.
- **Do not touch the power plug with wet hands. Additionally, if the cord pin is wet or covered with dust, dry the power plug completely or wipe dust off before plugging in the cord.**
 - You may be electrocuted due to excess moisture.
- **If you do not intend to use the display for a long time, unplug the power cord from the display.**
 - Covering dust can cause a fire, or insulation deterioration can cause electric leakage, electric shock or fire.
- **Insert the power plug firmly so it cannot come loose.**
 - A loose connection can cause fire. Hold the plug when pulling out the power cord.
- **Do not pull the plug out by the wire. Do not bend the power cord with excessive force or put heavy objects on the power cord.**
 - The power line can be damaged, which may cause electric shock or fire.
- **Do not insert metal or other conductive materials into the display openings. Additionally, do not touch the power cord right after plugging the cable into the wall input terminal.**
 - You may be electrocuted.
- **The power supply cord is used as the main disconnection device. The socket-outlet shall be installed near the equipment and shall be easily accessible.**
- **Do not unplug the power cord while the display is in use.**
 - Electrical shock can damage the product.
- **As long as this unit is connected to the AC wall outlet, it is not disconnected from the AC power source even if the unit is turned off.**

Important Precautions

Precautions in Installing the Display

Warning

- **Keep away from heat sources like heaters or open flames.**
 - Electrical shock, fire, malfunction or deformation may occur.
- **Keep the packing anti-moisture material or vinyl packing out of the reach of children.**
 - Anti-moisture material is harmful if swallowed. If swallowed by mistake, force the patient to vomit and visit the nearest hospital. Additionally, vinyl packing can cause suffocation. Keep it out of the reach of children.
- **Do not put heavy objects on the display or sit upon it.**
 - If the display collapses or is dropped, you may be injured. Children must pay particular attention.
- **Do not leave the power or signal cable where someone can trip over it.**
 - The passerby can falter, which can cause electrical shock, fire, display breakdown, or injury.
- **Install the display in a neat and dry place. Do not use near water.**
 - Dust or moisture can cause electrical shock, fire, or display damage.
- **Do not add accessories that have not been designed for this display.**
- **If you smell smoke or other odors or hear a strange sound from the display, unplug the power cord and contact Customer Service.**
 - If you continue to use without taking proper measures, electrical shock or fire can occur.
- **If you dropped the display or the case is broken, turn off the display and unplug the power cord.**
 - If you continue to use without taking proper measures, electrical shock or fire can occur. Contact Customer Service.
- **Do not drop an object on or apply impact to the display. Do not throw any toys or objects at the display.**
 - It can cause injury to humans, problems to the display, and damage the display.
- **Keep out of reach of children and do not place toys near the display.**
- **Make sure the display ventilation hole is not blocked. Install the display more than 10cm away from the wall.**
 - If you install the display too close to the wall, it may be deformed or fire can break out due to internal heat build-up.
- **Do not cover the display with cloth or other material (eg. plastic) while plugged in.**
 - The display can be deformed or fire can break out due to internal overheating.
- **Place the display on a flat and stable surface that is large enough to support the display.**
 - If the display is dropped, you may be injured or the display may be broken.
- **Install the display where no Electromagnetic Interference occurs.**
- **Keep the display away from direct sunlight.**
 - The display can be damaged.
- **Do not place the display on the floor.**
 - Small children and others may trip over it.

Important Precautions

● Precautions in Moving the Display

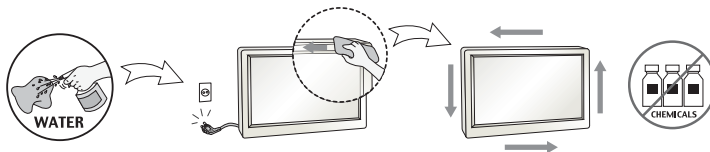
⚠ Warning

- **Make sure to turn off the display.**
 - You may be electrocuted or the display can be damaged.
- **Make sure to remove all cables before moving the display.**
 - You may be electrocuted or the display can be damaged.
- **Do not shock the display when moving it.**
 - You may be electrocuted or the display can be damaged.
- **Make sure the display faces forward and hold it with both hands to move.**
 - If you drop the display, the damaged display can cause electric shock or fire.
- **Do not place the display face down.**
 - This may damage the display.

● Precautions in Using/Cleaning the Display

⚠ Warning

- **Do not attempt to disassemble, repair, or modify the display yourself.**
 - Fire or electric shock can occur.
 - Contact Customer Service for repair.
- **When cleaning the display, unplug the power cord and scrub gently with a soft cloth to prevent scratching. Do not clean with a wet cloth or spray water or other liquids directly onto the display. An electric shock may occur. (Do not use chemicals such as benzene, paint thinners, or alcohol)**
- **Keep the display away from water.**
 - Fire or electric shock accident can occur.
- **Avoid high temperatures and humidity.**
- **Do not put or store flammable substances near the display.**
 - There is a danger of explosion or fire.
- **Keep the display clean at all times.**
- **Do not press on the display with a hand or sharp object such as nail, pencil or pen, or make a scratch on it.**
- **Keep proper distance from the display and rest from time-to-time.**
 - Your vision may be impaired if you look at the display too closely or for too long.
- **Keep small accessories out of the reach of children.**
- **Leaving a fixed image on the display for a long time may cause damage to the display and cause image retention. Make sure to use a screen saver on the display. Burn-in and related problems are not covered by the warranty on this display.**
- **Spray water onto a soft cloth 2 to 4 times, and use it to clean the front frame; wipe in one direction only. Too much moisture may cause staining.**



Important Precautions

● On Disposal (Only, Hg lamp used Display)

- The fluorescent lamp used in this display contains a small amount of mercury.
- Do not dispose of this display with general household waste.
- Disposal of this display must be carried out in accordance to the regulations of your local authority.

● Precautions for Image Sticking

To optimize display lifetime and function, pay attention on the following operation usages:

■ Normal operating condition

- Operating Temperature: 0°C to 35°C
- Operating Ambient Humidity: 20% to 90%
- Display Pattern: dynamic pattern (real display)

Note: Long-term static display can cause image sticking.

■ Operating usages under abnormal condition

- a. Ambient condition
 - Well-ventilated place is recommended to set up the system.
- b. Power and screen saver
 - Periodical power-off or screen saver is needed after long-term display.

■ Operating usages to protect against image sticking due to long-term static display

- a. Suitable operating time
 - Under 18 hours a day.
- b. Static information display recommended to use with moving image
 - Cycling display between 5 minutes information (static) display and 10 seconds moving image.
- c. Background and character (image) color change
 - Use different colors for background and character, respectively.
 - Change colors themselves periodically.
- d. Avoid combination of background and character with large different luminance

Note:

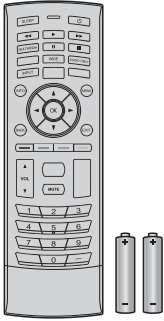
- 1) Abnormal condition just means conditions except normal condition.
- 2) Black image or moving image is strongly recommended as a screen saver.

Accessories

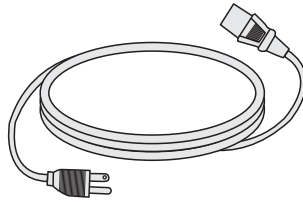
● Included Accessories

Thank you for your purchase. Ensure that the following accessories are included with your display. If an accessory is missing, please contact the dealer where you purchased the display.

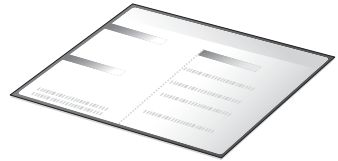
❖ The accessories included may differ from the images shown below.



Remote Control &
Batteries (AAA × 2)



Power Cord

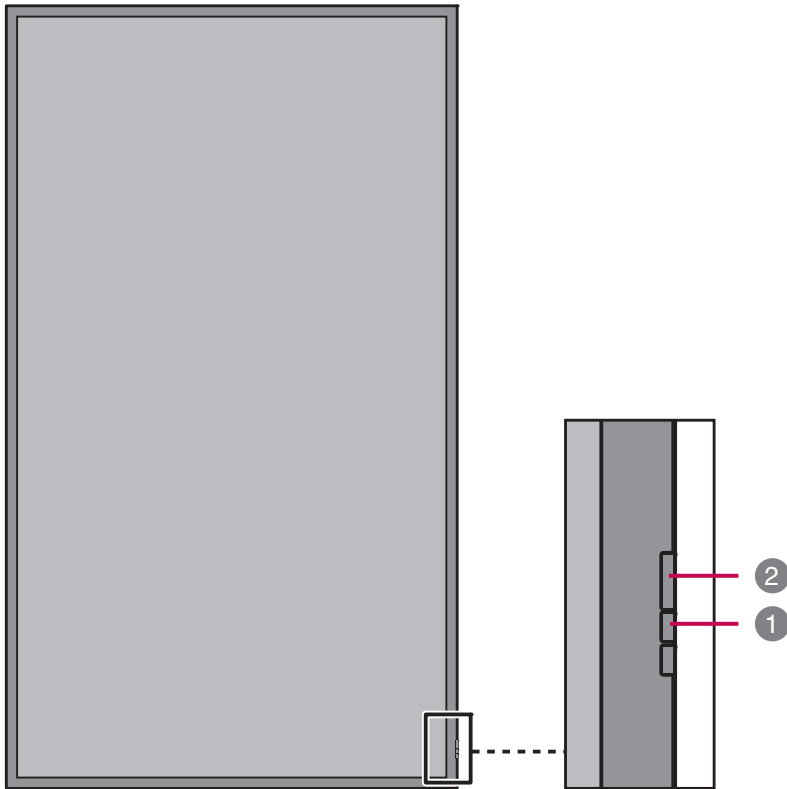


Quick Start Guide

Name and Function of the Parts

* The image shown in the user's guide could be different from the actual image.

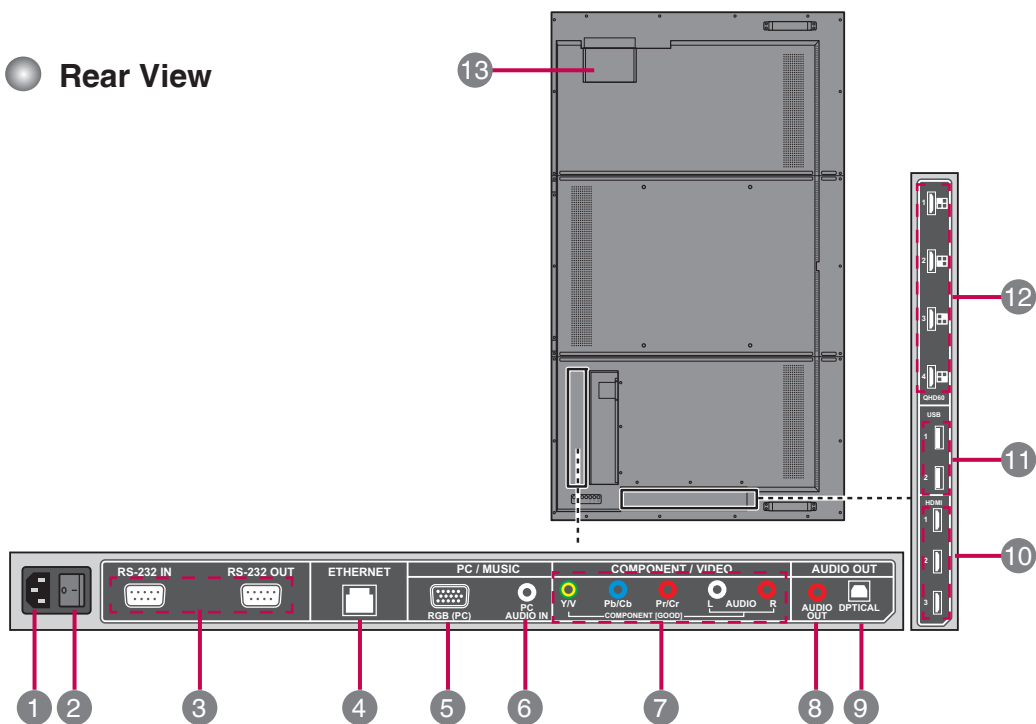
● Front View



No.	Item	Description
1	Power indicator	Indicate power on or sleep mode status. - Power on: LED lights up. - Power off: LED off.
2	IR Receiver	Receive incoming remote control commands.

Name and Function of the Parts

Rear View



No.	Item	Description
1	AC Power Input Connector	Connect the power cord.
2	AC Switch	Switch the power supply on/off.
3	RS-232C Serial Ports	Connect several displays with serial port.
4	Ethernet Port	Connect to a local area network (LAN) using an Ethernet cable.
5	RGB Port	Connect to a PC VGA port.
6	PC Audio Input Port	Connect to a PC's line / audio port.
7	Component/Video Input Ports	Connect to an external device, such as a VCR, STB, or a DVD player.
8	Stereo Audio Line Out	Connect an external audio system or headphones.

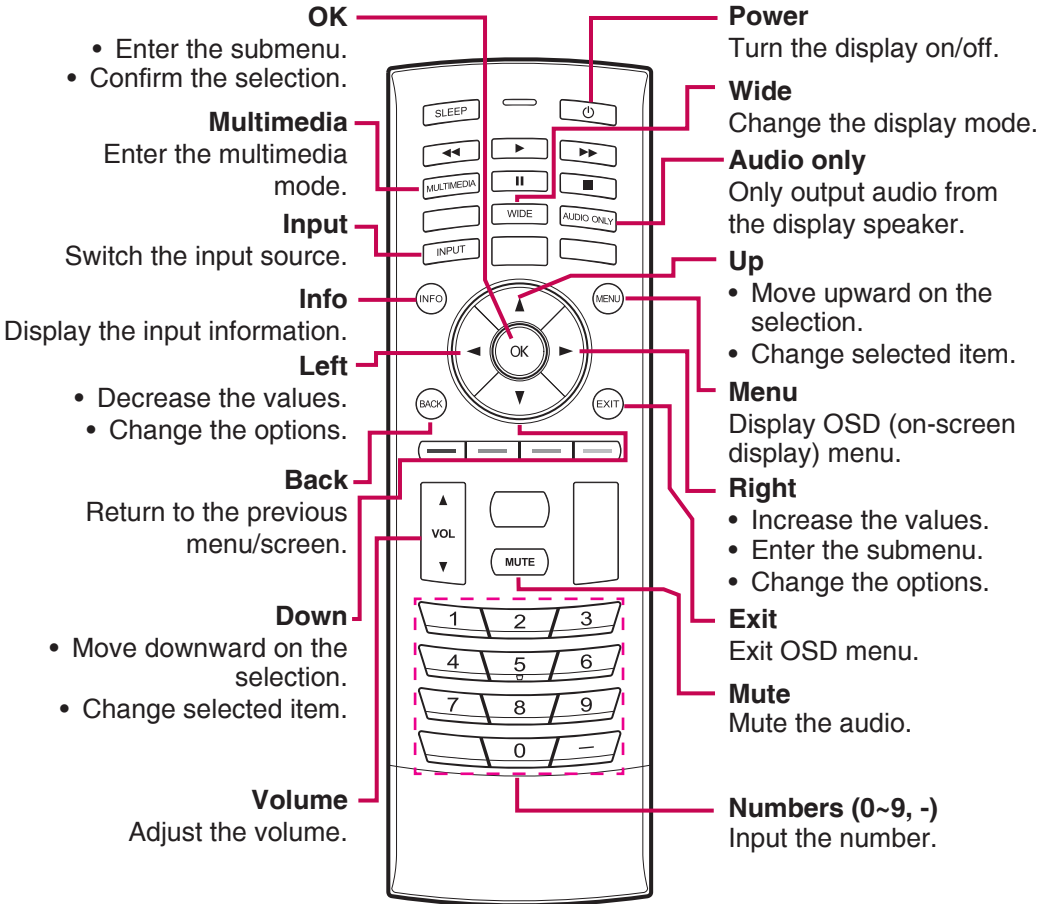
Name and Function of the Parts

● Rear View (continue)

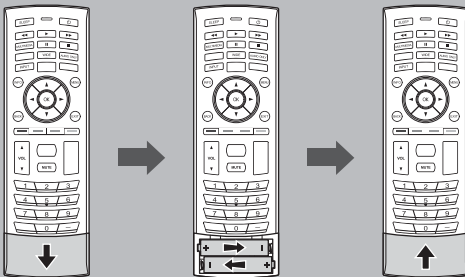
No.	Item	Description
9	Optical Audio Out	Connect an audio amplifier.
10	HDMI Ports	Connect an HDMI equipment or an HDMI-DVI adapter cable to devices such as a DVD player or set-top box. ❖ HDMI Supports High Definition input and HDCP (High-bandwidth Digital Content Protection). Some devices require HDCP in order to display HD signals.
11	USB Ports	Connect to a USB device such as a USB flash drive or USB hard disk drive.
12	QHD60 Ports	Connect an HDMI equipment such as a computer, camcorder, or multimedia player which are able to output 4x HDMI with individually 1080p@60Hz resolution and compose to a QHD@60Hz resolution.
13	OPS Module Slot	Connect an OPS module device.

Using the Remote Control

● Name of the Remote Control Buttons



● Installing Batteries into the Remote Control



- 1. Open the battery cover.**
- 2. Install the batteries matching the correct polarity.**
 - Install two 1.5V AA batteries.
- 3. Close the battery cover.**
 - Dispose the used batteries in the recycle bin to prevent environmental pollution.

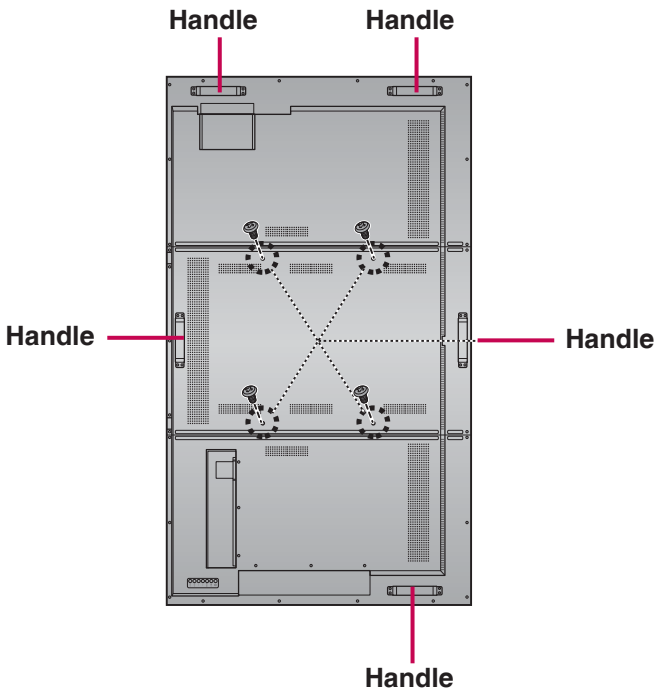
Mounting on a Wall

● VESA FDMI Wall Mounting

This display supports a VESA FDMI compliant mounting interface. These mounts are purchased separately. Refer to the instructions included with the wall mount for more information.

❖ The handles are designed for carrying.

VESA-compatible wall bracket (WxH)	Screw type	Mount holes number
600 x 400 mm	M8	4



● Mounting the display

You can install the display on a vertical surface with a suitable wall mounting bracket or on a horizontal surface with a table stand. Please pay attention to the following notes during installation:

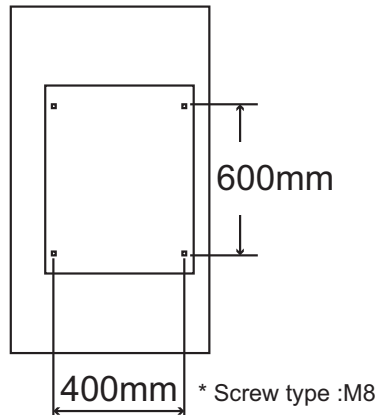
❖ This display should be installed by at least two adult persons. Attempting to install this display by only one person may result in danger and injuries.

❖ Refer the installation to qualified technicians. Improper installation may cause the display to fall or malfunction.

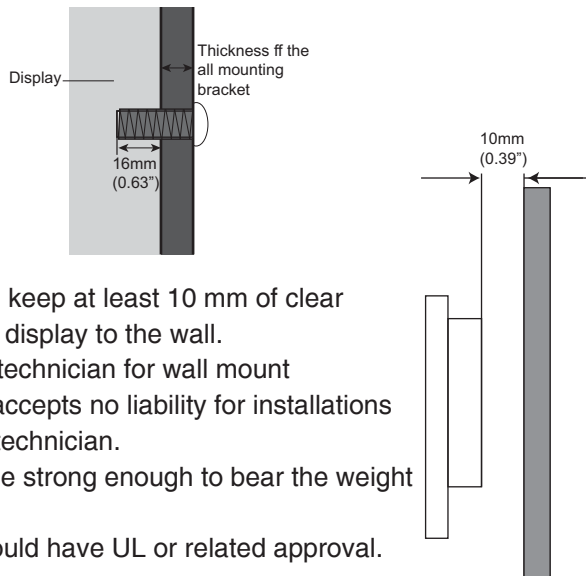
Mounting on a Wall

● Installing the display on a wall

1. Place a clean, dry and lint-free cloth on a flat, horizontal and object-free surface. Make sure that the size of the cloth is larger than the display.
2. Gently lay the display on the cloth with the LCD screen facing down.
3. Identify the wall mounting screw holes on the back of the display as shown in the illustration.



4. Install the wall mounting bracket on the display and attach the display to the wall according to the mounting bracket's instructions. The length of the screw should exceed the thickness of the wall mounting bracket by at least 16 mm. Make sure that all screws are tightened and secured properly. (Recommended torque: 470 – 635N-cm). The mounting means should be strong enough to bear the weight of the display.



Note:

- ❖ To maintain proper ventilation, keep at least 10 mm of clear space from the back cover of the display to the wall.
- ❖ Please consult a professional technician for wall mount installations. The manufacturer accepts no liability for installations not performed by a professional technician.
- ❖ The mounting means should be strong enough to bear the weight of the display.
- ❖ The wall mounting bracket should have UL or related approval.

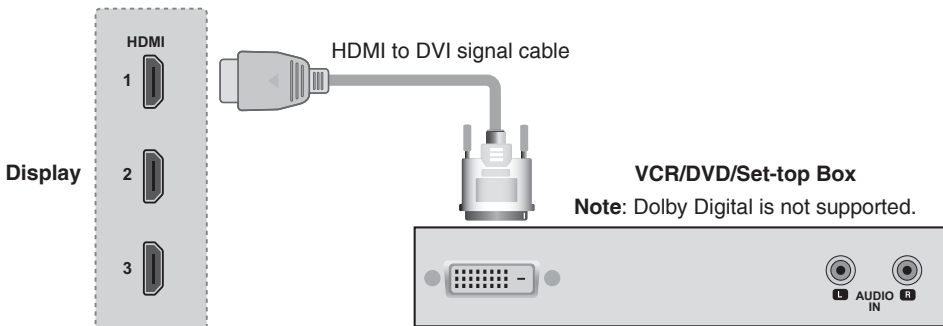
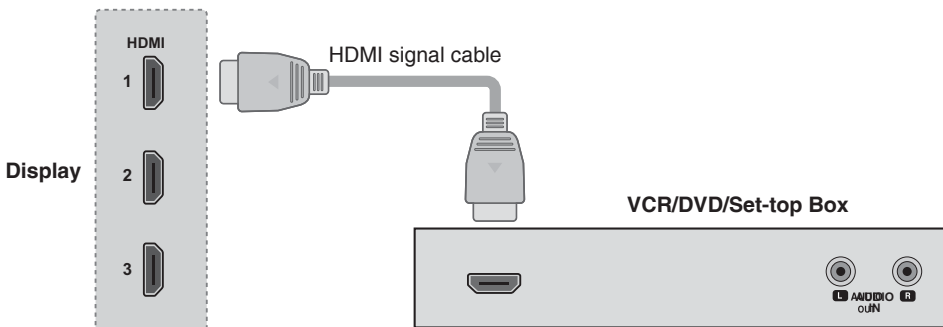
Connecting to External Devices

Recommended Connection, Resolution & Picture Mode

HDMI Connection, 3840 x 2160@30Hz, dynamic

● HDMI Connection (480p, 576p, 720p, 1080i, 1080p, UHD@24Hz/30Hz)

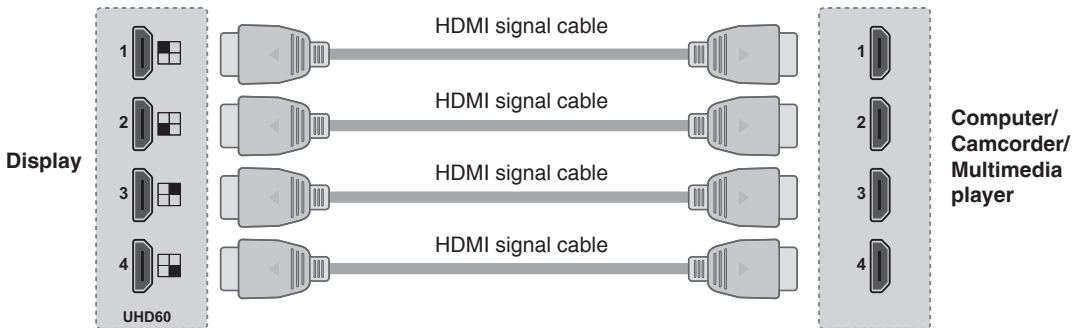
HDMI supports ultra high definition (UHD) input, high definition input, and HDCP (High-bandwidth Digital Content Protection). Some devices require HDCP in order to display HD signals.



Connecting to External Devices

● HDMI-QHD60 Connection (3840 x 2160 @60Hz)

Four HDMI ports form a UHD 60Hz. Each connection transmits 1080P @60Hz.



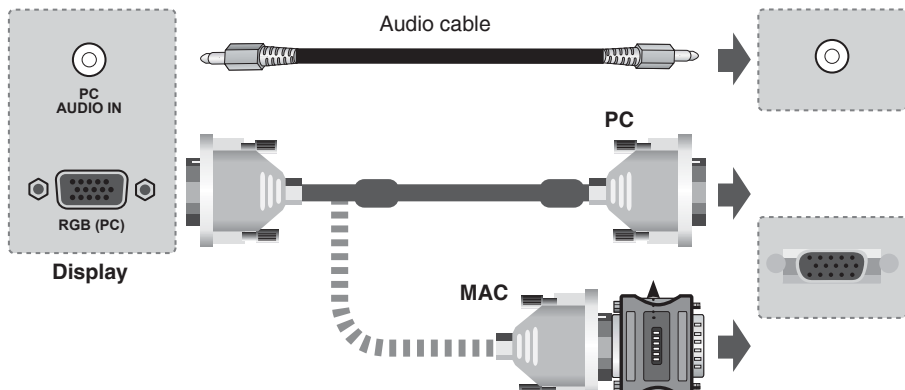
● PC Connection

Check that the computer, display, and the peripherals are turned off. Then, connect the signal input cable.

A. Connecting with an HDMI Signal Input Cable



B. Connecting with a D-sub(VGA) Signal Input Cable



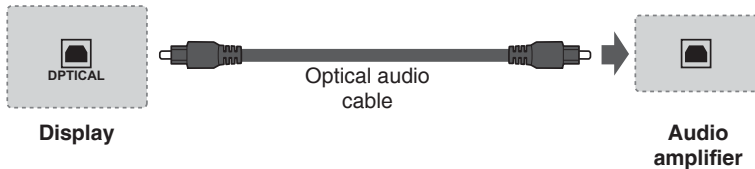
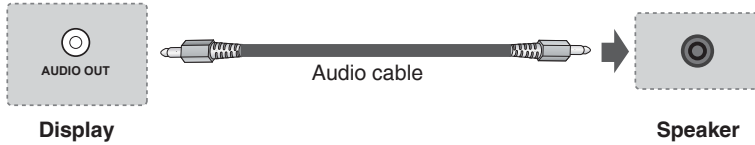
Macintosh Adapter

Use only the standard Macintosh adapter.

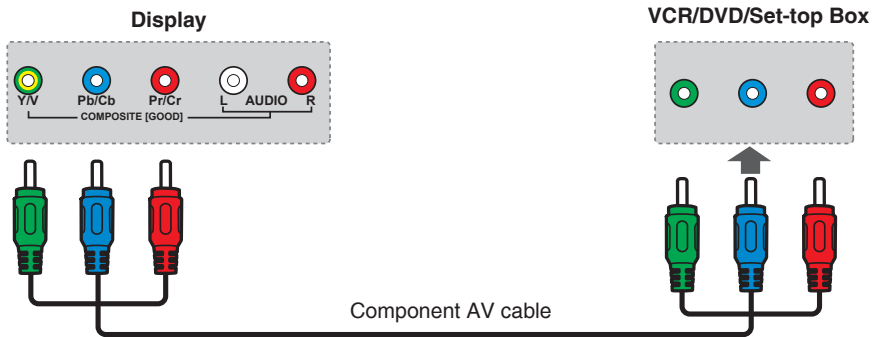
Do not use other adapter type that is compatible with different signaling system.

Connecting to External Devices

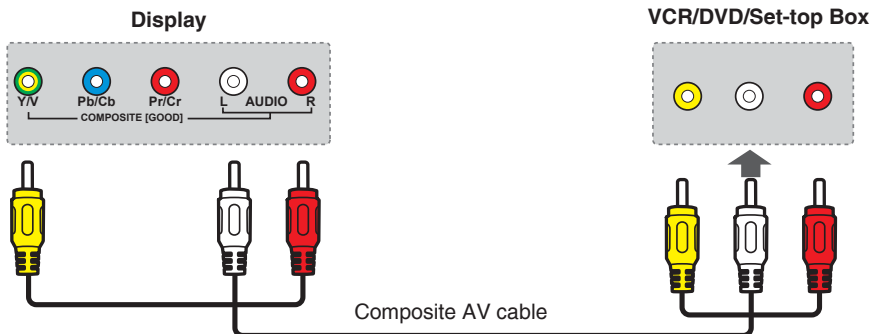
● Audio Out Connection



● Component Connection

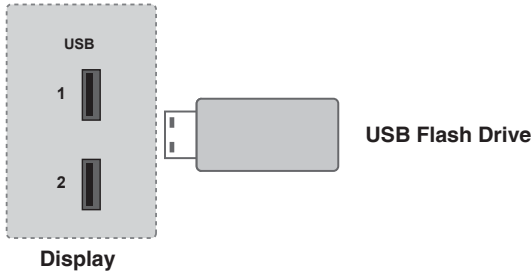


● Composite (Video) Connection

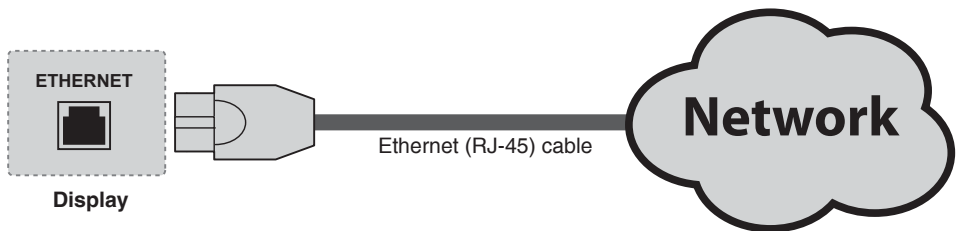


Connecting to External Devices

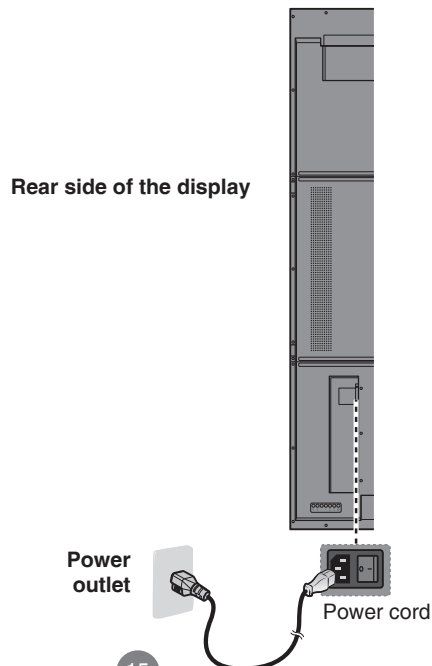
● USB Connection



● Ethernet Connection

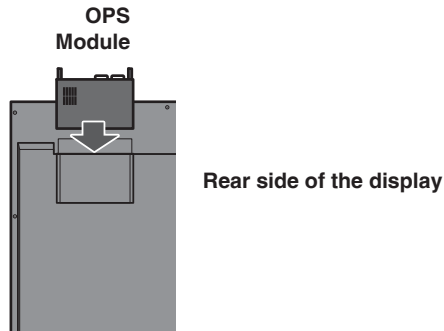


● Power Connection



Connecting to External Devices

● Installing OPS Module (Optional)



Note



- Refer to the instructions included with the OPS Module for more information.
- Video interface supported is DVI and maximum resolution is 1080P
- DisplayPort is not supported
- Maximum power provide for OPS is 80W

Digital Signage Open Pluggable Specification

Open Pluggable Specification (OPS) for Digital Signage

Highlights

- Enables easier installation, use and maintenance of digital signs.
- Makes digital signage devices more intelligent and connected.

Overview

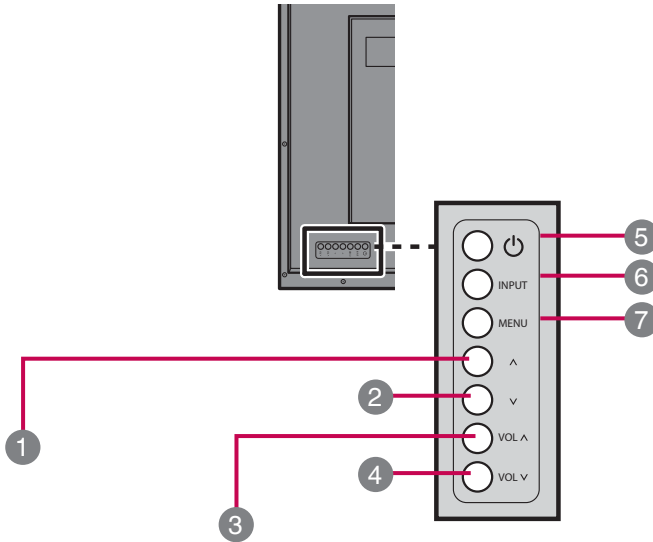
The open pluggable specification (OPS) helps standardize the design and development of digital signage devices and pluggable media players. Intel created OPS to address digital signage market fragmentation and simplify device installation, usage, maintenance and upgrades.

OPS enables digital signage manufacturers to deploy interchangeable systems faster.

Installing digital signage equipment based on Intel® architecture helps implement scalable digital signage applications that can network easily with other equipment. This simplifies interoperability and application upgrades designed to meet the digital signage requirements of individual customers, while helping to future-proof technology investments.

OSD Menu

● Screen Adjustment Options (using the Control Panel)



No.	Item	Description
1	Up	Select menu item (move up).
2	Down	Select menu item (move down).
3	Volume Up	- Increase the volume level. - Adjust the settings (increase the value).
4	Volume Down	- Decrease the volume level. - Adjust the settings (decrease the value).
5	Power	Turn the display on/off.
6	Input	Switch the input source.
7	Menu	Display/hide the OSD (on-screen display) menu or return to the previous menu.

OSD Menus

● Menu Options



Menu	Description
Input	Select the input source.
Picture	Adjust and refine the picture displayed on your display based on ambient room light and personal preferences.
Audio	Adjust the audio settings.
Setup	Adjust the general settings such as CEI setting, OSD language, and etc.
Ethernet	Configure the network settings.
Wide	Select how the picture displays on the screen.
Sleep Timer	Set the timer to turn the display off at the preset time.

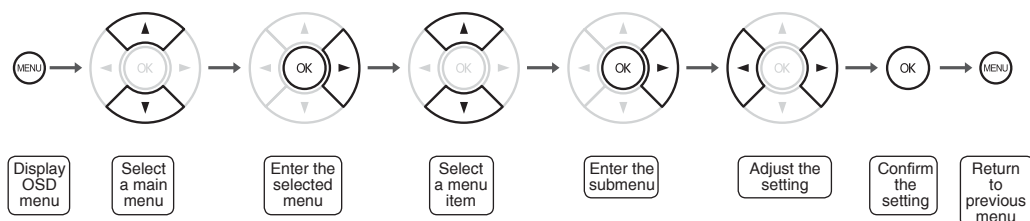
Note

OSD (On Screen Display)

The OSD function enables you to adjust the screen status conveniently since it provides graphical presentation.

OSD Menu

● Adjusting On-Screen Display (OSD) Settings



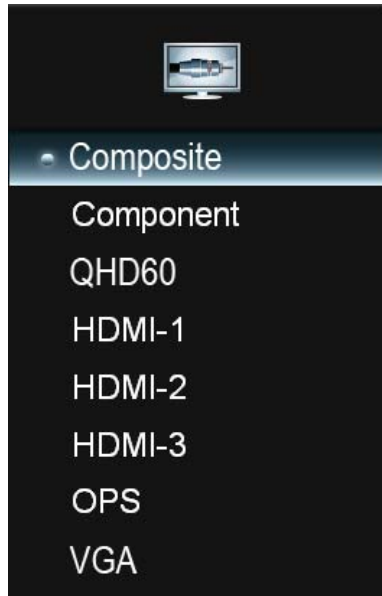
(*operation using the remote control)

- 1 Press the **MENU** button to display the OSD menu.
- 2 Use the ▲/▼ button to select the main menu.
- 3 Press the **OK** or ► button to enter the selected menu screen.
- 4 Use the ▲/▼ button to select the menu item.
- 5 Press the **OK** or ► button to enter the submenu.
- 6 Use the ◀/▶ button to adjust the setting/select the option.
- 7 Use the **OK** button to confirm the setting.
- 8 Press the **MENU** button to return to the previous menu/exit the OSD menu.

OSD Menu

● Input Menu

Select the proper input source.



Note



- You can also access the Input menu by pressing the **INPUT** button on the remote control.
- The available menu options varies depending on the input source.
- If the menu items are appears in gray, this indicates that those functions are not available.

OSD Menu


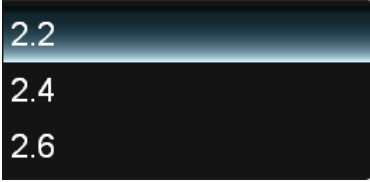

● Picture Menu

Picture Mode	Cinema
Gamma	2.2
Backlight	 85
Contrast	 80
Brightness	 50
Color	 60
Tint	 0
Sharpness	 8
Size & Position	
Color Temperature	
Advanced Picture	
Reset Picture Mode	

Menu Option	Description
Picture Mode	<p>Select a preset view option optimized for different viewing conditions.</p> <div data-bbox="511 1143 869 1481" data-label="Image"> </div> <ul style="list-style-type: none"> • Custom: User can use the user-defined settings as they wish. • Cinema: This mode is normally used in movie. Soft image can be seen in this mode. The picture is somewhat darker than other mode.

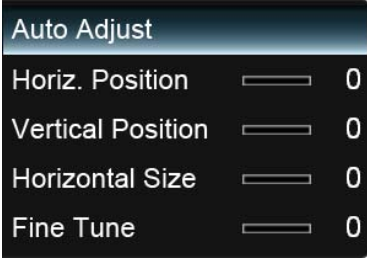
OSD Menu

● Picture Menu (continue)

Menu Option	Description
Picture Mode	<ul style="list-style-type: none"> • Nature: This mode shows normal and natural image. • Sports: This mode uses high contrast display for clear-cut images ideal for viewing sports events. • Dynamic: This mode is normally used in department store, Backlight and Sharpness is set to its maximum value. Saturation of Color becomes high. You can see very bright, clear, and sharp image. • Game: This mode increases the brightness and response time level for enjoying video games. <p>Note  “Picture Mode” option is not available if the input source is PC.</p>
Gamma	<p>Select the appropriate setting of dark scenery. With greater gamma value, dark scenery looks brighter.</p> 
Backlight	Adjust the backlight that affects the overall brilliance of the picture.
Contrast	Adjust the difference between the light and dark levels in the picture.
Brightness	Adjust the brightness setting.
Color	Adjust the color intensity of the picture.
Tint	Adjust the picture hue.
Sharpness	<p>Adjust the sharpness of the edges of elements in the picture.</p> <p>Note  “Sharpness” option is not available if the input source is PC.</p>

OSD Menu

● Picture Menu (continue)

Menu Option	Description
Size & Position	<p>Adjust the display settings.</p>  <ul style="list-style-type: none">• Auto Adjust: Synchronize the display automatically.• Horiz. Position: Move the screen position horizontally.• Vertical Position: Move the screen position vertically.• Horizontal Size: Set the horizontal size of the screen.• Vertical Size: Set the vertical size of the screen.• Fine Tune: Adjust the focus of the display. This item allows you to remove any horizontal noise and clear or sharpen the image of characters.

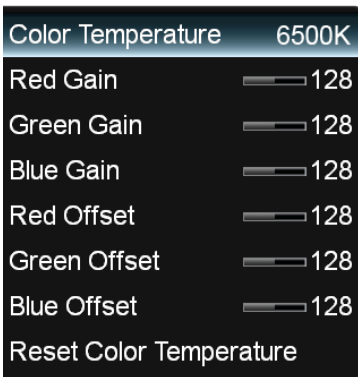
Note



- “**Size & Position**” menu is not available if the input source is HDMI-QHD60.
- The available menu options varies depending on the input source.


OSD Menus

● Picture Menu (continue)

Menu Option	Description
Color Temperature	<p>Adjust the color settings.</p>  <p>The screenshot shows a dark OSD menu with the following items: Color Temperature (6500K), Red Gain (128), Green Gain (128), Blue Gain (128), Red Offset (128), Green Offset (128), Blue Offset (128), and a Reset Color Temperature option.</p> <ul style="list-style-type: none">• Color Temperature: Select from the predetermined color temperatures.• Red Gain / Green Gain / Blue Gain: Adjust the red / green / blue gain settings to your preference.• Red Offset / Green Offset / Blue Offset: Adjust the red / green / blue offset settings to your preference.• Reset Color Temperature: Reset all Color Temperature settings to the factory default settings.





OSD Menus

● Picture Menu (continue)

Menu Option	Description												
Advanced Picture	<p>Set advanced Picture settings.</p> <div data-bbox="508 465 869 807" style="border: 1px solid black; background-color: #1a1a1a; color: white; padding: 5px; margin: 10px 0;"> <table style="width: 100%; border-collapse: collapse;"> <tr><td style="padding: 2px 5px;">Dynamic Contrast</td><td style="text-align: right; padding: 2px 5px;">Off</td></tr> <tr><td style="padding: 2px 5px;">Local Dimming</td><td style="text-align: right; padding: 2px 5px;">Off</td></tr> <tr><td style="padding: 2px 5px;">MEMC</td><td style="text-align: right; padding: 2px 5px;">On</td></tr> <tr><td style="padding: 2px 5px;">Noise Reduction</td><td style="text-align: right; padding: 2px 5px;">Off</td></tr> <tr><td style="padding: 2px 5px;">Digital NR</td><td style="text-align: right; padding: 2px 5px;">Off</td></tr> <tr><td style="padding: 2px 5px;">Film Mode</td><td style="text-align: right; padding: 2px 5px;">Off</td></tr> </table> </div> <ul style="list-style-type: none"> • Dynamic Contrast: Adjust the brightness of the display to maximize the picture quality. • Local Dimming: Reduce the leakage and produce a darker picture. • MEMC: Reduce motion blur effect. • Noise Reduction: Reduce the noise level. • Digital NR: Reduce the noise level of digital signals. • Film Mode: Produce smoother motion picture when viewing movies from video players connected via HDMI. <div style="background-color: #f0f0f0; padding: 10px; margin-top: 10px;"> <p>Note  • “Advanced Picture” option is not available if the input source is PC.</p> <p>• Only “Local Dimming” and “MEMC” options are available if the input source is HDMI-UHD60.</p> </div>	Dynamic Contrast	Off	Local Dimming	Off	MEMC	On	Noise Reduction	Off	Digital NR	Off	Film Mode	Off
Dynamic Contrast	Off												
Local Dimming	Off												
MEMC	On												
Noise Reduction	Off												
Digital NR	Off												
Film Mode	Off												
Reset Picture Settings	<p>Reset all Picture settings to the factory default settings.</p> <div data-bbox="418 1340 965 1591" style="border: 1px solid black; background-color: #1a1a1a; color: white; padding: 10px; margin: 10px 0; text-align: center;"> <p>Do you wish to RESET Picture Settings to default?</p> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> OK Cancel </div> </div> <p>Select OK to reset all settings.</p>												

OSD Menu

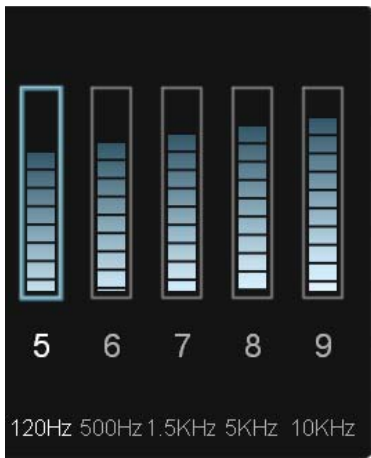
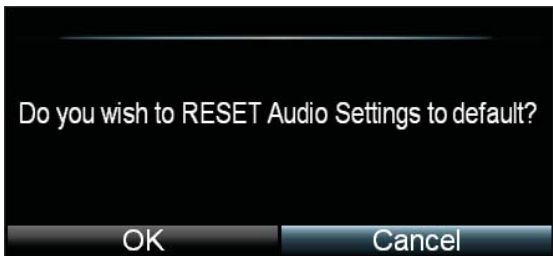
● Audio Menu

XinemaSound™ 3D	Off
XinemaSound™ Leveler	Off
Bass	 8
Treble	 7
Balance	 2
Lip Sync	 2
Speakers	Off
Audio Only	
Digital Audio Out	Off
Analog Audio Out	Fixed
Equalizer Settings	
Reset Audio Mode	

Menu Option	Description
XinemaSound™ 3D	Enable/Disable the multi-dimensional surrounding sound function.
XinemaSound™ Leveler	Enable/Disable the smooth and steady volume level function.
Bass	Adjust the bass level to your preference.
Treble	Adjust the treble level to your preference.
Balance	Adjust the sound balance between the left and right speakers.
Lip Sync	Adjust to match the movements and the lips of the person talking on the screen.
Speakers	Turn the built-in speakers on or off.

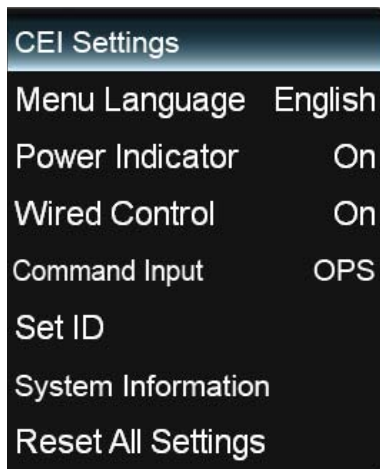
OSD Menu

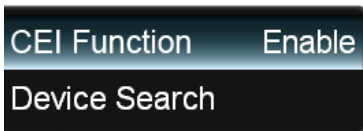

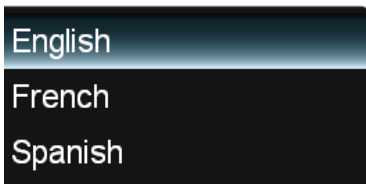
● Audio Menu (continue)

Menu Option	Description
Audio Only	Output audio from the speakers but turn off the display.
Digital Audio Out	Select the type of digital audio output to an external audio system.
Analog Audio Out	Select the analog audio mode.
Equalizer Settings	<p>Customize the equalizer settings.</p>  <p>To adjust the settings, do the following:</p> <ol style="list-style-type: none"> Press the ◀/▶ button to select the option and select OK to enter the submenu. Press the ▲/▼ button to adjust the setting.
Reset Audio Settings	<p>Reset all Audio settings to the factory default settings.</p>  <p>Select OK to reset all settings.</p>

OSD Menu


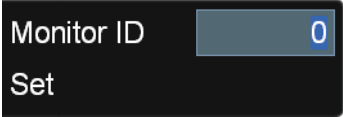
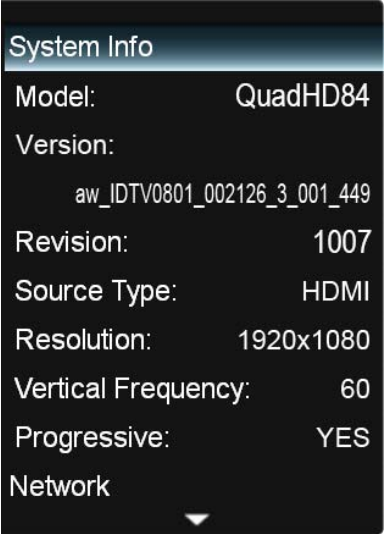
● Setup Menu



Menu Option	Description
CEI Settings	<p>Configure CEI settings.</p>  <ul style="list-style-type: none"> • CEI Function: Enable/Disable CEI function. • Device Search: Search for CEI devices. <p>Note  “Device Search” option is only available if CEI function is enabled.</p>
Menu Language	<p>Select the on-screen menu language.</p> 
Power Indicator	<p>Enable or disable the power indicator on the front of the display when the display is turned on.</p>

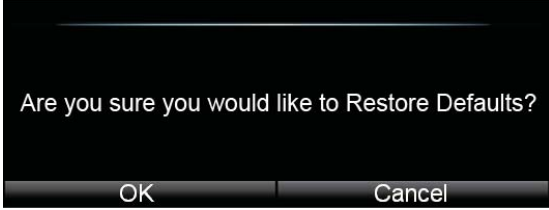
OSD Menus

● Setup Menu (continue)

Menu Option	Description
Wired Control	Specify the type of network connection.
Command Input	Input source of Command Input via RS232 or OPS. 
Set ID	Assign a unique Set ID NO (name assignment) to each display when several displays are connected (via RS-232C) for display.  <p>Enter the ID number and select Set to confirm the setting.</p>
System Information	Display the system information of the display.  <p>Select System Information to view the system information.</p>

OSD Menus


● Setup Menu (continue)

Menu Option	Description
Reset All Settings	<p>Return the display parameters on all menus to the factory default settings.</p>  <p>Select OK to reset all settings.</p>

OSD Menus

● Ethernet Menu

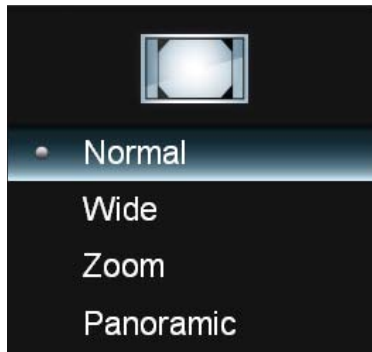


Menu Option	Description
Manual Setup	<p>Configure the network settings.</p> <div data-bbox="527 627 892 1028" data-label="Image"> <p>The screenshot shows a dark interface with a 'Type' dropdown menu set to 'Static IP'. Below it are five rows of input fields for IP Address, Subnet Mask, Def. Gateway, Pref. DNS, and Alt. DNS, each containing four '0' characters. At the bottom is a 'Connect' button.</p> </div> <ul style="list-style-type: none"> • Type: User can use the user-defined settings as they wish. • IP Address / Subnet Mask / Def. Gateway / Pref. DNS / Alt. DNS: Enter the respective network parameters. • Connect: Verify the network connection. <div data-bbox="346 1204 1082 1307" data-label="Text"> <p>Note  Check with your Information Technology Provider for the correct setting.</p> <ul style="list-style-type: none"> • Be sure the RJ-45 cable is properly connected. </div>

OSD Menu

● Wide Menu

Select how the picture displays on the screen. As you select an option, you will see the screen adjusting to the different size.



Note

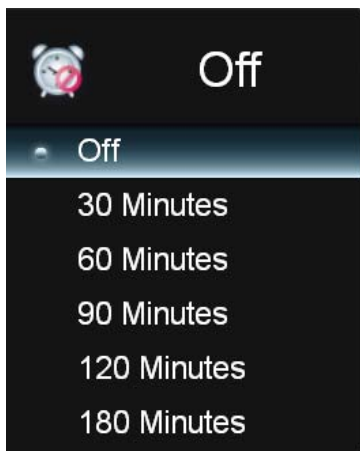


- The available menu options varies depending on the input source.
- “Wide” menu is not available if the input source is 4k2k.
- The option is either “Panoramic” or “Stretch” depend on input screen format:
 - Panoramic: Standard screen format (ex. 4:3)
 - Stretch: Wide screen format (ex. 16:9)

OSD Menus

● Sleep Timer

Set the timer to turn the display off at the preset time.



Note You can also access the Sleep Timer menu by pressing the **SLEEP** button on the remote control.



Multimedia Mode

Multimedia Menu

This display is equipped with USB port that enables you to view photos, listen to music, or watch videos stored on a USB storage device.

Multimedia support format

Container	Extensions	Audio/Video
ASF	.asf	Video
	.wmv	
AVI/DivX	.avi	Video/Audio
MPEG-2 PS (Program Stream), VOB, SVCD	.vob	Video/Audio
MP4	.mp4	
MP3	.mp3	
WAVE/WAV	.wav	Audio
JPEG	.jpeg	
	.jpg	

Note • There may be files with these extensions that do not play correctly due to Codec differences.



Basic Operation

1. Turn on the display.
2. Plug a USB device to the USB port on the display.
3. Press the **MULTIMEDIA** button on the remote control.
4. Select the USB port that you want to access and press the **OK** button.
5. Select the media type of the file you wish to play and press the **OK** button.
6. Use the **▲/▼/◀/▶** button to browse the files, folders or menu options and press the **OK** button to confirm.



Multimedia Mode

Playback Music

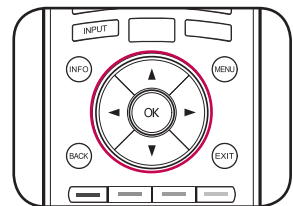
1. Select **Audio** and press the **OK** button to enter the main Music content browser.



2. In the main Music content browser, use the ▲/▼ button to select a song.

3. Press the **OK** button to play, and an automatic playback begins from the selected song.

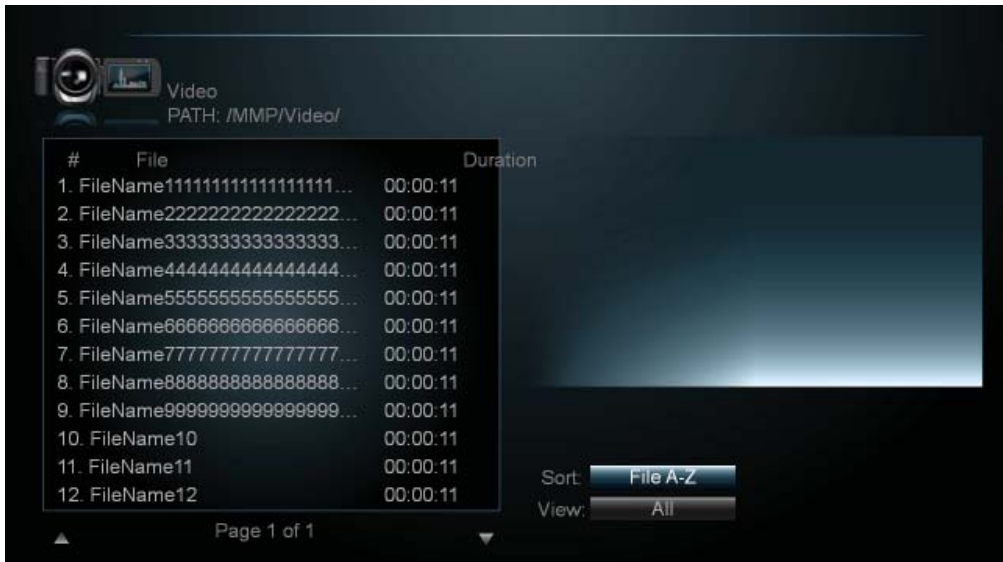
- Press the **||** icon to pause the selected song playback. Press the **▶** button to resume the playback.
- You can highlight the **▶** icon and press the **OK** button to skip to the next song.
- You can highlight the **◀** icon and press the **OK** button to skip to the previous song.
- Select **Sort** to specify the sorting method.
- Select **View** to change the type of file listing.
- Select **Browser Photos** to playback photos.



Multimedia Mode

Watching Videos

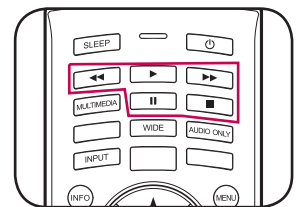
1. Select **Video** and press the **OK** button to enter the main Video content browser.



2. In the main Video content browser, use the ▲/▼ button to select a video.

3. Press the **OK** button to begin the video playback.

- Press the **||** icon to pause the selected video playback. Press the **▶** button to resume the playback.
- Press the **▶▶** button to fast-forward the video playback.
- Press the **◀◀** button to rewind the video playback.
- Press the **■** button to stop the playback.
- Select **Sort** to specify the sorting method.
- Select **View** to change the type of file listing.



Multimedia Mode

Viewing Photos

1. Select **Photo** and press the **OK** button to enter the main Photo content browser.



2. In the main Photo content browser, use the ▲/▼/◀/▶ button to select a photo.

3. Press the **OK** button to view in full screen.

4. To begin a slide show, select **Start Slideshow** and press the **OK** button. A slide show begins from the selected photo.

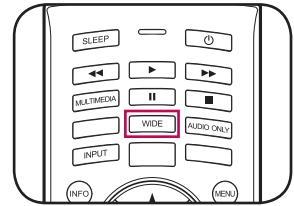
- Press the **||** button to pause the slide show, or press the **■** button to stop the slide show.
- Select **Sort** to specify the file sorting method.
- Select **View** to change the type of file listing.
- Select **Setting** to customize the slide show settings.
 - **Shuffle**: Enable/Disable the shuffle function.
 - **Speed**: Set the interval time between each slide display.
 - **Effect**: Select the transition effect between each slide displays.
- Select **Browser Music** to playback songs.



Changing Display Mode

● Set Aspect Ratio

1. Turn on the display.
2. Press the **WIDE** button on the remote control.
The Aspect Ratio menu appears on the screen.



3. Use the ▲/▼ button to select the aspect ratio of the display and press the **OK** button to confirm.

Normal



Stretch



Wide



Panoramic



Zoom



Note



- The available menu options varies depending on the input source.
- The option is either “Panoramic” or “Stretch” depend on input screen format:
 - Panoramic: Standard screen format (ex. 4:3)
 - Stretch: Wide screen format (ex. 16:9)

Troubleshooting

No image is displayed

- | | |
|--|---|
| <ul style="list-style-type: none">● Is the power cord connected?● Is the power indicator light on?● Power is on, power indicator is blue but the screen appears extremely dark.● Is the power indicator amber?● Does the 'NO SIGNAL' message appear? | <ul style="list-style-type: none">• See if the power cord is properly connected to the outlet.• See if the power switch is turned on.• Adjust brightness and contrast again.• Backlight may need repair.• If the display is in power saving mode, move the mouse or press any key.• Turn both devices off and then back on.• The signal cable between PC and display is not connected. Check the signal cable.• Press INPUT on the remote control to check the input signal. |
|--|---|

The screen image looks abnormal

- | | |
|---|---|
| <ul style="list-style-type: none">● Is the screen positioned?● Do thin lines appear in the background?● Power is on, power indicator is blue but the screen appears extremely dark. | <ul style="list-style-type: none">• D-SUB analog signal –Select Auto Adjustment in Size & Position menu to automatically select the optimal screen status that fits the current mode.• D-SUB analog signal –Select Auto Adjustment in Size & Position menu to automatically select the optimal screen status that fits the current mode. If the adjustment is not satisfactory, use the Fine Tune menu.• D-SUB analog signal —Select Auto Adjustment in Size & Position menu to automatically select the optimal screen status that fits the current mode. If the adjustment is not satisfactory, use the Fine Tune menu. |
|---|---|

Troubleshooting

After-image appears on the screen

- **After-image appears when the previous image changed.**
- If you display a fixed image for a long time, the pixels may be damaged quickly. Use the screen-saver function.

Screen color is abnormal

- **Screen has poor color resolution (16 colors).**
- **Screen color is unstable or mono-colored.**
- **Do black spots appear on the screen?**
- Set the number of color to more than 24 bits (true color). Select **Control Panel –Display–Settings–Color Table** menu in Windows.
- Check the connection status of the signal cable or re-insert the PC video card.
- Several pixels (red, green, white, or black color) may appear on the screen, which can be attributable to the unique characteristics of the LCD Panel. This is not a malfunction of the LCD.

If any of above instructions does not work, follow the instructions:

- [1] Press **MENU**. Select **Setup > Reset All Settings**.
- [2] Enter the password.
- [3] Remove the AC power cord and wait for 10 seconds.
- [4] Connect the AC power cord and turn on the display.

Specifications

The product specifications can change without prior notice for product improvement.

LCD Panel	Size	84"	
	Native Resolution	3840 x 2160	
	Aspect Ratio	16:9	
	Frame Rate	120Hz	
	Brightness	500 nits	
	Contrast Ratio	1400:1 (Typical)	
	Response Time	5ms (Typical)	
	Display Color	1.06 Billion	
Power	Input Voltage	100 ~ 240Vac	
	Input Frequency	50/60 Hz	
	Power Consumption (Max)	On	550W
		Standby	≤ 3W
		Controllable Standby	≤ 15W
Dimensions & Weight	Dimensions (Width x Height x Depth)		
	84" Landscape:1919.2mmX1105.2mmX67mm		
	84" Portrait:1105.2mmX1919.2mmX67mm		
	Net Weight		
		74.0kg +/- 2kg (without stand)	
Video Signal	Maximum Resolution	RGB: 1920 x 1080 @60 Hz	
		Single HDMI: 3840 x 2160 @23.98/24/25/29.97/30Hz 4x HDMI: 3840 x 2160 @50/60Hz Component: 1920 x 1080 I @50Hz Composite: 480i (NTSC)	
Supported Color Format	4K2K@30Hz / 4K2K@25Hz / 4K2K@24Hz: Up to RGB 4:4:4: 8 bit		
	≤ 1080P or 4K2K@50Hz / 4K2K@60Hz: Up to RGB 4:4:4 12 bit		
Input Connector	HDMI, HDMI QHD60, RGB (VGA), RS-232C, RJ-45, Component/ Composite		
Environmental Conditions	Operational Condition	Temperature: 0°C to 35°C, Humidity: 20% to 90%	
	Storage Condition	Temperature: -20°C to 60°C, Humidity: 10% to 90%	

Specifications

● PC Mode (RGB) – Preset Mode

Mode No.	Resolution	Refresh rate
1	720 x 400	70Hz
2	640 x 480	60Hz
3	640 x 480	75Hz
4	800 x 600	60Hz
5	800 x 600	72Hz
6	800 x 600	75Hz
7	1024 x 768	60Hz
8	1024 x 768	70Hz
9	1024 x 768	75Hz
10	1280 x 1024	60Hz
11	1280 x 1024	75Hz
12	1920 x 1080	60Hz

● HDMI – Preset Mode

Single HDMI		
Mode No.	Resolution	Refresh rate
1	640 x 480 P	60Hz 4:3
2	720 x 480 P	59.94Hz
3	720 x 480 P	60Hz 16:9
4	720 x 576 P	50Hz
5	1280 x 720 P	50Hz
6	1280 x 720 P	60Hz 16:9
7	1920 x 1080 I	50Hz
8	1920 x 1080 I	60Hz 16:9
9	1920 x 1080 P	50Hz
10	1920 x 1080 P	59.94Hz
11	1920 x 1080 P	60Hz 16:9
12	1920 x 1080 P	23.98Hz
13	1920 x 1080 P	24Hz
14	1920 x 1080 P	30Hz 16.9

Specifications

Single HDMI		
Mode No.	Resolution	Refresh rate
15	3840 x 2160	23.98Hz
16	3840 x 2160	24Hz
17	3840 x 2160	25Hz
18	3840 x 2160	29.97Hz
19	3840 x 2160	30Hz

UHD60 (4x HDMI)		
Mode No.	Resolution	Refresh rate
1	3840 x 2160	50Hz
2	3840 x 2160	60Hz

● Component Mode – Preset Mode

Mode No.	Resolution	Refresh rate
1	720 x 480 I	59.94Hz
2	720 x 480 P	59.94Hz
3	1280 x 720 P	60Hz
4	1920 x 1080 I	60Hz
5	720 x 576 I	50Hz
6	720 x 576 P	50Hz
7	1280 x 720 P	50Hz
8	1920 x 1080 I	50Hz

● Composite Mode – Preset Mode

Mode No.	Resolution
1	480i (NTSC)

Daisy Chain Connection

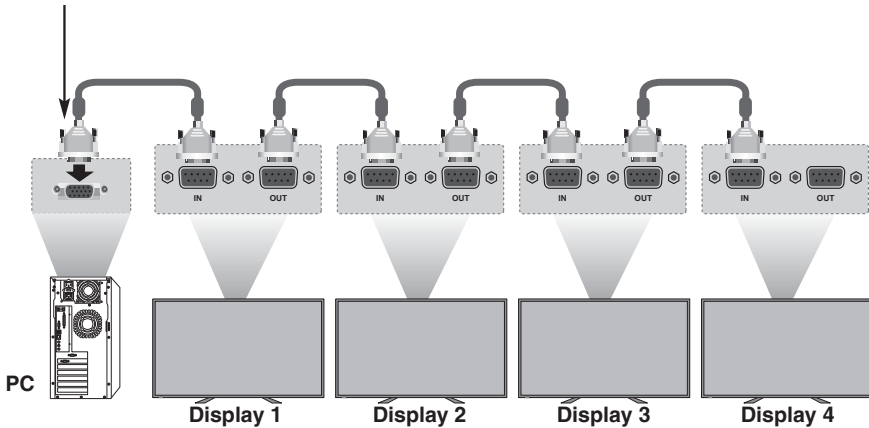
Use this method to connect several displays to a single PC.
You can control several displays at a time by connecting them to a single PC.

● Connecting the cable

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

* The RS-232C protocol is used for communication between the PC and display.
You can turn the display on/off or adjust the OSD menu from your PC.

RS-232C cable (not included)



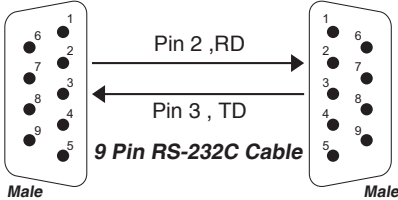
*Maximum of Daisy Chain: 4 pcs

● RS-232C Configurations

2-Wire Configurations (Not Standard)

PC (or PD RS-232C Out)

PD (RS-232C In)



PC DB 9 Pin Male			
Pin No.	Designation	Description	Input/Output
1	DCD	Data carrier detect	Input
2	RxD	Receive data	Input
3	TxD	Transmit data	Output
4	DTR	Data terminal ready	Output
5	GND	Ground	-
6	DSR	Data set ready	Input
7	RTS	Request to send	Output
8	CTS	Clear to send	Input
9	RI	Incoming call	Input

● Communication Parameter

- ⇒ **Baud Rate:** 115200
- ⇒ **Data Length:** 8 Bit
- ⇒ **Parity Bit:** None
- ⇒ **Stop Bit:** 1 Bit

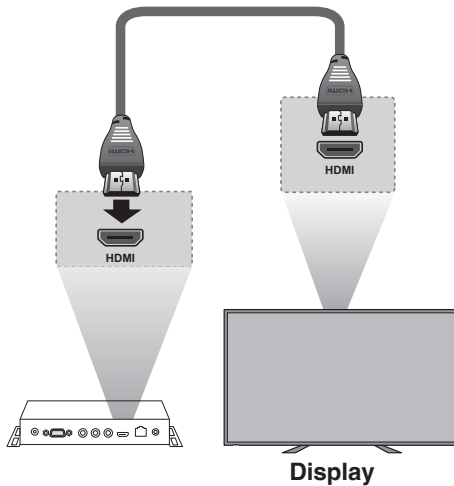
- ⇒ **Flow Control:** None
- ⇒ **Communication Code:** Hex Code
- ⇒ Use a DB 9 Pin Cable

HDMI CEC Connection

With Consumer Electronics Interface (CEI) feature, you can command and control two or more CEC-enabled boxes, that are connected through HDMI, by using only one of their remote controls. (e.g. controlling a television set, set-top box and DVD player using only the remote control of the display).

● Connecting the cable

Connect the HDMI cable as shown in the illustration.



****Not support HDMI splitter or Daisy Chain connection, only support PC-Display 1:1 control.***

● HDMI CEC statement

Term	Description
One Touch Play	Turning on the HDMI source device cause the connected Display to be turned on and switch to HDMI Input automatically.
Routing Control	Switch (Remote control or Front key) Display Input to HDMI will cause the HDMI source device to be turned on.
System Standby	Turning off the Display will cause the HDMI Devices in the CEC net to be turned off.

Controlling the Multiple Product

command	Header (5 bytes)					Payload (4 bytes)				Checksum (1byte)
	Prefix code #0	Prefix code #1	Set ID	Payload Type	# of payload bytes	Command	data #0	data #1	data #2	CS #0
Set Power	0xCC	0x33		0	4	0x10	0 : Off 1 : On	reserved (0x00)	reserved (0x00)	Header XOR Payload
Ack Set Power	0xCC	0x55		0	4	0x10	0xE0 : OK 0xE1 : NG	reserved (0xFF)	reserved (0xFF)	Header XOR Payload
Set Input Source	0xCC	0x33		0	4	0x11	0x30 : VGA1 0x40 : DVI1 0x50 : HDMI1 0x51 : HDMI2 0x52 : HDMI3 0x60 : Composite1 0x70 : YPbPr1 0x80 : Music Port 0x90 : TV1 0xA0 : HDMI-UHD60 0xB0 : OPS	reserved (0x00)	reserved (0x00)	Header XOR Payload
Ack Input Source	0xCC	0x55		0	4	0x11	0xE0 : OK 0xE1 : NG	reserved (0xFF)	reserved (0xFF)	Header XOR Payload
Read Input Source	0xCC	0x33		1	4	0x11	reserved (0x00)	reserved (0x00)	reserved (0x00)	Header XOR Payload
Ack Read Input Source	0xCC	0x55		1	4	0x11	0xE0 : OK 0xE1 : NG	0x30 : VGA1 0x40 : DVI1 0x50 : HDMI1 0x51 : HDMI2 0x52 : HDMI3 0x60 : Composite1 0x70 : YPbPr1 0x80 : Music Port 0x90 : TV1 0xA0 : HDMI-UHD60 0xB0 : OPS	reserved (0xFF)	Header XOR Payload

Controlling the Multiple Product

RS232C CheckSum

	Header (5 bytes)					Payload (4 bytes)			Checksum (1byte)	
command	Prefix code #0	Prefix code #1	Set ID	Payload Type	# of payload bytes	Command	data #0	data #1	data #2	CS #0
Set Power	0xCC	0x33		0	4	0x10	"0 : Off 1 : On"	reserved (0x00)	reserved (0x00)	Header XOR Payload



X	Y	○
0	0	0
0	1	1
1	0	1
1	1	0

XOR

We can make CheckSum with Header (5 bytes) and Payload(4 bytes).

(Prefix code#0) XOR (Prefix code#1) XOR (Set ID) XOR (Command Payload Type) XOR (# of Payload bytes) XOR (Command) XOR (data #0) XOR (data #1) XOR (data#2) = CheckSum

For example:

(0xCC) XOR (0x33) XOR (0x01 = Set ID) XOR (0x00) XOR (0x04) XOR (0x10) XOR (0x01 = ON) XOR (0x00) XOR (0x00) = 0xEB

* Full list of RS-232C / RJ-45 commands available on request.

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