USER MANUAL

PS48A (SS48XNN01.0)

V0.07

Table Of Contents

SAFETY INSTRUCTIONS

Please carefully read through and keep the following instructions for future reference before using the display.

- Please follow the instructions in this document.

- Make sure to check that the local power supply complies with the display's power requirements

- Do not block the ventilation holes on the rear of display and ensure there is enough space around the display to allow for heat dissipation.

- Do not open the rear cover. Damage caused by improper use is not covered by warranty.

- Our company's software products are copyrighted. Do not copy without authorization.

- Overexposure to direct sunlight can cause damage over time and a strong reflection will disturb the user's experience when viewing content on the display.

- Do not install near any heat source, such as radiators, heaters, stoves or any other products that may generate heat (including sound amplifiers).

- Do not install the display on platforms or carts that are unstable, slanted or shaky. It may cause the display to fall, injuring people around it and damaging the display itself. We suggest consulting with professionals in the securing of the display.

- Always comply with all warnings and instructions labels on the display.

- Do not install the display in a confined environment.

- If you want to mount the display in a recessed TV wall mount, make sure to leave enough space around the display to ensure good ventilation and to avoid operation at an abnormal temperature.

- Avoid excessive pressure or temperature changes as special liquid-crystal material in the display may result in cracks, scratches or damage.

- When the display's power is on, do not cover or block any of the display's ventilation pores. It is suggested to periodically clean the display's ventilation pores to ensure heat dissipation.

- Keep candles or other flammable items away from the display to avoid risks of fire.

- Do not stick your finger or other objects in-between the display and its stand base or its neighboring area in order to avoid harming yourself or damaging the display.

- Do not press upon the display with too great a force so as to avoid damaging the product.

- ONLY USE accessories specified by the manufacturer.

- Never attempt to repair or open the display by yourself. Opening and removing the covers may expose you to dangerous voltage or other hazards. Failure to follow this WARNING may result in death or serious injury. Please contact your dealer or a service technician for assistance.

- Hold the display by the sides firmly with two hands when carrying the display out of the box.

- Disconnect all power sources before removing the rear cover for repairs.

- The power cord should be connected to a socket outlet with an earthing connection.

Consignes de sécurité

Veuillez lire attentivement et conserver les instructions suivantes pour référence ultérieure avant d'utiliser l'affichage.

- Veuillez suivre les instructions du manuel d'utilisation de l'affichage.

- Assurez-vous que l'alimentation électrique locale est conforme aux exigences d'alimentation de l'affichage.

- N'obstruez pas les orifices de ventilation au dos de l'affichage et veillez à ce qu'il y ait suffisamment d'espace autour de l'affichage pour permettre une bonne dissipation de la chaleur.

- N'ouvrez pas le couvercle arrière. Les dommages causés par une mauvaise utilisation ne sont pas couverts par la garantie.

- Les logiciels de notre société sont protégés par les droits d'auteur. Ne pas copier sans autorisation.

- Une surexposition à la lumière directe du soleil peut, au fil du temps, causer des dommages et une forte réflexion peut gêner l'utilisateur lors de la visualisation du contenu à l'écran.

- N'installez pas l'appareil à proximité d'une source de chaleur, telle qu'un radiateur, un chauffage, un poêle ou tout autre produit pouvant générer de la chaleur (y compris un amplificateur).

- N'installez pas l'affichage sur des plates-formes ou des chariots instables, inclinés ou branlants. Cela pourrait provoquer la chute de l'affichage, blesser les personnes à proximité et endommager l'affichage lui-même. Nous vous suggérons de faire appel à des professionnels pour la sécurisation de l'affichage.

- Respectez toujours tous les avertissements et toutes les étiquettes d'instructions apposés sur l'affichage.

- N'installez pas l'affichage dans un environnement confiné.

- Si vous souhaitez installer l'affichage dans un support mural encastré pour téléviseur, veillez à laisser suffisamment d'espace autour de l'affichage pour assurer une bonne ventilation et éviter un fonctionnement à une température anormale.

- Évitez les variations excessives de pression ou de température, car cela pourrait provoquer des fissures, des éraflures ou endommager les matériels contenant des cristaux liquides spéciaux dans l'affichage.

- Lorsque l'affichage est allumé, ne couvrez ou n'obstruez aucun des orifices de ventilation de l'affichage. Il est conseillé de nettoyer périodiquement les orifices de ventilation de l'affichage pour assurer une bonne dissipation de la chaleur.

- Tenez les bougies ou autres objets inflammables éloignés de l'affichage pour éviter tout risque d'incendie.

- Ne placez pas vos doigts ou d'autres objets entre l'affichage et son socle ou à proximité afin d'éviter de vous blesser ou d'endommager l'affichage.

- N'appuyez pas trop fort sur l'affichage afin de ne pas endommager le produit.

- UTILISER UNIQUEMENT les accessoires spécifiés par le fabricant.

- N'essayez jamais de réparer ou d'ouvrir l'écran vous-même. L'ouverture et le retrait des couvercles peuvent vous exposer à des tensions dangereuses ou à d'autres dangers. Le non-respect de cet AVERTISSEMENT peut entraîner des blessures graves, voire mortelles. Pour toute assistance, veuillez contacter votre revendeur ou un technicien qualifié.

- L'affichage doit être tenu fermement par les côtés par deux personnes pour le sortir de sa boîte.

- Le cordon d'alimentation doit être connecté à une prise de courant avec mise à la terre.

Warnings

This symbol warns user that uninsulated voltage within the unit may have sufficient magnitude to cause electric shock. Therefore, it is dangerous to make any kind of contact with any part inside this unit.

This symbol alerts the user that important literature concerning the operation and maintenance of this unit has been included. Therefore, it should be read carefully in order to avoid any problems.

WARNING

To prevent fire or shock hazards, do not expose this unit to rain or moisture.

WARNING

Do not use this unit's polarized plug with an extension cord receptacle or other outlets unless the prongs can be fully inserted.

WARNING

Refrain from opening the display cabinet as there are high voltage components inside. Refer servicing to qualified service personnel.

CAUTION

To reduce the risk of electric shock, make sure power cord is unplugged from wall socket. To fully disengage the power to the unit, please disconnect the power cord from the ac outlet. Do not remove cover (or back). No user serviceable parts inside. Refer servicing to qualified service personnel.

Avertissements

⚡	Ce symbole avertit l'utilisateur que la tension non isolée à l'intérieur de l'appareil peut être suffisamment importante pour provoquer un choc électrique. Par conséquent, tout contact avec les éléments se trouvant à l'intérieur de cet appareil peut être dangereux.
⚠	Ce symbole avertit l'utilisateur que des informations importantes concernant le fonctionnement et l'entretien de l'appareil ont été incluses. Par conséquent, il convient de les lire attentivement afin d'éviter tout problème.

⚡ AVERTISSEMENT

Pour éviter tout risque d'incendie ou de choc électrique, n'exposez pas cet appareil à la pluie ou à l'humidité.

⚡ AVERTISSEMENT

N'utilisez pas la fiche polarisée de cet appareil avec une rallonge ou autres prises sauf si les broches peuvent être complètement insérées.

⚡ AVERTISSEMENT

Ne pas ouvrir le boîtier de l'affichage car il contient des composants sous haute tension. Confiez toute réparation à un personnel qualifié.

⚠ PRÉCAUTION

Pour réduire le risque de choc électrique, assurez-vous que le cordon d'alimentation est débranché de la prise murale. Pour débrancher complètement l'appareil, débranchez le cordon d'alimentation de la prise secteur. N'enlevez pas le couvercle (ou le dos). Ne contient aucune pièce réparable par l'utilisateur. Confiez toute réparation à un personnel qualifié.

Recommended Use

- For optimum performance, allow 20 minutes for warm-up.
- Position the display at a 90° angle to windows and other light sources to minimize glare and reflections.
- Clean the display surface with a lint-free, non-abrasive cloth. Avoid using any cleaning solution or glass cleaner.
- Adjust the display's brightness and contrast to enhance readability.
- Avoid displaying fixed patterns on the monitor for long periods of time to avoid image persistence (after image effects).

Ergonomics

To realize the maximum ergonomic benefits, the following is recommended:

- Use the preset Size and Position controls with standard signals.
- Use the preset Color Setting.
- Use non-interlaced signals.
- Do not use primary color blue on a dark background, as it is difficult to see and may produce eye fatigue due to insufficient contrast.
- Suitable for entertainment purposes at controlled luminous environments, to avoid disturbing reflections from the screen.

Cleaning the LCD Panel

- When the liquid crystal panel is dusty, please gently wipe with a soft cloth.
- Do not rub the LCD panel with hard material.
- Do not apply pressure to the LCD surface.
- Do not use oleic acid cleaner as it will cause deterioration or discolor on the LCD surface.

Cleaning the Cabinet

- Unplug the power supply.
- Gently wipe the cabinet with a soft cloth.
- To clean the cabinet, dampen the cloth with a neutral detergent and water, wipe the cabinet and follow with a dry cloth.

NOTE: DO NOT clean with benzene thinner, alkaline detergent, alcoholic system detergent, glass cleaner, wax, polish cleaner, soap powder, or insecticide. Rubber or vinyl should not be in contact with the cabinet for an extended period of time. These types of fluids and materials can cause the paint to deteriorate, crack or peel.

Declarations

FCC Declaration of Conformity

47 CFR § 2.1077 Compliance Information

Name of Responsible Party:	AU Optronics Corp. America
Address of Responsible Party:	37085 Grand River Ave.
	Farmington, MI 48335
	U. S. A.
Contact Person:	Company Representative
Phone No.:	+1 408-518-8800
Fax No.:	+1 408-518-8123

FCC Compliance Statement

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.

FCC Information

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

CE Declaration of Conformity

Hereby, AUO Inc., declares that this LCD monitor is in compliance with the essential requirements and other relevant provisions of EMC Directive 2014/30/EU, Low Voltage Directive 2014/35/EU, and RoHS Directive 2011/65/EU and Directive 2009/125/EC with regard to establishing a framework for the setting of eco-design requirements for energy-related product.

Notice: Shielded cables

All connections to other computing devices must be made using shielded cables to maintain compliance with EMC regulations.

Caution

Changes or modifications not expressly approved by the manufacturer could void the user authority, which is granted by the Federal Communications Commission, to operate this product.

Notice: Canadian users

This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

As an ENERGY STAR Partner, we have determined that this product meets the ENERGY STAR guidelines for energy efficiency.

This product qualifies for ENERGY STAR® in the default setting. Change the default setting or enabling the other features could exceed the limits necessary to qualify ENERGY STAR®. Refer to ENERGYSTAR.gov for more information about ENERGY STAR® program.

> 注意！
>
> 使用過度恐傷害視力。
>
> 使用30分鐘請休息10分鐘。
>
> 未滿2歲幼兒不看螢幕，
>
> 2歲以上每天看不超過1小時。
>
> 警告使用者，此為甲類資訊技術設備，於居住環境中使用時，可能會造成射頻擾動，在此種情況下，使用者會被要求採取某些適當的對策。

限用物質含有情況標示聲明書
Declaration of the Presence Condition of the Restricted Substances Marking (For Taiwan BSMI)

設備名稱： 彩色液晶顯示器　　型號（型式）：SS48XNN01.0(99.S4801.000)

單元 Unit	限用物質及其化學符號 Restricted substances and its chemical symbols					
	鉛 Lead (Pb)	汞 Mercury (Hg)	鎘 Cadmium (Cd)	六價鉻 Hexavalent chromium (Cr^{+6})	多溴聯苯 Polybrominated biphenyls (PBB)	多溴二苯醚 Polybrominated diphenyl ethers (PBDE)
電路板	-	○	○	○	○	○
機構零部件	-	○	○	○	○	○
玻璃面板	○	○	○	○	○	○
電源線	-	○	○	○	○	○

備考 1. 「超出 0.1 wt ％」及「超出 0.01 wt ％」係指限用物質之百分比含量超出百分比含量基準值。
Note 1:"Exceeding 0.1 wt %" and "exceeding 0.01 wt %" indicate that the percentage content of the restricted substance exceeds the reference percentage value of presence condition.
備考 2. 「○」係指該項限用物質之百分比含量未超出百分比含量基準值。
Note 2:"○" indicates that the percentage content of the restricted substance does not exceed the percentage of reference value of presence.
備考 3. 「－」係指該項限用物質為排除項目。
Note 3:The "－" indicates that the restricted substance corresponds to the exemption.

WHAT'S IN THE BOX

Package Contents

Check your product box for the following items. If there are any missing accessories, contact the local dealer where you purchased your display. The illustrations in this manual may differ from the actual product and items.
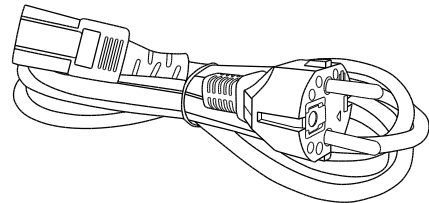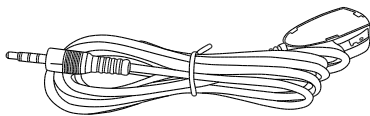
Display
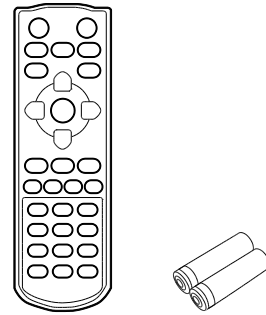
Remote Control and
AAA Batteries
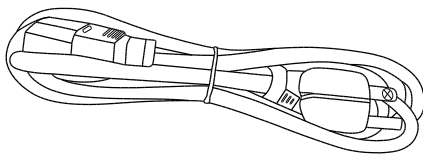
Power Cord (USA/Taiwan/Japan)

Power Cord (Europe/Korea)

IR Extender

Quick Start Guide

NOTE: The IR extender features an LED that indicates the power status of the display.

Green	The display is powered on.
Red	The display is in stand-by mode.

MOVING THE DISPLAY

Unpacking the Display

Before unpacking the display, prepare a flat and stable surface near a wall outlet. Set the product box in an upright position according to the arrow markings on the outside of the product box.

1. Open the product box from the top of the box.
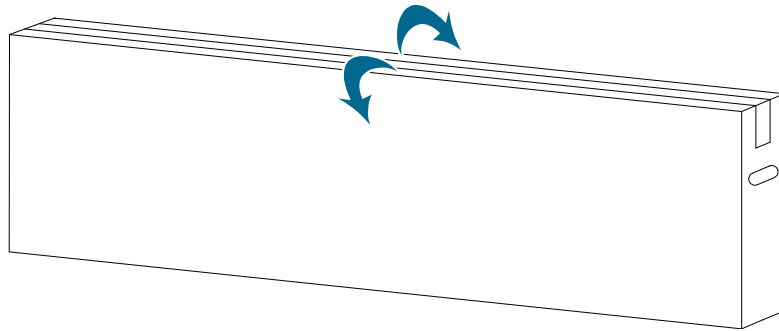
2. Remove the accessories from the top of the EPE foam packaging cushion.
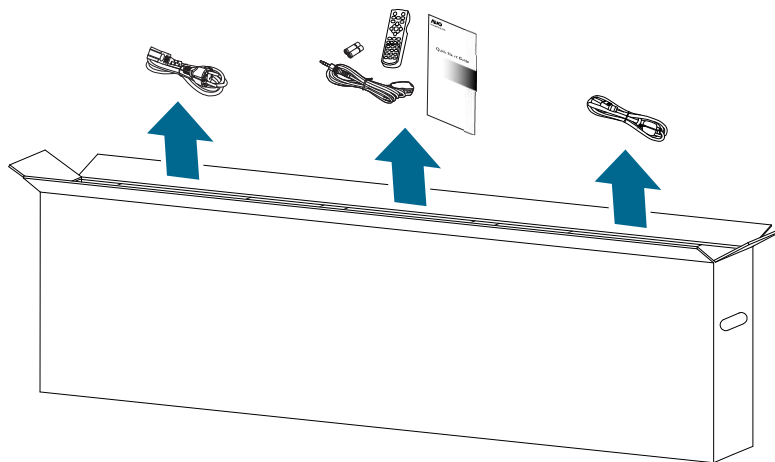
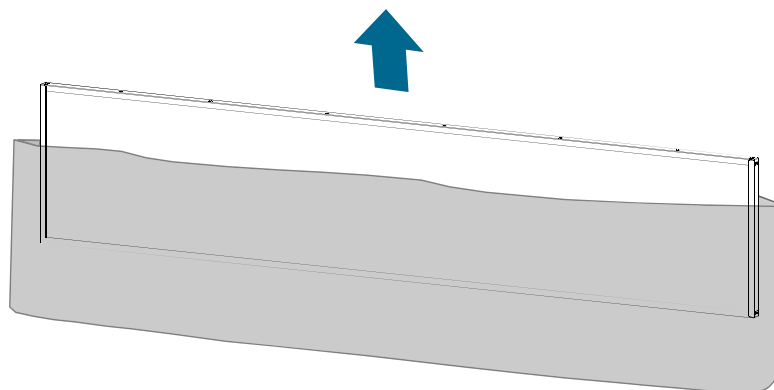3. Remove the EPE foam packaging cushion from the box.
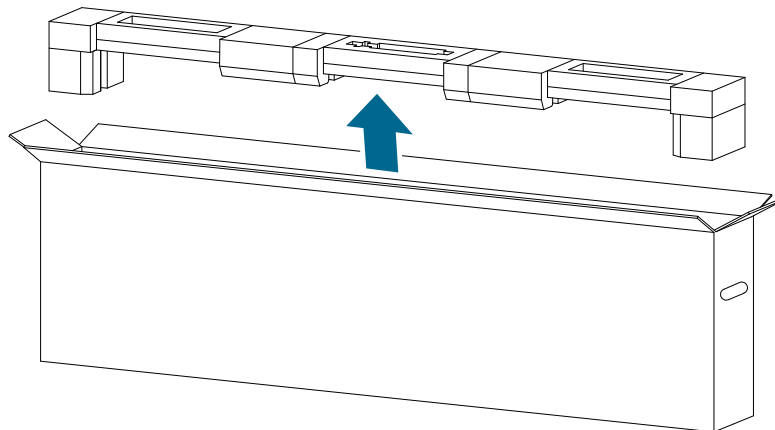
4. Remove the protective board from the box.
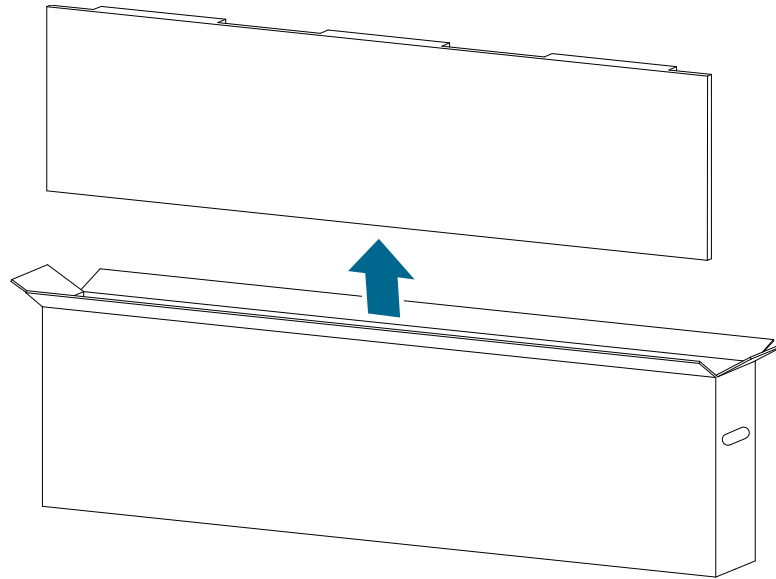
5. Remove the display with the anti-static bag from the box.
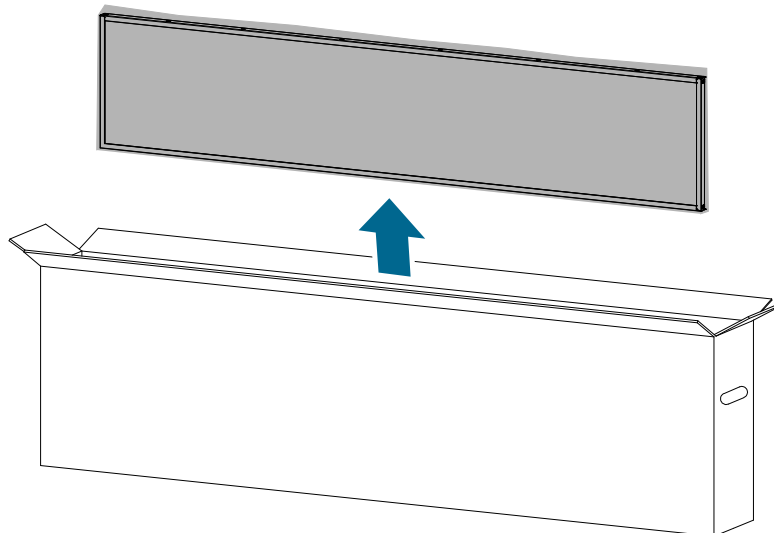
6. Remove the display from the anti-static bag.

NOTE: DO NOT remove the protective film from the screen until you mount the display on a wall.

Carrying the Display

When carrying the display, always carry it using both hands and with the LCD panel facing forward. DO NOT carry the display while putting pressure on the screen at the front of the chassis.
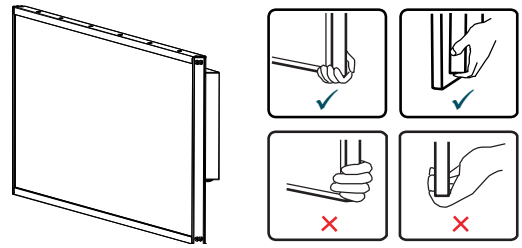
CAUTION: Avoid applying force or using sharp objects on the screen or the frame around the screen at all times.

PRÉCAUTION: Évitez d'appliquer une force ou d'utiliser des objets pointus sur l'écran ou le cadre autour de l'écran en tout temps.

Placing the Display

When placing the display, always keep the display upright or keep the screen face down as illustrated in the Setting Down the Display section. Never tilt the display towards the left, right or balanced on a single corner of the frame.
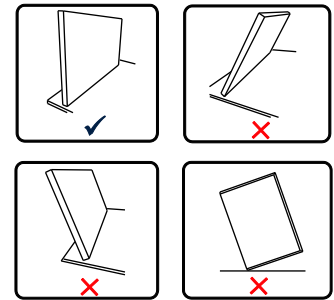
Setting Down the Display

When setting the display down, place the screen face down on a flat and stable surface covered by a protective sheet and a table cushion as shown in the illustration provided.
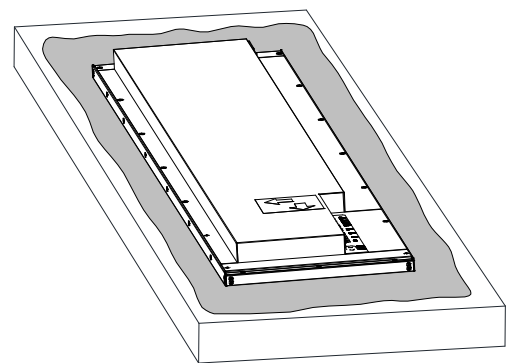
CAUTION: Never press or place anything on the back cover. This may damage the internal parts of the display.

PRÉCAUTION : N'appuyez ou ne placez jamais quoi que ce soit sur la couverture arrière. Cela pourrait endommager les parties internes de l'écran.

MOUNTING THE DISPLAY

Adjusting Directions

To avoid injuries, follow the installation instructions to safely install the display onto a wall. It is recommended to allow a certified installation company to conduct the wall mounting operation.
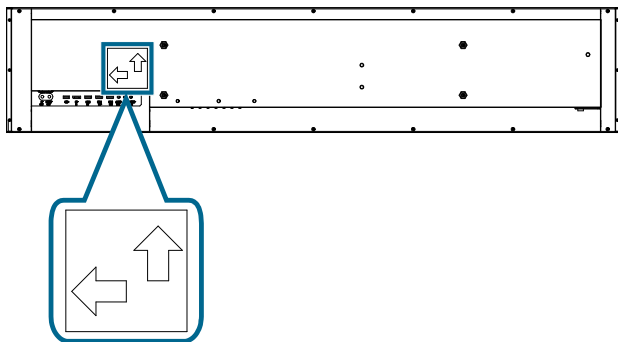
> ⚠ **CAUTION:** Dropping the display may cause injuries to people around it.
>
> **PRÉCAUTION** : La chute de l'écran peut causer des blessures aux personnes qui l'entourent.

If you want to use the display vertically or horizontally, adjust the display such that the main power switch on the back of the display is pointing downward or leftward and the respective arrow on the rear of the display is pointed upward (as illustrated below). If the display is not mounted in such a way the display may not function properly.

Horizontal (Landscape)   Vertical (Portrait)
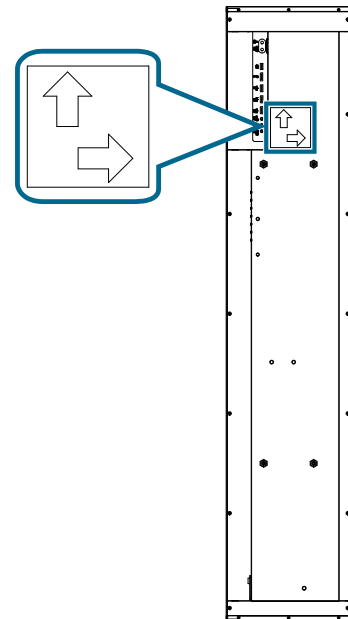
> 📖 **NOTE:**
> - Before mounting, make sure there is space to connect your devices. See "CONNECTING THE DISPLAY" on page 23.
> - The On-Screen Display (OSD) menu can only be displayed horizontally; its orientation cannot be adjusted. As a result, when the display is installed vertically, the menu will be displayed in a 90-degree counter-clockwise orientation.

Wall Mount Specifications

MOUNTING LOCATION

It is important to install the display in a location that allows adequate ventilation around the display, so that heat can properly dissipate away from the display and its mounting accessories. If installing the display onto a ceiling or wall with a mounting bracket, then the ceiling and wall must be strong enough to support the display and its mounting accessories.

Ventilation Requirements

When mounting in an enclosed space or recessed area, leave adequate room between the display and the enclosure in order to allow heat to disperse, as shown below.
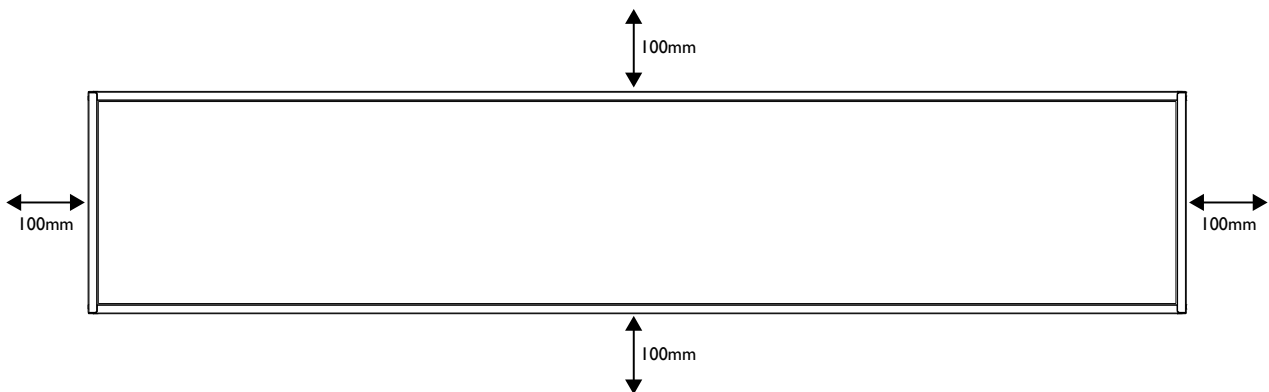
Make sure to provide air conditioning around the display or adequate ventilation, so that heat can properly dissipate away from the unit and mounting accessories.

Please note the following:

- DO NOT install in locations where a door can knock against the display.

- DO NOT install in areas where the display will be subjected to dust and/or strong vibrations.

- DO NOT install the display next to the location where the main power supply enters the building.

- DO NOT install the display in an area where people can easily grab and hang onto the display or its mounting accessories.

MOUNTING EQUIPMENT

⚠️ **CAUTION:** This display cannot be used or installed without a support stand or a mounting support accessory.

PRÉCAUTION : Cet affichage ne peut pas être utilisé ou installé sans socle ou accessoire de support de montage.

The display is designed for use with the VESA mounting system. When using mounting accessories other than those that are approved by the dealer, they must comply with the VESA compatible (FDMlv1) mounting method. It is recommended to use mounting interfaces that comply with UL1678 standard in North America.

WALL MOUNTING

For proper installation **it is strongly recommended to use a trained, qualified technician**.

The back of the display is equipped with four screw-holes with dimensions of VESA mount 600 x 100mm. For installation, use four M6 screws to firmly secure a wall mount onto the display (length: at least 27mm, maximum 30mm, maximum torque: 16 kgf.cm).

> **NOTE:** Refer to the proper installation instructions included with the mounting equipment.

1. Place the display face-down on a flat, padded surface for safe installation of mounting accessories.

2. Use four M6 screws to firmly secure a wall mount onto the display:

   - VESA dimension: 600 x 100mm

   - Length: at least 27mm, maximum 30mm

   - Maximum torque:16 kgf.cm
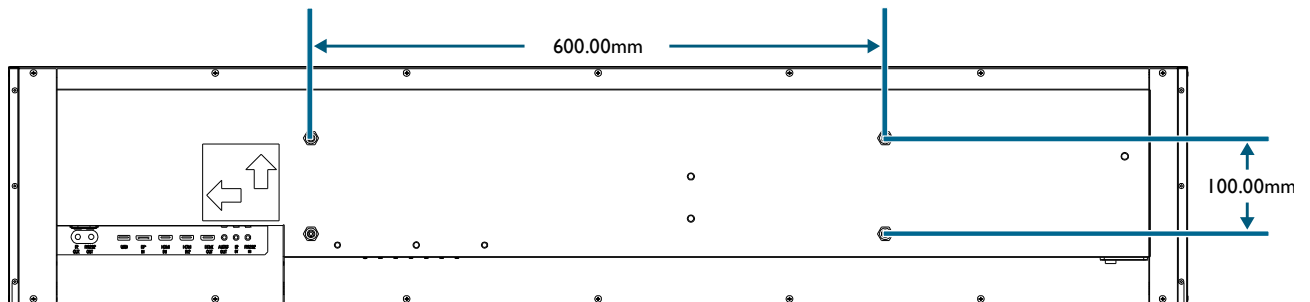
3. Make sure there is no gap between the display and the bracket.

4. To ensure safe installation, use two or more brackets to mount the display. Mount the display to at least two points on the installation location.
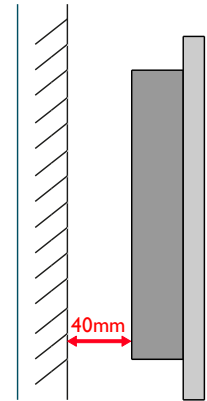
> **NOTE:**
> - Be careful to avoid tipping the display over when attaching accessories.
> - Periodically check for loose screws, gaps, distortions, or other problems that may occur with the mounting apparatus. If a problem is detected, please refer to qualified personnel for service.
> - Regularly check the mounting location for signs of damage or weakness that may occur over time.

Flat Wall Installation

Installation on a Flat Wall (Minimum Distance: 40mm)

When installing the display on a wall face, there has to be at least 40mm of space between the display and the wall for ventilation purposes.

The display must be installed in an environment with proper ventilation to prevent it from overheating. Do not block the ventilation holes on the top, left, and right sides while keeping the display away from any heat source.

40mm

NOTE: To prevent glare when used in a location with strong sunlight, it is recommended to add a cover over the display.

Protection from Overheating

When the display is close to overheating a warning code will show up at the top-right corner of the screen and the display will automatically behave in the following way:

	Warning Code Displayed on Screen	
	H1	H2
Ambient Temperature	≥ 53°C	≥ 55°C
Internal Temperature (OSD On)	≥ 56°C	≥ 58°C
Behavior/ Adjustment	The BLU brightness will decrease to a level of about 70%.	The BLU brightness will decrease to a level of about 10%.

Under these circumstances the user must check and ensure that there is enough space around the display for heat dissipation.
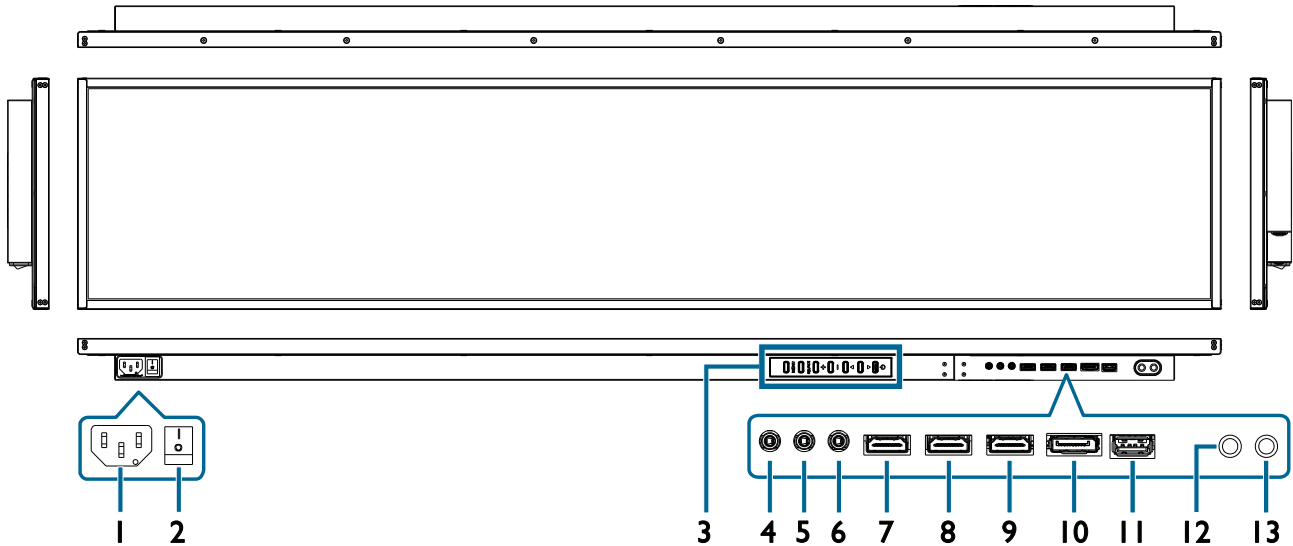
NOTE: The threshold to trigger an ambient temperature warning code varies slightly depending on the way the display is set up. For example, for a display with multiple ports in use, the threshold is 53°C while for a display with only one port in use the threshold might be higher than 53°C.

Only when the ambient temperature lowers to below 48°C will the BLU brightness return to 100%.

SETTING UP THE DISPLAY

Main Components

The following images and tables show the location of the connectors and other components.

Item		Description
1	AC In	Connects with the supplied power cord.
2	AC Switch	Switches the main power on/off.
3	Control Buttons	See "Control Buttons" on page 21 for detailed information.
4	RS232 IN	Connects with the serial IO connector of a host device.
		📖 NOTE: From the tip to the terminal the plug sections are defined as TX / RX / Ground.
5	IR IN	• Connects with an external IR extender cable. • Connects with the IR OUT connector of another display to daisy chain the IR signal.
		📖 NOTE: From the tip to the terminal the plug sections are defined as IR / VCC / LED / Ground.
6	AUDIO OUT	Connects with external speakers with an amplifier or audio amplifier to output the audio that is supplied by the video source.
		📖 NOTE: Headphones and earphones are not supported.

Item		Description
7	HDMI OUT	Connects with the HDMI IN connector of another display to daisy chain the audio/video broadcast on the displays. **NOTE:** When interconnecting displays to create a daisy-chain configuration, use only the HDMI IN2 port as the input source on all the displays in the daisy chain.
8	HDMI IN2	Connects with devices transmitting audio/video using the HDMI interface.
9	HDMI IN1	Connects with devices transmitting audio/video using the HDMI interface.
10	DP IN	Connects with devices transmitting audio/video using the DP (DisplayPort) interface.
11	USB	Connects with a flash drive to display digital media or update the display's firmware. **NOTE:** Use a flash drive with a maximum storage capacity of 512 GB for FAT32/NTFS formats.
12	RS232 OUT	Connects with the RS232 IN connector of another display to daisy chain direct commands.
13	IR OUT	Connects with the IR IN connector of another display to daisy chain the IR signal with a pin-to-pin straight cable featuring three conductor sections.

Control Buttons

The following image and table identify the functions of the control buttons. You can also control the display via the remote control. See "THE REMOTE CONTROL" on page 30.
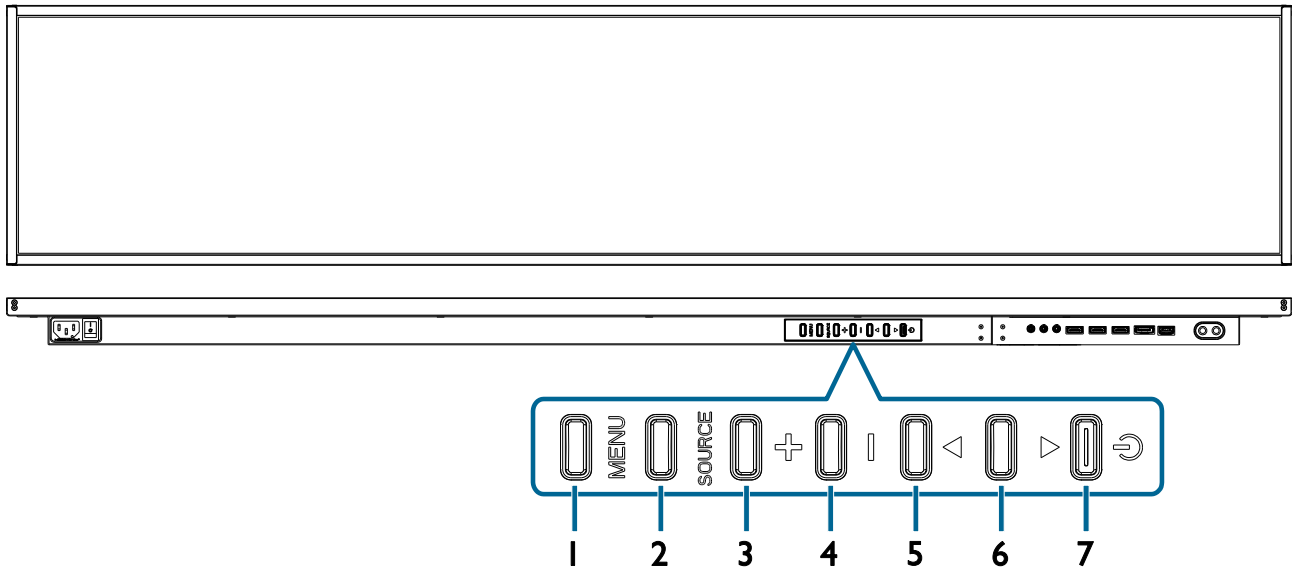
| Item		Description
1	MENU	• Displays the On-Screen Display (OSD) menu. For more details see "ON-SCREEN DISPLAY (OSD) MENU" on page 33. • In the sub-menu, confirms the item selected in the OSD menu and return to the previous menu.
2	SOURCE	• Switches the video input source ([HDMI1], [HDMI2], [DP]). • Accept the changes made in the OSD menu.
3	Plus (+)	• Increases the volume of the display. • Moves the selection right or increase the values in the OSD menu.
4	Minus (—)	• Decreases the volume of the display. • Moves the selection left or decrease the values in the OSD menu.
5	Up (▲)	• Moves the selection in the OSD menu up. • Plays media files.
6	Down (▼)	Moves the selection in the OSD menu down.
7	Power (⏻)	Switches the power on/off.

NOTE:
- This button does not work when the power switch is off.
- It takes about 10 seconds to power on the display.

Connecting the Power Cable

1. Connect the power cord to the display.
2. Fully insert the plug into the power outlet socket.
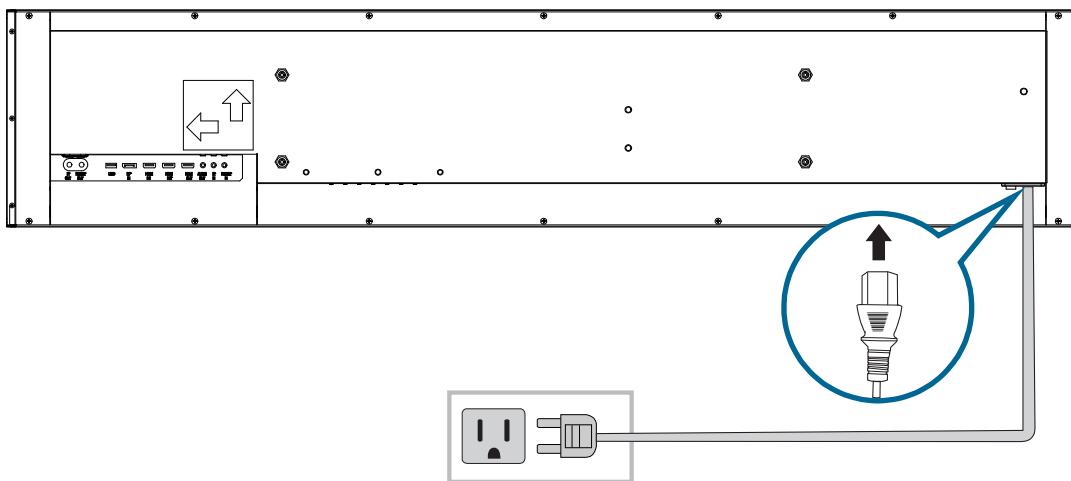
⚠	**CAUTION:** Loose connections may cause noise. Do not plug and unplug the power cord repeatedly in a short period of time. **PRÉCAUTION :** Des connexions desserrées peuvent causer du bruit. Ne branchez et ne débranchez pas le cordon d'alimentation plusieurs fois dans un court laps de temps.

📖	**NOTE:** The supplied power cord varies depending on the country where you purchased this apparatus. For all cases, use a power cord that matches the AC voltage of the power outlet and has been approved by and complies with the safety standard of your country.

3. Turn on the power switch.

Power Switch
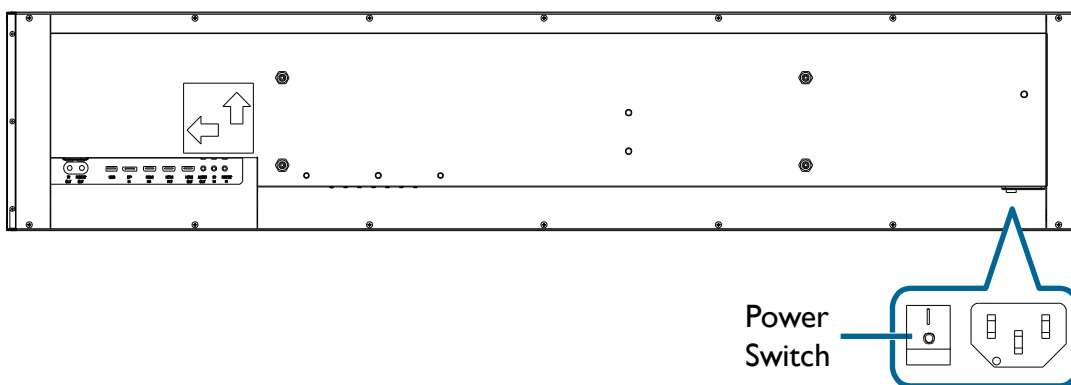
| ⚠	**CAUTION:** When disconnecting the AC power cord, be sure to first disconnect the plug from the outlet socket. **PRÉCAUTION :** Lorsque vous débranchez le cordon d'alimentation CA, assurez-vous d'abord de débrancher la fiche de la prise de courant.

CONNECTING THE DISPLAY

✎ **NOTE:** Before making connections, make sure that the power for all the connected equipment is off.
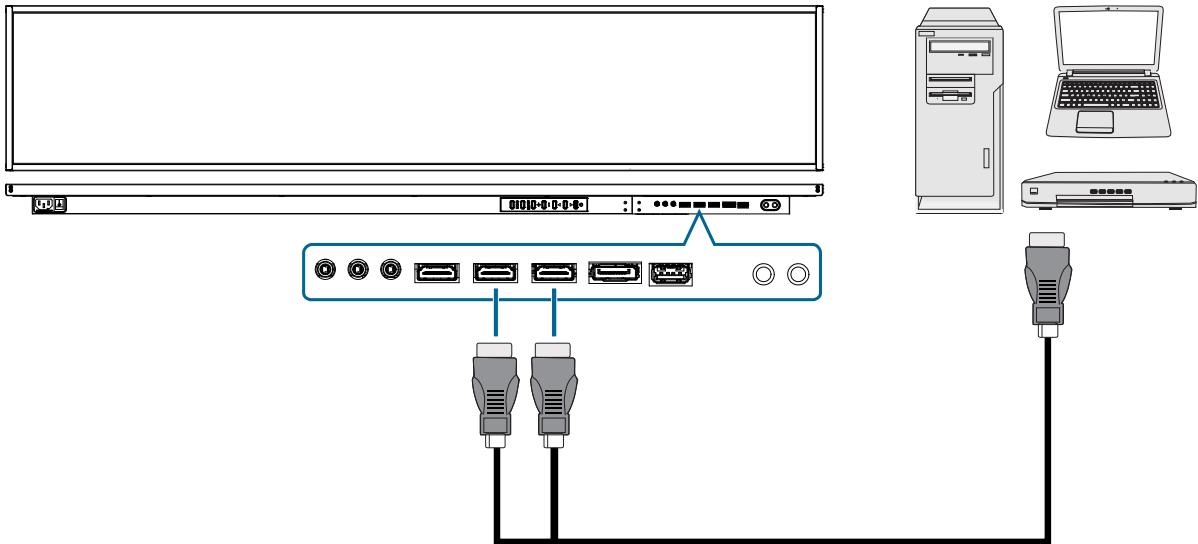
Using the DisplayPort

1. Connect a DisplayPort cable to the DisplayPort output port on a computer or A/V device.
2. Connect the DisplayPort cable to the DisplayPort input port on the display.
3. Press the **[SOURCE]** button of the remote control to select the video input source (DP).
4. Once selected, the audio input setting will automatically switch to the correct audio source for the video connection.
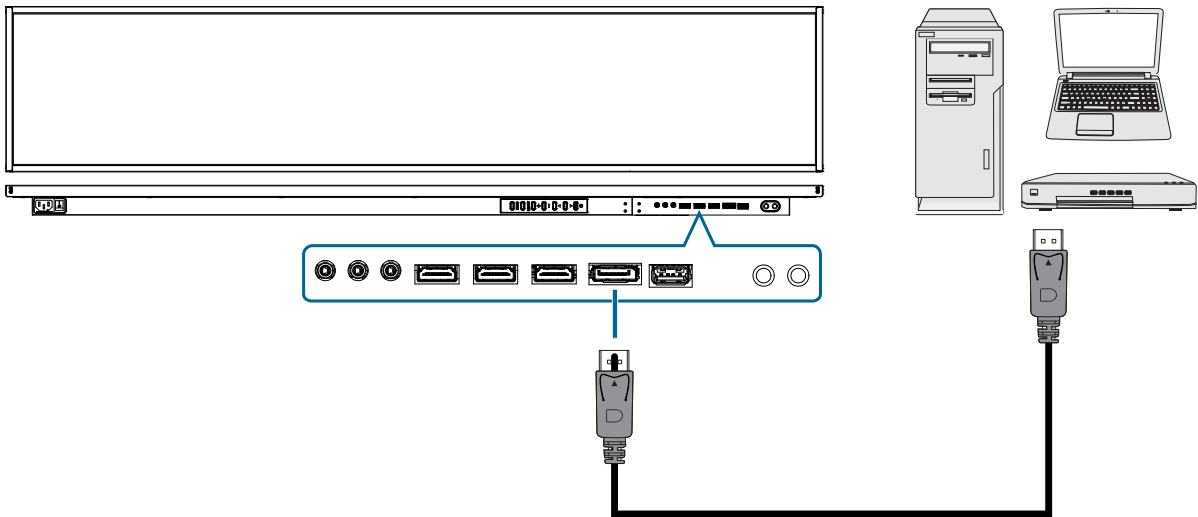
✎ **NOTE:** Use DisplayPort cables with a maximum length of 3m.

Using the HDMI Port

1. Connect an HDMI cable to the HDMI output port on a computer or A/V device.

2. Connect the HDMI cable to the HDMI 1 or HDMI 2 input port on the display.

3. Press the **[SOURCE]** button of the remote control to select the video input source (HDMI 1 / HDMI 2).

4. Once selected, the audio input setting will automatically switch to the correct audio source for the video connection.


Using the USB Port

1. Connect a USB flash drive to the USB port on the display.

2. Press the **[MENU]** button of the remote control, select 🖱 and then press the **[ENTER]** button to access the multimedia files in the USB flash drive. See "Playing Media in the USB Flash Drive" on page 39 for more information.
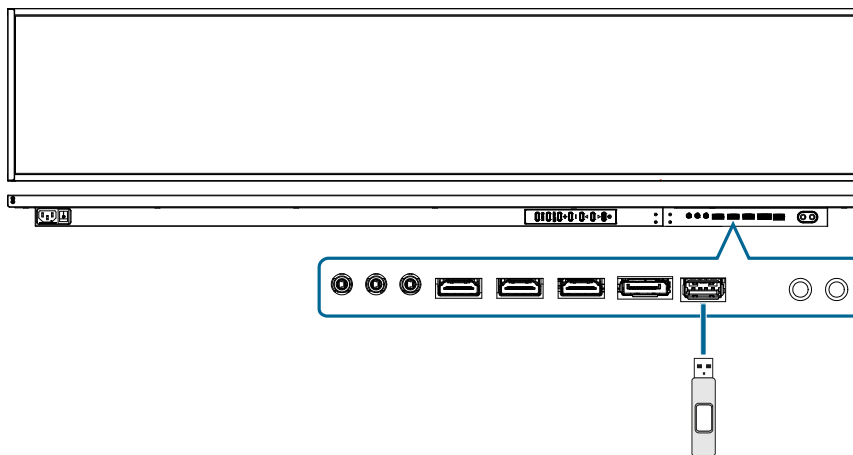
Using the RS232 Port

1. Connect a RS232 cable to the RS232 output port on a computer.
2. Connect the RS232 cable to the RS232 input port on the display.
3. Enter commands on the computer based on the commands list included in the "COMMANDS LIST" section on page 44.
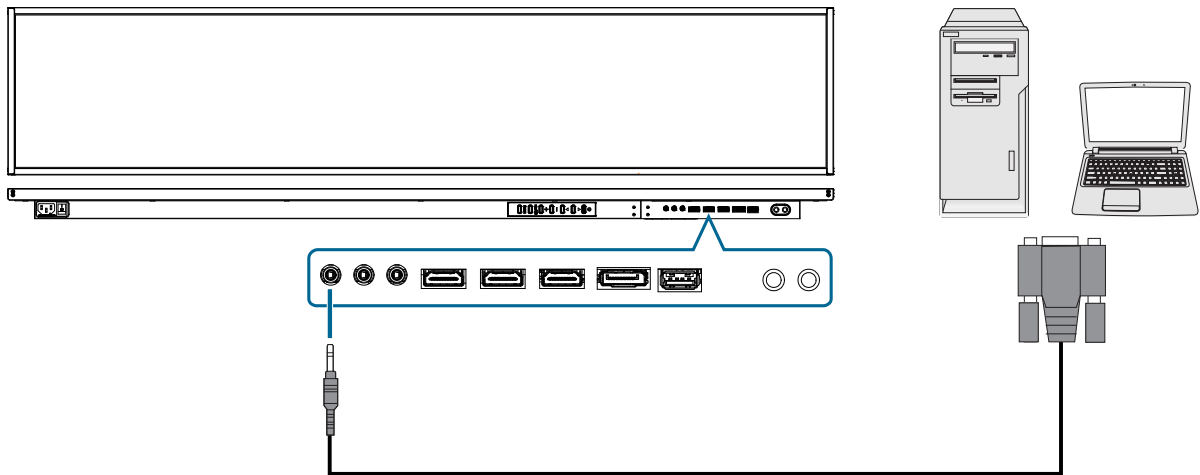
Connecting External Speakers

To connect external speakers to the display, use an audio cable to connect the AUDIO OUT jack of the display to the speakers or sound systems.
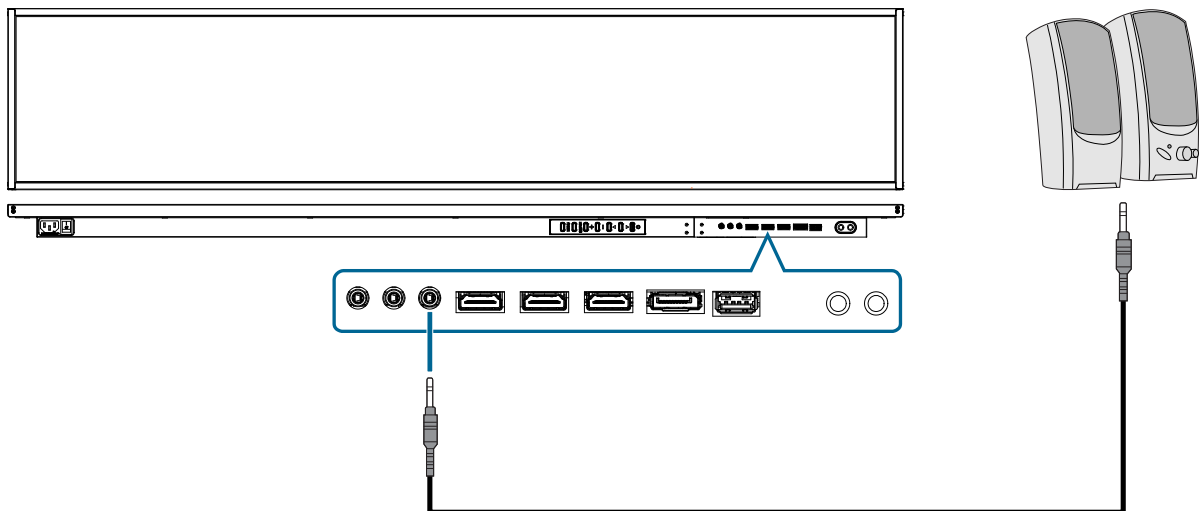
Interconnecting the Displays

USING THE HDMI PORTS

You can interconnect multiple displays via the HDMI In/Out ports to create a daisy-chain configuration for multi-screen applications.
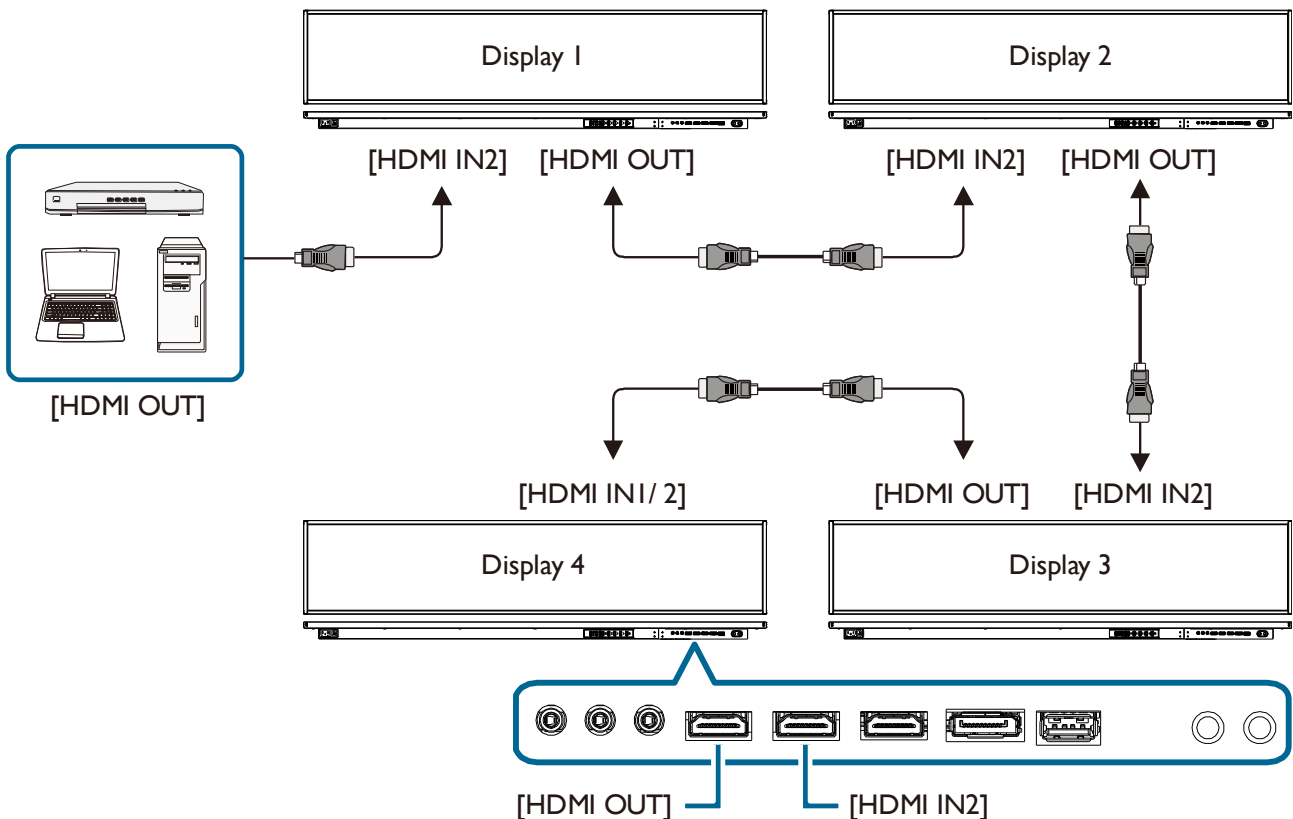
> **NOTE:**
> - The HDMI daisy-chain connection allows up to 4 interconnected displays. It is recommended to check the number of connectable displays in your installation environment in advance.
> - To protect the connected equipment, turn off the main power switch before making connections.

To interconnect the displays in a daisy chain:

1. Connect the video source to the HDMI IN2 port of the first display in the daisy chain.

2. Use an HDMI cable to connect the HDMI output port of the first display to the HDMI IN2 port of the second display, and so on for all subsequent displays.

3. Set the video source of every display to HDMI2. All subsequent displays will broadcast the image shown on the first display.

> **NOTE:** When interconnecting displays, use only the HDMI IN2 port as the input source. DO NOT use the HDMI IN1 port as it does not support daisy chain.

USING THE IR IN/OUT PORTS

You can connect multiple display in an IR daisy chain so as to operate them with one remote control.

NOTE: The IR daisy-chain connection allows up to 4 interconnected displays.

To set up an IR daisy chain, use an IR cable to connect the IR OUT port of the first display to the IR IN port of the second display, and so on for all subsequent displays.

Controlling a Single Display in the IR Daisy Chain

After the IR daisy chain is set up, you can set a specific display to IR free status to overside the IR daisy chain and control only that display in the IR loop:

1. Power on the specific display to be operated.

2. Press the **[MENU]** button to display the OSD menu and select [*Setting*] > [*Monitor ID*] to set a unique ID for each display.

3. Press the **[F4]** button on the remote control followed by the display's two-digit monitor ID (e.g., 01) and **ENTER**.

4. The display will show **IR Free** and accept IR signals while other displays will show **IR Lock** and ignore IR signals.

5. Press the **[F4]** button again to unlock the IR sensors of other displays.

NOTE: The F4 button will not function on displays playing media files from a USB flash drive.

Interconnecting the Displays for Direct Commands

By interconnecting multiple displays via the RS232 ports you can send commands to control all the connected displays at once, as well as sending commands to individual displays within the connection chain.

NOTE:
- The RS232 command function is disabled by default.
- To protect the connected equipment, turn off the main power switch before making connections.

To interconnect multiple displays for direct commands via the RS232 ports:

1. Connect a computer to the RS232 input port of the first display.

2. Use a 3.5mm cable to connect the RS232 output port of the first display to the RS232 input port on the second display, and so on for all subsequent displays.

NOTE: Use a 3.5mm cable with a 3-pin plug:

3. Press the **[MENU]** button to display the OSD menu and select [*Setting*] > [*RS232 Switch*] > [*COM Port*] to enable the RS232 command transmission function via COM port.

4. Enter commands on the computer based on the commands list included in the "COMMANDS LIST" section on page 44.
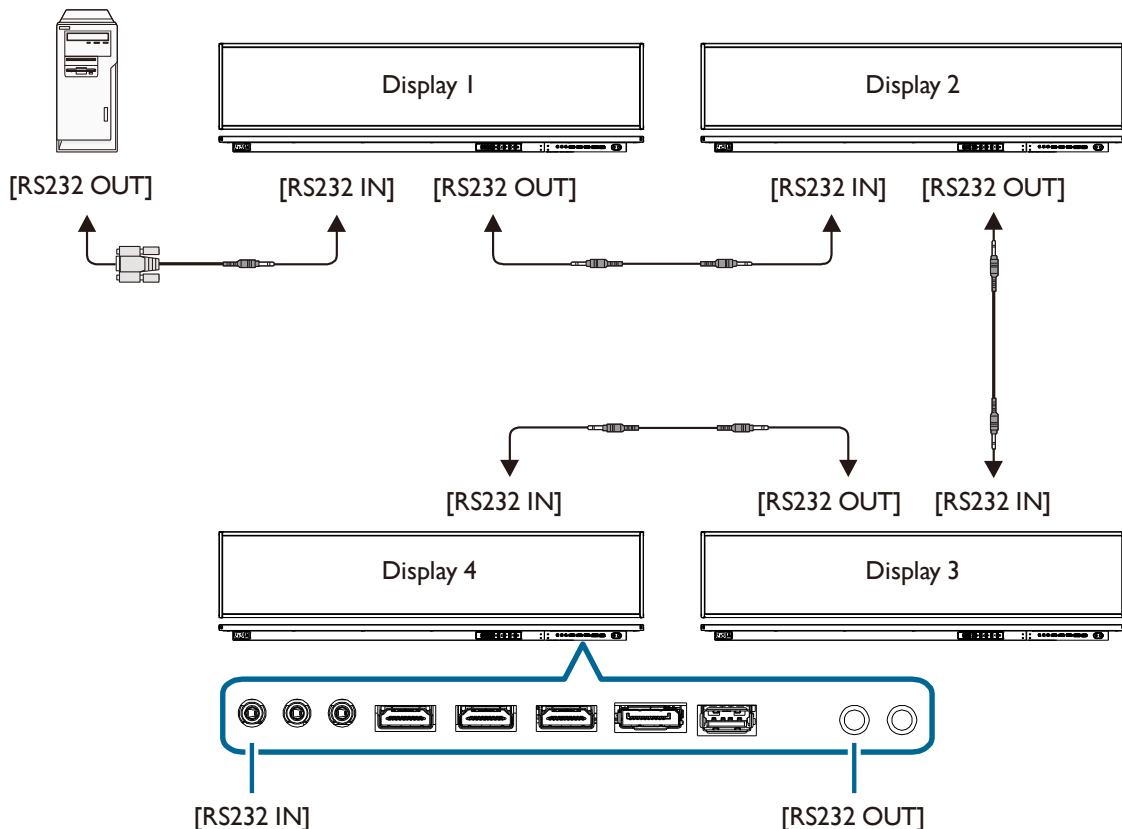
Once you have interconnected the displays via the RS232 ports, a unique, non-repeating ID number must be established for each display in the system in order to be able to separately control an individual display within the system via RS232 commands.
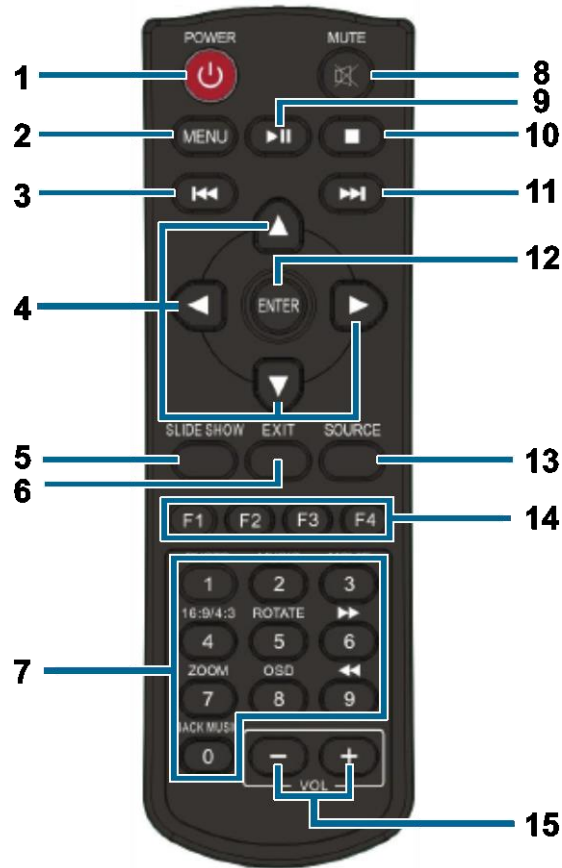
An Auto-ID function allows you to conveniently designate each display with an ID number based on the order in which the displays have been connected (i.e., the first display connected to the command computer via the RS232 port will be designated display 1, the display connected to display 1will be designated display 2, and so on). To enable the Auto-ID function you must first execute the following commands in the order shown below:

Command	Description
00 06 00 00 00 00 88 1B	Prepares all displays within the RS232 daisy chain to receive their ID (at this point all display's IDs are still set to 0).
00 06 00 00 00 01 49 DB	Gives the first connected display in the RS232 daisy chain the ID of 1.
00 06 00 00 00 02 09 DA	Gives the second connected display in the RS232 daisy chain the ID of 2.
00 06 00 00 00 03 C8 1A	Gives the third connected display in the RS232 daisy chain the ID of 3.
00 06 00 00 00 04 89 D8	Gives the fourth connected display in the RS232 daisy chain the ID of 4.

THE REMOTE CONTROL

Remote Control Overview

The remote control is the primary way to access and control the display. The following table identifies the functions of the remote control buttons.

Item		Description
1	POWER	Switches the power on/off.
		NOTE: It takes about 10 seconds to power on the display.
2	MENU	• Displays the OSD menu. • In the sub-menu, confirms the item selected in the OSD menu and return to the previous menu.
3	⏮	Plays the previous media file.
4	[▲] / [▼] / [◄] / [►] Up / Down / Left / Right	Moves the selection in the OSD menu.
5	SLIDE SHOW	Displays input source information.
6	EXIT	Exits the current menu.
7	Number Pad	Inputs numbers.

Item	Description
8 MUTE	Silences the audio from the display.
	NOTE: Once the audio is silenced by the MUTE button, the display will remain mute even after it is powered off and then on by the AC switch, or disconnected and then re-connected to the AC power.
9 ▶❚❚	• Plays the media file. • Pauses playback of the media file.
10 ■	Stops playback of the media file.
11 ▶▶❘	Plays the next media file.
12 ENTER	Accepts the settings made in the OSD menu.
13 SOURCE	Switches the video input source. Use the [▲] or [▼] buttons to directly select [HDMI1], [HDMI2], [DP].
14 Hot Keys	• F1: Creates a playlist for the media files that have been selected.
	NOTE: Only files of the same type (photo/music/movie) and in the same drive can be grouped together under the same playlist.
	• F2: Deletes the existing playlists. • F3: Imports playlists. • F4: Sets a specific display to IR free status. See the " • USING THE IR IN/OUT PORTS" section on page 27 for more information.
15 VOL	Adjusts the display's volume ([+] to increase, [-] to decrease).

NOTE: If the remote control is not working, replace the batteries with new ones and make sure that they are correctly inserted: Place two 1.5V AAA batteries matching the (+) and (–) signs to the (+) and (–) indications of the battery compartment.

CAUTION:
• The remote control should use only carbon-zinc or alkaline batteries. Using an incorrect battery type can create a risk of explosion.
• Dispose of used batteries according to the instructions provided.
• To reduce the risk of fire or burns, DO NOT disassemble, crush, or puncture the batteries. DO NOT short circuit the contacts. DO NOT dispose of the batteries in fire or water.

PRÉCAUTION :
• La télécommande ne doit utiliser que des piles carbone-zinc ou alcalines. L'utilisation d'un type de pile incorrect peut créer un risque d'explosion.
• Disposez des piles usagées conformément aux instructions fournies.

- Pour réduire le risque d'incendie ou de brûlure, NE PAS démonter, écraser ou percer les piles. NE PAS court-circuiter les contacts. NE PAS jeter les piles dans le feu ou dans l'eau.

Using the Remote Control

The display's IR sensor is located at the center of the display slightly to the left. It is embedded behind the display panel and cannot be relocated. When using the remote control, aim the remote control at the middle of the display's front side within a distance of less than 2.5m/8.2ft from the IR sensor, and a horizontal and vertical angle of less than 30 degrees.
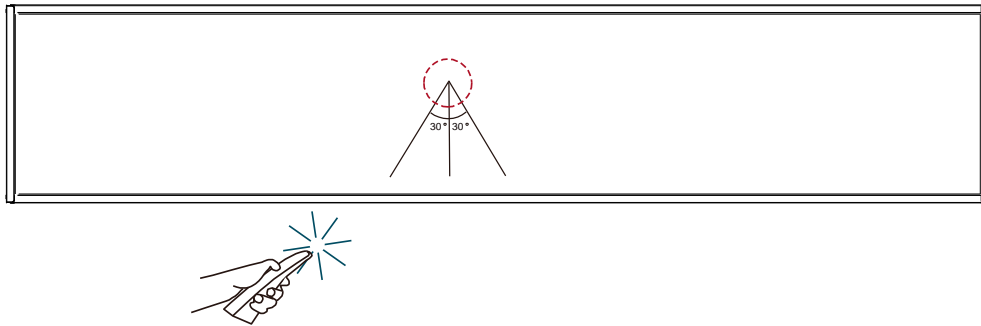
NOTE: Even when the remote control is pointed at the correct location where the IR sensor is and within the correct range of the sensor, there is a chance that environmental conditions may affect the proper functioning of the remote control.

LOCKING/UNLOCKING THE REMOTE CONTROL

The IR sensor for the display can be locked so that the remote control function is disabled.

To lock the IR sensor/remote control:

1. Press the [MENU] button on the remote control followed by [0], [0], and [2].

2. Once the remote control is locked a lock icon will appear on the top-left corner of the display indicating that the remote control has been locked.

NOTE: If the remote control has already been locked and the user try to use the remote control, the lock icon will appear on the display again.

To unlock the IR sensor/remote control and enable the remote control function:
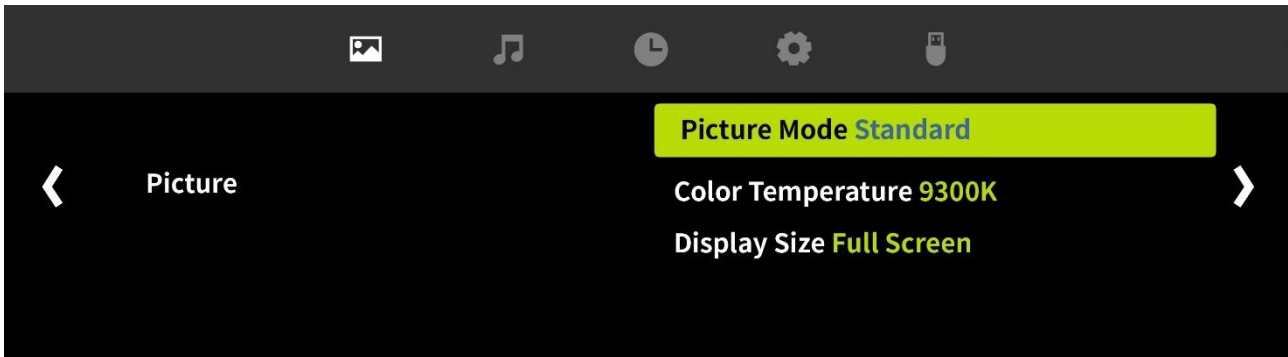
1. Press the [MENU] button on the remote control followed by [0], [0], and [3].

2. Once the remote control is unlocked the lock icon on the display will disappear indicating that the remote control has been unlocked.

NOTE: The keypad will also be locked/unlocked when the IR sensor is locked/unlocked. Use the OSD menu to lock/unlock only the remote control or the keypad. See the "SETTING" section on page 36 for more information.
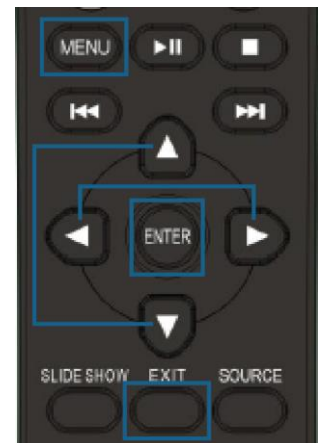
ON-SCREEN DISPLAY (OSD) MENU

This LCD display is equipped with an OSD (On-Screen Display) menu for easy adjustment of the display's settings.

Picture Mode Standard

Picture

Color Temperature 9300K
Display Size Full Screen

Navigating the OSD Menu

The OSD menu can be accessed by using the remote control.

1. Press the [MENU] button to display the OSD menu.

2. Press the [◀] or [▶] button to navigate the main menu and press the [ENTER] button to enter the sub-menu.

3. In the sub-menu, press the [▲] or [▼] button to choose the settings and then press [◀] or [▶] button to adjust the settings. If there is a sub-list under the sub menu, press the [ENTER] button again to enter the sub-list.

4. Press the [MENU] button to confirm the settings and return to the previous menu.
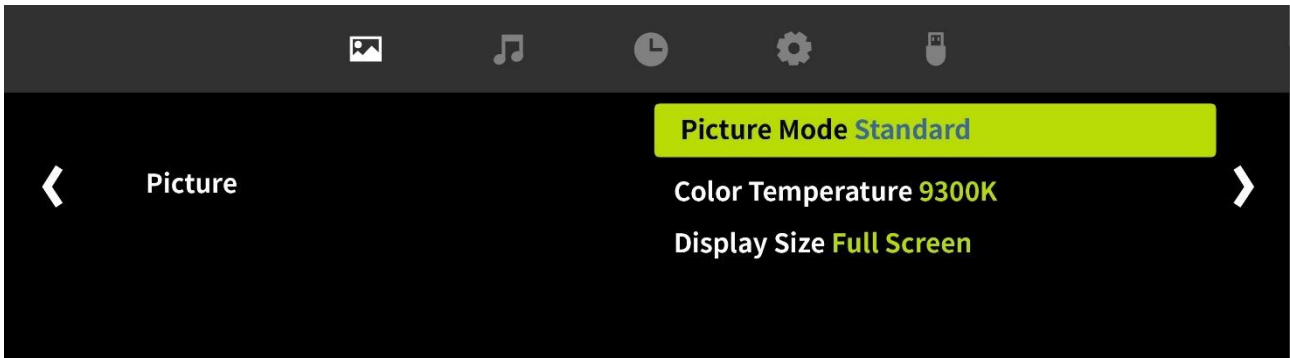
OSD Menu Overview

The following sections list the initial OSD functions in the main menu screen. For more detailed options, check the on-screen menu provided by the display.

NOTE: The sub-menu displays three items at most. Press the [▲] or [▼] button in the sub-menu for more options.

PICTURE
## (Adjusts the display's image settings)

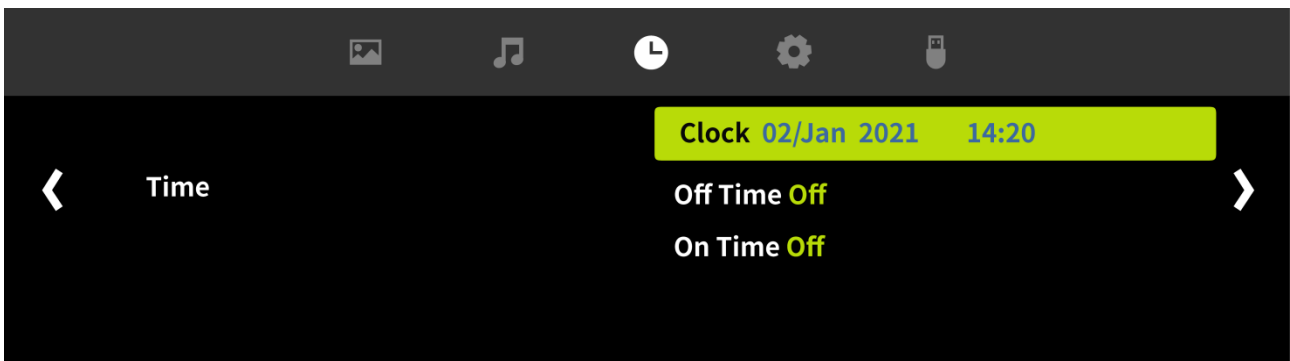| Item	Description
Picture Mode	Changes the picture mode (Standard / Soft / User / Vivid). **NOTE:** Different signal sources have different picture mode and color temperature configurations. The display will automatically change Picture Mode and Color Temperature settings according to the signal source detected.
Color Temperature	Adjusts the color temperature of the display (9300K / 6500K / User / 11500K). **NOTE:** When the Color Temperature is set to User, the display will present the native color gamut of the input source.
Display Size	Sets the size of images displayed (Full Screen / Up / Middle / Down). For the default setting (Full Screen) the display will adjust the image so that it is 1920x360 pixels in size. When set to Up, Middle, or Down, the image will be placed in the respectively portion of the screen in its native resolution. **NOTE:** The Up / Middle / Down settings are not applicable to images of 1920x360 pixels.
Backlight	Adjusts the backlight brightness of the display (0 to 100).
Color Range	Changes the RGB range setting (0-255 / 16-235 / Auto). For its default setting (Auto) the display presents images according to the color range setting of the input source.

SOUND
(Adjusts the display's audio settings)
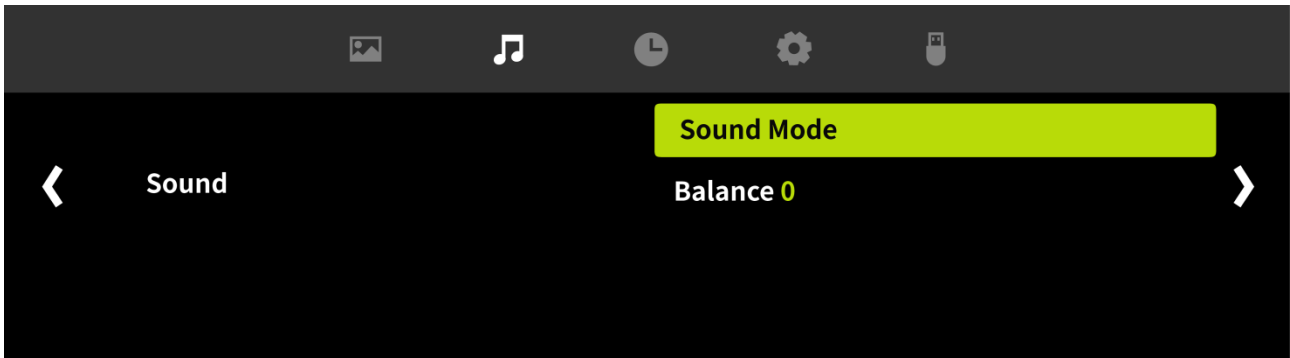
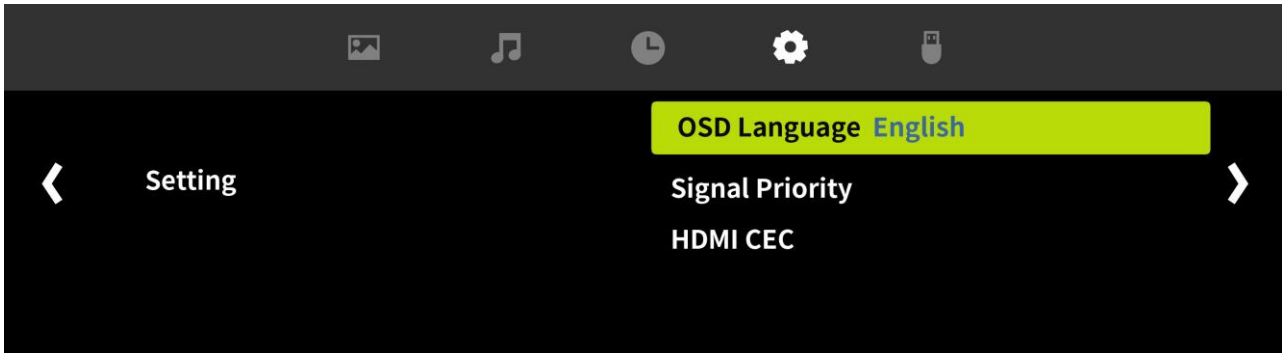| Item	Description
Sound Mode	Changes the sound mode (Treble / Bass). **NOTE:** The Sound Mode function will be disabled when the display is connected to external speakers.
Balance	Adjusts the sound balance of the audio output (-50 to +50).

TIME
(Sets the display's on/off time)

Item	Description
Clock	Sets the current date and time for the display (format: DD/Month/YYYY/HH:MM). **NOTE:** The date and time will be reset when the power switch is turned off.
Off Time	Allows the display to automatically power off at a pre-configured time (Off / Once / User). The power-off schedule can be set to execute on day(s) of the week in User mode.

| On Time	Allows the display to automatically power on at a pre-configured time, input source, and volume. The power-on schedule can be set to execute on day(s) of the week in User mode.

SETTING
(Adjusts the display's parameters)

🖼	🎵	🕒	⚙	🔌

Setting

‹ OSD Language **English**

Signal Priority

HDMI CEC

›

Item	Description
Language	Changes the OSD Menu language (English / French / Spanish / German / Italian / Japanese / Simplified Chinese / Traditional Chinese).
Signal Priority	Allows the display to detect input sources according to a pre-configured sequence. Select Enable and set up priority 1 to 4 to enable the function. Select Reset to return to the default setting where no input source is prioritized. **NOTE:** When setting up the USB port as the input source, a unique media type (photo, music, or movie) must be designated.
HDMI CEC	Enables/Disables the HDMI CEC function (Off / On) and configures the devices on the HDMI CEC device list. **NOTE:** For more information about the HDMI CEC function see the "HDMI CEC" section on page 46.
OSD Settings	Sets the duration (5 / 10 / 15 / 20 / 30 / 40 / 50 / 60 / Always On) the OSD menu is displayed on screen. **NOTE:** • The OSD display duration is counted by second. • The orientation of the OSD menu cannot be adjusted.

Item	Description
Power Saving	Enables/Disables the power saving function so that the display will automatically power off after a pre-configured period of time when no signal is detected (30 / 60 / 120 / 240 / 300 Sec / Off). NOTE: The display does not support the Power Saving function when playing media files from a USB flash drive.
Monitor ID	Sets a unique ID number for the display (1 to 99).
RS232 Switch	Selects the RS232 command control source (COM Port / Off).
Detect Signal	Manages the power of the display (Off / On). The default setting (Off) will switch the display to standby after 60 seconds if there is no signal from the current input source. When set to On, only the display backlight will be turned off after 60 seconds if there is no signal from the current input source.
Anti-Burn-In	Triggers the screen saver function (Off / On / Once). NOTE: The screen saver function works by displaying a vertical white rectangle ¼ the width of the screen moving across the screen, followed by a vertical black rectangle. If On is selected, the process will repeat every 8 hours until it is disabled.
Remote Operation	Locks/unlocks the IR sensor for the display thereby disabling/enabling control of the display via remote control.
Keypad Operation	Enables/Disables the display's control buttons.
Software Update (USB)	Updates the firmware on the display when a flash drive containing the firmware file is connected to the display's USB port (Yes / No). NOTE: The display must be connected to a power source (via the AC adapter) throughout the process of software update. Cutting off power in the middle of an update process will cause an update failure.
Reset	Resets the OSD menu to its default settings (No / Yes).
Information	Lists the firmware version, internal temperature, and resolution of the display.

USB
(PLAYS MEDIA IN THE USB FLASH DRIVE)
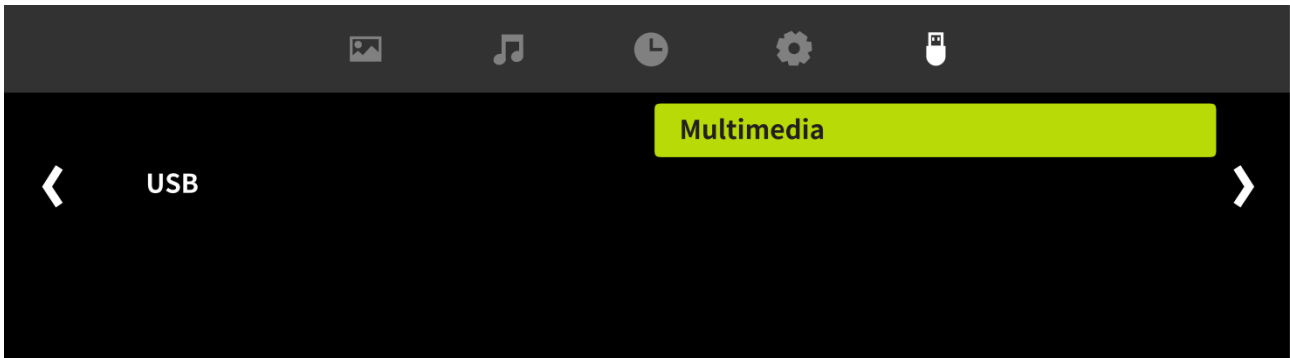
| Item	Description
Multimedia	Accesses the media files located on the flash drive connected to the USB port of the display. See "Playing Media in the USB Flash Drive" on page 39 for more information.

Playing Media in the USB Flash Drive

> **NOTE:** For more information on supported file formats, see SUPPORTED FILE FORMATS on page 42.

To play the multimedia files in a flash drive using the remote control:

1. Insert the flash drive to the USB port on the display.
2. Press the **[MENU]** button on the remote control to display the OSD menu.
3. Use the **[◀]** / **[▶]** button to select 🖴 and then press the **[ENTER]** button to enter the sub-menu.
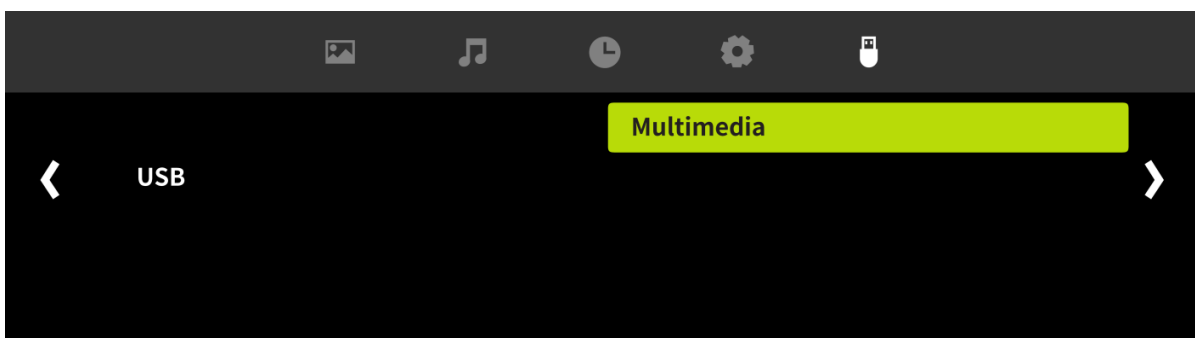
4. Use the **[◀]** / **[▶]** button to select the media type (Photo / Music / Movie) you wish to play and then press the **[ENTER]** button to confirm the selection.
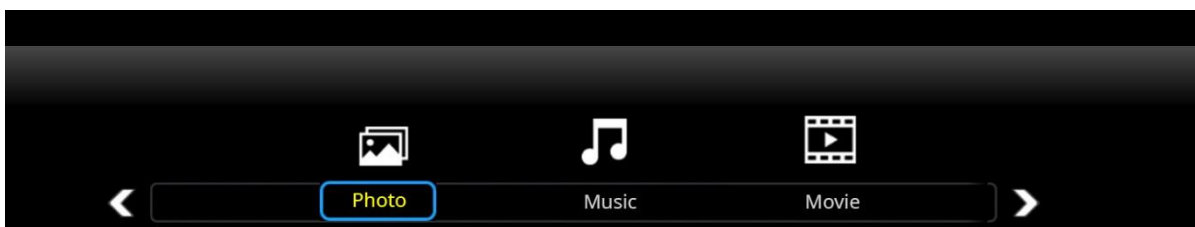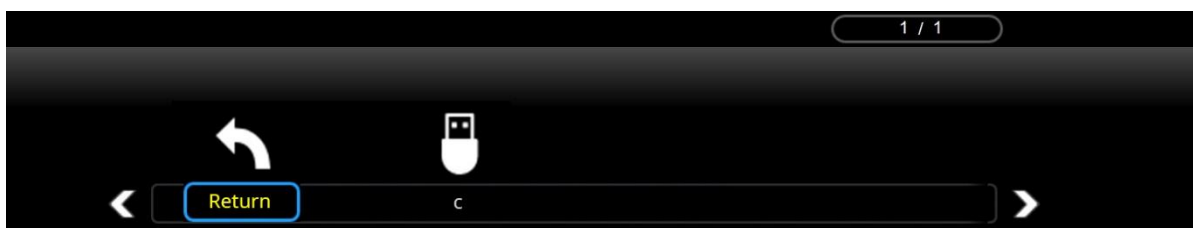

5. The USB flash drive will be listed as the c drive. Select **c** and press the **[ENTER]** button to play the media files.

> **NOTE:**
> - Press the **[EXIT]** button or select **Return** to go back to the previous sub-menu.
> - Use the **[F1]** button to create playlists, **[F2]** button to delete playlists, and **[F3]** button to import playlists.

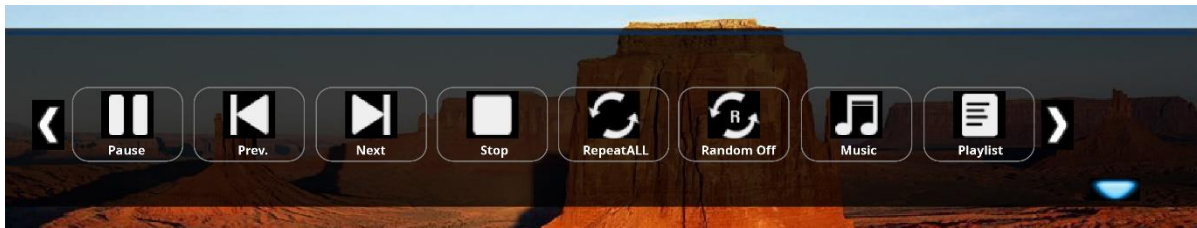6. Use the **[▲]** / **[▼]** / **[◀]** / **[▶]** buttons to navigate to the media file you want to play and press

the **[ENTER]** button to confirm your selection.

7.   When a media file is being played:

  •   Press the **[ENTER]** button to display the control buttons.

  •   Use the **[◄]** / **[►]** buttons to navigate the control buttons.

  •   Press the **[ENTER]** button to confirm your selection.

CONTROL BUTTONS

Buttons	Function	Photo	Music	Movie
▮▮	Pauses playback	●	●	●
▶	Plays the photo/music/video file	●	●	●
◀◀	Fast backwards the music/video file	○	●	●
▶▶	Fast forwards the music/video file	○	●	●
▮◀	Plays the previous photo/music/video file	●	●	●
▶▮	Plays the next photo/music/video file	●	●	●
■	Stops playback	●	●	●
↻	Repeats playback for one or all of the files	●	●	●
A-B	Sets point A and B as end points to repeat the designated part of the music/video file	○	●	●
↻R	Plays all files randomly	●	●	●
♫	Plays background music for the photo slideshow	●	○	○
◀X	Mutes the audio from the display	○	●	○
☰	Shows all files in the playlist	●	●	●
ⓘ	Shows the file information	●	●	●
↻90°	Rotates the photo clockwise by 90°	●	○	○
↺90°	Rotates the photo counterclockwise by 90°	●	○	○
▶▶	Forwards the video slowly	○	○	●
▶▮	Jumps forward one frame	○	○	●
🕐	Jumps to a designated time on the music/video file	○	●	●
⚙	Adjusts the display size of the photo/video	●	○	●

SUPPORTED FILE FORMATS

Movie

File Extension	Container	Video Codec	Maximum Resolution	Maximum Frame Rate	MPEG1 (L2 & L3)	L-PCM
.dat .mpg .mpeg	MPG	MPEG1	1080P	30fps	V	V
	MPEG	MPEG2	1080P	30fps		
.ts .trp .tp	TS	MPEG2	1080P	30fps	V	
		H.264	1080P	30fps		
.vob	MPEG2-PS	MPEG2	1080P	30fps	V	V
.mkv	MKV	H.264	1080P	30fps	V	V
		MPEG1	1080P	30fps		
		MPEG2	1080P	30fps		
		MPEG4	1080P	30fps		
.avi	AVI	MPEG2	1080P	30fps	V	V
		MPEG4	1080P	30fps		
		H.264	1080P	30fps		
.avi	AVI	Motion JPG	640X480	30fps	V	V

Music

File Extension	Audio Codec	Bit Rate	Sample Rate
.mp3	MPEG1 Layer2	32Kbps–448Kbps	32Khz–48KHz
.mp3	MPEG1 Layer3	32Kbps–320Kbps	32Khz–48KHz
N/A (work with video files only)	LPCM	64Kbps–1.5Mbps	8Khz–48KHz

Photo

File Extension	Codec (Format)	Photo	Resolution
.jpg	JPEG	Base-line	15360x8640
		Progressive	1024x768
.png	PNG	Non-interlaced	9600x6400
		Interlaced	1200x800
.bmp	BMP	–	9600x6400

TROUBLESHOOTING

If there is no response from the display (no screen):

1. Check if the power cord is properly connected to the display.

2. Check if the AC switch is turned on.

3. Check if the signal source device is properly connected to the display.

4. In case of voltage instability, wait for the voltage to stabilize and then turn on/off the display again with the remote control or AC switch.

If the display is powered on and operating but shows no picture:

1. Check if the display's input source setting matches the source device connected to the display.

2. In case of voltage instability, wait for the voltage to stabilize and then turn on/off the display again with the remote control or AC switch.

If the display shows abnormal (unstable, unfocused, distorted, etc.) images:

1. Check if the signal source device is properly connected to the display.

2. In case of voltage instability, wait for the voltage to stabilize and then turn on/off the display again with the remote control or AC switch.

If the display shows horizontal and/or vertical blocks/lines:

1. Check if the signal source device is properly connected to the display.

2. In case of voltage instability, wait for the voltage to stabilize and then turn on/off the display again with the remote control or AC switch.

APPENDIX A: COMMANDS LIST

NOTE: Refer to the "Communication Protocol" document for how to send commands to the display.

Addr.	Name	R/W	Default	Description
00h	Monitor ID	R/W	1	0: Sets ID to 0, and accept a new ID. 1–99: sets ID to x (only ID=0 can be set to x).
01h	Power Status	R/W	1	0: Power off 1: Power on
02h	Volume	R/W	50	0-100: Audio volume
03h	Mute	R/W	0	0: Mute off 1: Mute on
04h	Video Source	R/W	5	5: HDMI1 6: HDMI2 12: DisplayPort 17: USB (read only)
05h	Contrast Ratio	R/W	50	0-100: Contrast ratio
06h	Brightness	R/W	50	0-100: Brightness
07h	Color Temperature	R/W	1	0: 6500K 1: 9300K 2: 11500K 3: User
08h	Anti-Burn-in	R/W	0	0: Off 1: On 2: Once
09h	Power Saving	R/W	0	0: Off 1: 30s 2: 60s 3: 120s 4: 240s 5: 300s
0Ah	Backlight	R/W	85	0-100: Backlight
0Dh	Picture Mode	R/W	1	0: Vivid 1: Standard 2: Soft 3: User
0Eh	Color Range	R/W	0	0: Auto 1: 0–255 2: 16–235
1Ch	User R Gain	R/W	50	0–100. User red gain
1Dh	User G Gain	R/W	50	0–100. User green gain
1Eh	User B Gain	R/W	50	0–100. User blue gain
25h	Show Monitor ID	W only	-	0: Hides the "Monitor ID" window 1: Shows the "Monitor ID" window
2Ah	Display Size	R/W	0	0: Full screen 1: Up 2: Middle 3: Down

Addr.	Name	R/W	Default	Description
50h	Detect Signal	R/W	0	0: Off 1: On
66h	Priority 1	R/W	0	0: Null (default) 1: HDMI 1
67h	Priority 2	R/W	0	2: HDMI 2 4: DP
68h	Priority 3	R/W	0	5: USB-Photo 6: USB-Music
69h	Priority 4	R/W	0	7: USB-Movie
6Bh	Priority Enable	R/W	0	0: Disable 1: Enable
6Ch	Priority Reset	W	N/A	1: Resets all priority to be "Null"
0Fh	Temperature Value	R only	-	-30–100
2Bh	Reset	W only	-	0: No action 1: System reset
2Dh	IR/Keypad Lock	R/W	0	0: Unlocks IR and keypad 1: Locks IR and keypad 2: Locks keypad 3: Locks IR
2Fh	Aging	R/W	-	0: Disable 1: Enable

APPENDIX B: HDMI CEC

The HDMI Consumer Electronics Control (HDMI CEC) function allows you to control the display and its input source simultaneously with a remote control.

To use the HDMI CEC function:

Connect the source device to the display via the HDMI IN1 or HDMI IN2 port.

Add the device into the HDMI CEC device list in the OSD menu.

Enable the HDMI CEC function.

The input source will now be automatically powered on/off when the display is turned on/off with its remote control.

One Touch Play

The display will be automatically powered on when the input source is turned on with its remote control.

System Standby

The display will automatically enter standby mode when the input source enters standby mode.

Remote Control Pass Through

You can use the display's remote control to control the input source. The supported keys are listed in the following table:

Operation ID	User Operation
0x00	Select
0x01	Up
0x02	Down
0x03	Left
0x04	Right
0x0D	Exit
0x41	Volume Up
0x42	Volume Down
0x44	Play & Pause
0x45	Stop
0x4C	Backward
0x4B	Forward

NOTE: There is no guarantee that the display is compatible with all devices that feature the HDMI CEC function on the market.

APPENDIX C: SPECIFICATIONS

Item \ Model	PS48A (SS48XNN01.0)
Panel	
LCD Size	48.5 inch
Light Source	E-LED
Active Area (H x V) (mm)	1209.6 x 226.8
Resolution (pixels)	1920 x 360
Aspect Ratio	16:3
Brightness (typ.) (cd/m^2)	700
Contrast Ratio (typ.)	4000:1
Response Time (ms)	8 (G to G)
Frame Rate (Hz)	60
Viewing Angle (U/D/L/R)	85/85/85/85 degree (typ.) 85/85/85/85 degree (min.)
Light Life (hrs)	50,000
Panel Surface	Anti-glare type, 2%
Color Gamut (x% NTSC)	SRGB 72%
Display Color	8 bit, 16.7 M
Power	
Power Supply	AC 100–240V, 50–60Hz, 0.6A
Power Consumption (Watt @ AC 100V)	62W
Standby Power (Watt @ AC 100V)	< 0.5W
Display	
Signal Input	HDMI 2.0 x2, DP 1.2 x1, USB 2.0 x1 (plug and play)
Signal Output	HDMI 2.0 out x1, Audio out x 1
External Control	RS232 In x1 [Note 1], RS232 Out x1 [Note 2], IR Out x 1
Speaker	N/A
Dimension	1232.4(H) x 249.6(V) x 45mm(D)
Net Weight (kg)	7.32
Border Width (U/D/R/L)) (mm)	9.9/9.9/9.9/9.9
Wall Mounting) (mm)	100 x 600 (VESA)
OSD Control	RS232, keypad, IR
OSD Language	English / French (Français) / German (Deutsch) / Italian (Italiano) / Spanish (Español) / Traditional Chinese (繁體中文) / Simplified Chinese (简体中文) / Japanese (日本語)
Painting — Front	AL texture anode black hairline
Painting — Back	Black, matt G5
Ambient Light Sensor	N/A

Item \ Model	PS48A (SS48XNN01.0)
Environment	
Operation Temp	0°C–50°C
Storage Temp	-20°C–60°C
Operating Humidity	10%–90% RH
Storage Humidity	10%–90% RH
Display Orientation	Landscape/Portrait
Usage	24/7 (hrs/days)
Accessory	
Power Cable	US (UL/BSMI/PSE) 1.8M ×1, EU (CE/KC) 1.8M ×1
IR Extender Cable	×1 (Note 3)
Remote Control	×1
Battery	3A ×2
QSG	×1
Wall Mount Bracket	N/A

NOTE 1: Use an RS232-in cable with a 3.5mm TRS connector with the following pin definition to connect to the RS232 In port:

S: Ground
R: PC RX
T: PC TX
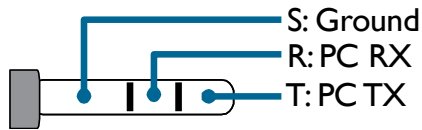
NOTE 2: Use an RS232-out cable with a 3.5mm TRS connector with the following pin definition to connect to the RS232 Out port:

S: Ground
R: Next PC TX
T: Next PC RX
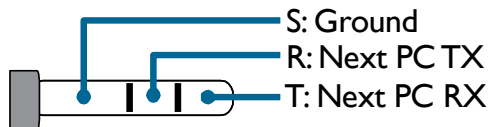
NOTE 3: The IR extender cable is used to connect to the IR In port.

Packing Information

Item	Specification			Packing Remark
	Qty.	Dimension (L x H x D)	Total Weight	
Packing Box	1pc/box	1380 x 390 x 161 mm	11 kg	
Pallet with Boxes	14 boxes (7 boxes/layer)	1390 x 918 x 1150 mm	172 kg	Pallet 18 kg Pallet 1390 x 1150 x 138 mm

APPENDIX D: SUPPORTED TIMING

	HDMI 2.0	DP 1.2
PC Timing (FHD)	640×480@60Hz IBM	640×480@60Hz IBM
	800×600@60Hz VESA DVI	800×600@60Hz VESA DVI
	1024×768@60Hz VESA DVI	1024×768@60Hz VESA DVI
	1440×900@60Hz 16:10	1440×900@60Hz 16:10
	1680×1050@60Hz 16:10	1680×1050@60Hz 16:10
	1920×1080@60Hz CVT 16:9	1920×1080@60Hz CVT 16:9
	1920x360@60Hz	1920x360@60Hz
Video Timing (FHD)	480p@60Hz 720x480 4:3	480p@60Hz 720x480 4:3
	576p@50Hz 720x576 16:9	576p@50Hz 720 x 576 16:9
	576i@50Hz 720x576 4:3	1080p@30Hz 1920x1080
	1080p@30Hz 1920x1080	1080p@25Hz 1920x1080
	1080p@25Hz 1920x1080	1080p@24Hz 1920x1080
	1080p@24Hz 1920x1080	1080p@50Hz 1920x1080
	1080p@50Hz 1920x1080	1080p@60Hz 1920x1080
	1080p@60Hz 1920x1080	1080i@60Hz 1920x1080
	1080i@60Hz 1920x1080	