Public Information Display

User Manual

DV555K
DV655K
DV755K

Table of Contents

Declaration of Conformity

FCC Declaration of Conformity

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.

The following local Manufacturer /Importer is responsible for this declaration:

Product:	LCD Monitor
Model Number:	DV555K; DV655K; DV755K
SKU Number:	DV555K xxxxxx ; DV655K xxxxxx DV755K xxxxxx ("x" = 0~9, a ~ z, A ~ Z or Blank)
Name of Responsible Party:	Acer America Corporation
Address of Responsible Party:	333 West San Carlos St. Suite 1500 San Jose, CA 95110 U. S. A.
Contact Person:	Acer Representative
Phone No.:	254-298-4000
Fax No.:	254-298-4147

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.

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

Please use the supplied power adapter and power cord to ensure the FCC compliance. If a power cord is not provided, please contact your supplier.

CE Declaration of Conformity

Hereby, Acer 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.

Find manuals and other documents for your Acer product on the official Acer support website.

Acer monitors are purposed for video and visual display of information obtained from electronic devices.

Safety Information

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

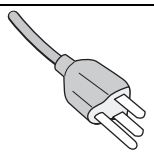
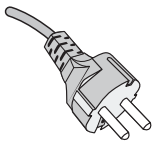
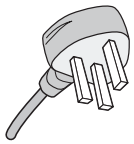
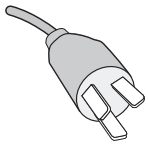
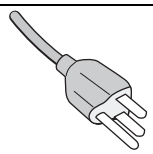
Refrain from opening the display cabinet as there are high voltage components inside. Refer servicing to qualified service personnel.

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.

CAUTION

Please use the power cord provided with this monitor in accordance with the table below. If a power cord is not supplied with this equipment, please contact your supplier. For all other cases, please 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 particular country.

	North America (USA/Canada/ Taiwan)	European Union	UK	China	Japan
Plug Shape					
Voltage	120 (110 in Taiwan)	230	230	220	100

When operating a display which requires an AC 125-240V power supply, make sure to use a power supply cord that matches the power supply voltage of the AC power outlet being used.

The power supply cord should be connected to an outlet with a grounded connection.

NOTE

This product can only be serviced in the country where it was purchased.

Use the power cord which has BSMI mark at both ends when you use this monitor in Taiwan.

- The intended primary use of this product is as an Information Technical Equipment in an office or domestic environment.
- The product is intended to be connected to a an external device and is not intended for the display of television broadcast signals.

Safety Information

Safety Precautions

Please note the following when setting up and using the display:

- **DO NOT OPEN THE DISPLAY.** There are no user serviceable parts inside and opening or removing covers may expose you to dangerous shock hazards or other risks. Refer all servicing to qualified service personnel.
- Do not spill any liquids into the cabinet or use your display near water.
- Do not insert objects of any kind into slots on the display, as they may touch dangerous voltage points, which can be harmful or fatal or may cause electric shock, fire or equipment failure.
- Do not place any heavy objects on the power cord. Damage to the cord may cause shock or fire.
- Do not place this product on a sloping or unstable cart, stand or table, as the monitor may fall, causing serious damage to the display.
- Do not mount the display face up, face down or upside down for an extended period of time as it may cause permanent damage to the screen.
- The power supply cord you use must have been approved by and comply with the safety standards of your country. (Type H05VV-F 3G 1mm2 should be used in Europe)
- In UK, use a BS-approved power cord with melded plug having a black (13A) fuse installed for use with this display.
- Do not place any objects on top of the display and do not use the display outdoors.
- Do not bend, crimp or otherwise damage the power cord.
- Do not use the display in high temperature, humid, dusty, or oily areas.
- If display glass is broken, do not come in contact with the liquid crystal and handle with care.
- Allow adequate ventilation around the display, so that heat can properly dissipate. Do not block ventilated openings or place the display near a radiator or other heat sources.
- The power cable connector is the primary means of detaching the system from the power supply. The monitor should be installed close to a power outlet, which is easily-accessible.
- Handle with care when transporting. Save packaging for transporting.
- Please clean the ventilation holes on the back of the display at least once a year to remove any dust or dirt.
- Do not use the display under rapid temperature and humidity change condition or avoid cold air from air-conditioning outlet directly, as it may shorten the lifetime of the display or cause condensation. If condensation happens, let the display stand unplugged until there is no condensation.
- The touch panel glass is not safety glass and is not laminated. As with other glass, the touch panel glass may break into sharp pieces if misused, dropped, or otherwise subjected to a substantial shock. If touch panel glass happens to break, please use care to avoid injury.
- DO NOT tap the monitor with hard or pointed objects, such as a pen or pencil.

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, contrast and sharpness controls 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 OA 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.

Power Management

To reduce power, the display supports three power-off methods, for different purposes.

Sleep Timer

- The user can set the timer to power off the display, regardless of the current source signal status. Sleep Timer options in the OSD menu are: 5 mins, 15 mins, 30 mins, 60 mins, 90 mins, 120 mins, 180 mins, and OFF.
- This value will not be saved. It only executes once, and the default is OFF.

Power Save Timer

- This timer will power off the display when the current source has no signal. The adjustable range of the Power Save Timer is 30 sec-300 sec, or OFF. This timer can be disabled in the OSD menu.
- This value will be saved; the default is 300 sec.
- If the display is connected via VGA/HDMI1/HDMI2/DVI-D/DP and switches to standby as a result of the Power Save Timer, the display will power on automatically if the signal from the current source returns.

NOTE

For VGA/HDMI1/HDMI2/DVI-D/DP to support this function, please set the **Detect Signal in Standby** function to ON in the OSD Menu.

NOTE

The Sleep Timer priority is the same as Power Save Timer; if both timers are enabled, the power-off time of the display will depend on which timer is programmed to power off first.

Schedule

- The user can set seven schedules to determine power-on times and power-off times individually.
- The Schedule setting priority is higher than the Power Saving Timer. If the power-off time setting in the Schedule is enabled, the system will disable the Sleep Timer automatically.

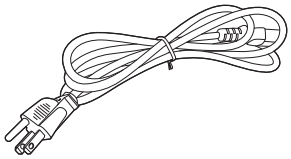
NOTE

Not all video devices are guaranteed to support the auto power-on function when connected to the display.

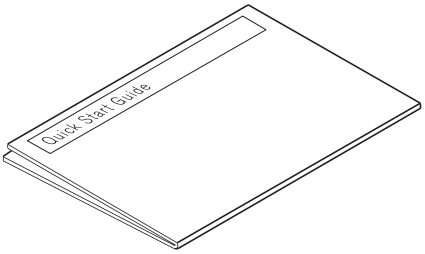
Package Contents

Your new display should include the following items:

LCD monitor

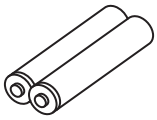


Power cord
(By regional request)

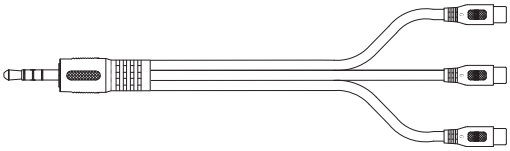


Quick Start Guide

Remote Control



Remote Control Batteries



CVBS Cable

VGA Cable	Optional
DVI Cable	
HDMI Cable	
DP Cable	

Installation of Your Display

WARNING

- For proper installation it is strongly recommended to use a trained, authorized technician. Failure to follow standard mounting procedures could result in damage to the equipment or injury to the user or installer.
- Product warranty does not cover damage caused by improper installation, remodelling, or natural disasters. Failure to follow these recommendations could result in voiding the warranty.
- DO NOT mount the display yourself. For proper installation **it is strongly recommended to use a trained, qualified technician**.
- This display is designed to operate at an altitude of up to 2,000m above sea level.

Moving Your Display

CAUTION

Never move or carry the display yourself.

Prior to installation, place the display on a flat area or surface with adequate space.

Make sure there is nothing on the floor/surface that can damage the display.

To avoid damaging the screen face, place a protective sheet on the surface underneath the display.

NOTE

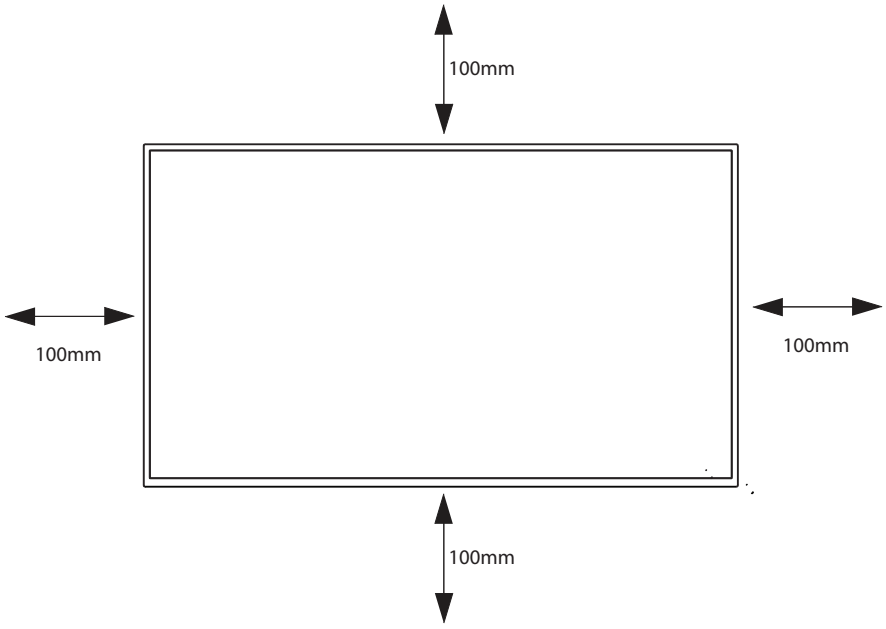
Do not leave the monitor in the face-up or face-down position for more than one hour as this may result in a negative effect on the screen's performance.

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.

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 (FDMIv1) mounting method. It is recommended to use mounting interfaces that comply with UL1678 standard in North America.

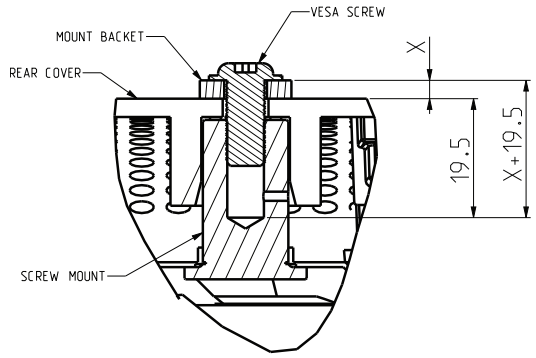
Attaching Mounting Equipment to Your Display

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

NOTE

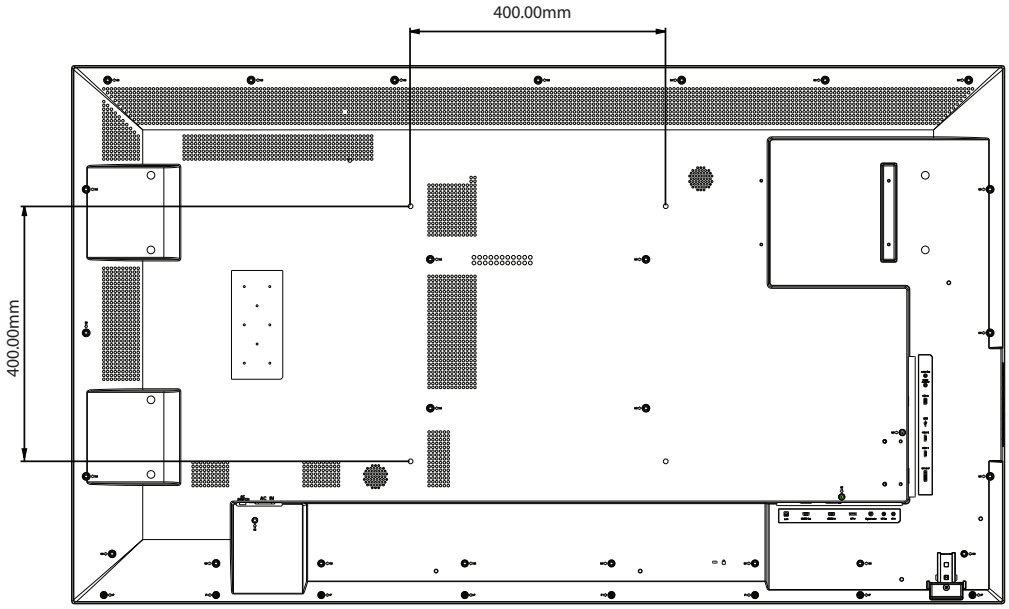
Refer to the proper installation instructions included with the mounting equipment.

1. Place the display face-down on a flat, padded surface for safe installation of mounting accessories.
2. For installation, it is recommended to use M6 screws and tighten them securely. Screws should have a Boss screw thread of at least 15mm, a loose-proof spring washer, and a length 10 mm longer than the thickness of the mounting bracket.

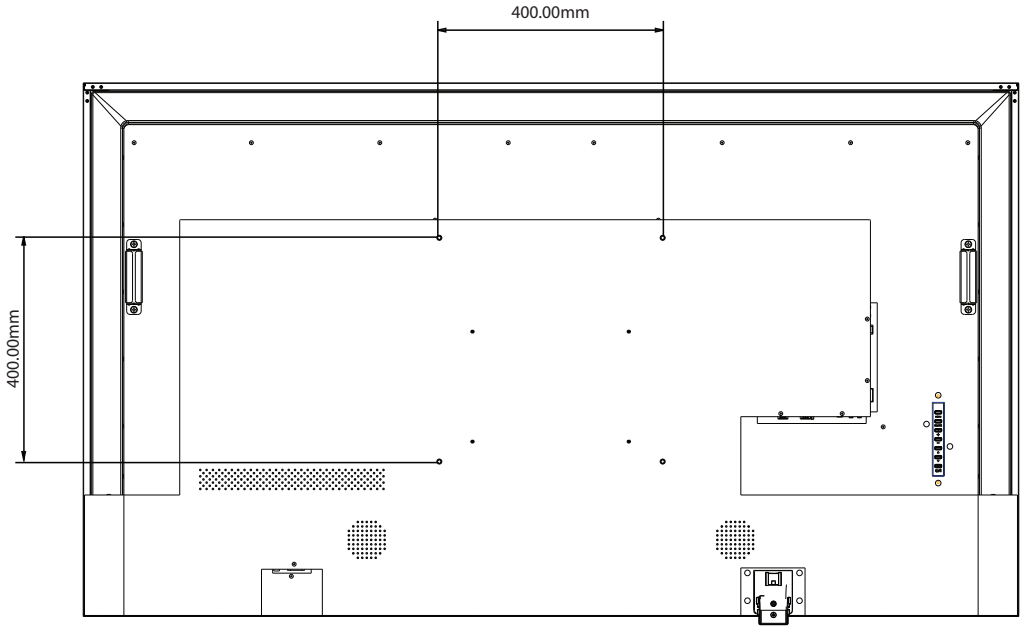


(Recommended Torque: 470 - 635N·cm). Bracket hole should be under ϕ8.5 mm.

55/65″



75″



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.

Installing for Portrait or Landscape Orientation

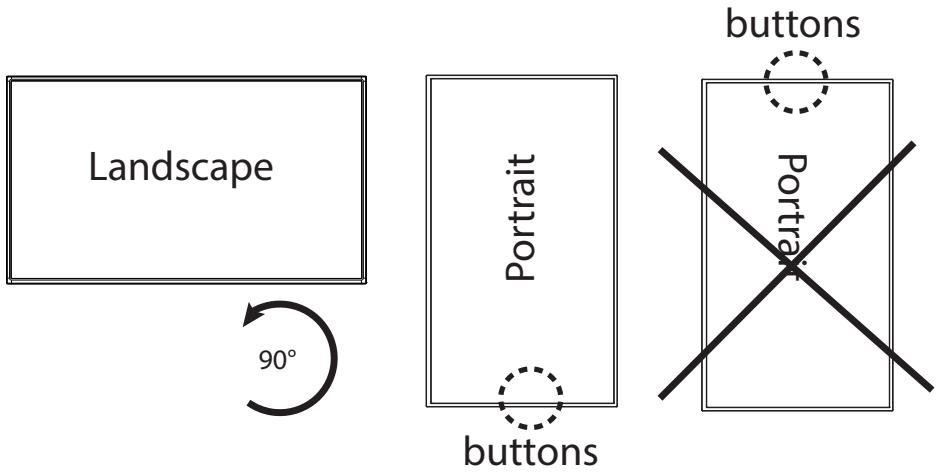
The display can be installed in portrait or landscape orientation. Ensure that the display is oriented as shown in the images below.

NOTE

- The operating environmental condition (temperature) when the display is in portrait orientation is 0°C to 40°C (32° to 104°F). The operating humidity is 20 - 80% (without condensation).
- Proper operation of the display is not guaranteed when it is not mounted as shown below (upside down, face down, etc.).
- In portrait orientation, the lifetime of the backlight is shorter than when in landscape orientation.

Installation in portrait mode

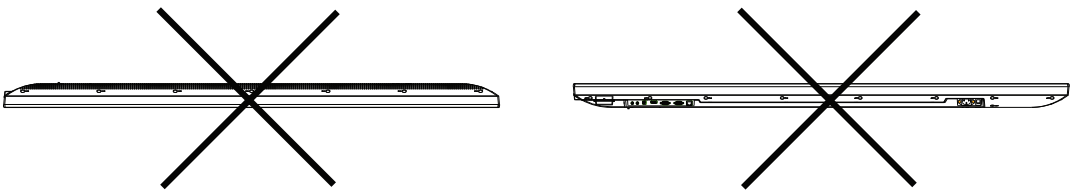
The buttons should be on the bottom side when viewed from the front of the display.



NOTE

This display does not have a function to rotate displayed images. To display images in portrait orientation, use images that have already been rotated.

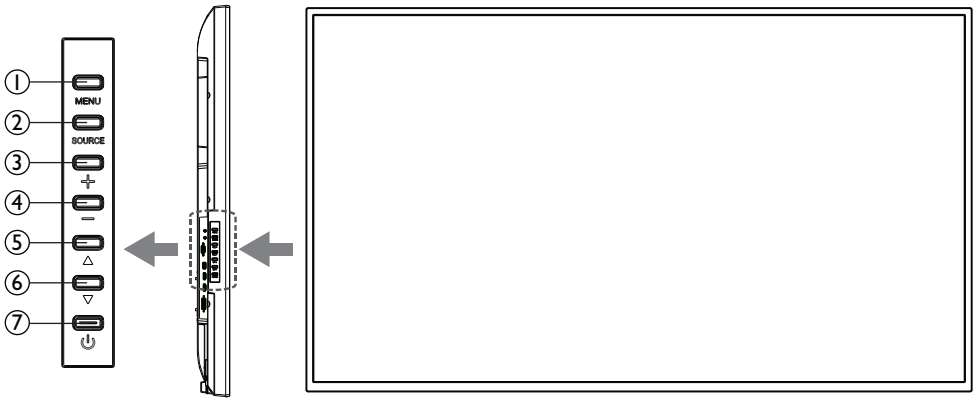
Do NOT install the display in a face up or a face down position.



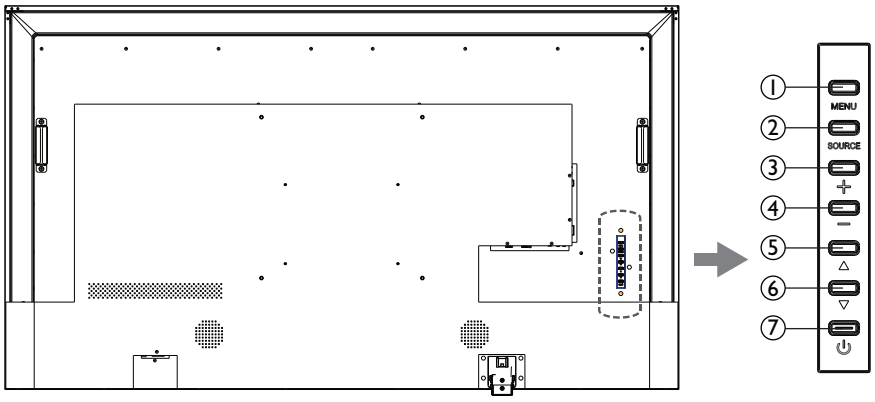
Display Components

Control Panel - Location & Buttons

55/65″



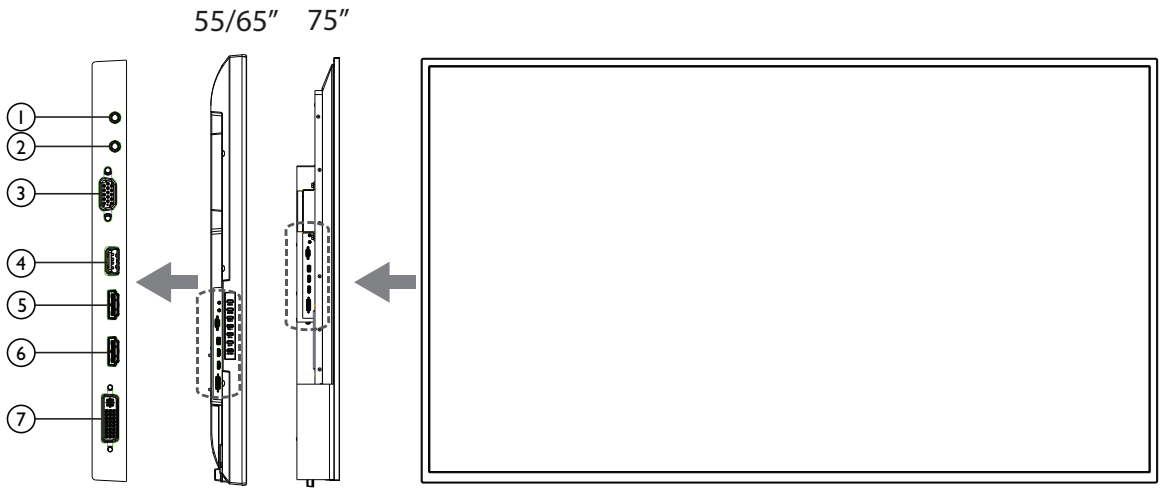
75″



①	**MENU button**	Turns the OSD menu on/off.
②	**SOURCE button**	Toggles between the input sources of your display: [AV], [HDMI1], [HDMI2], [DVI-D], [DP], [VGA], [USB]. Also acts as an INPUT button within the OSD menu.
③	**Volume Up button** (+)	In the OSD menu, acts as the LEFT button to adjust or increase the function. Also increases the audio output level when the OSD menu is turned off.
④	**Volume Down button** (-)	In the OSD menu, acts as the RIGHT button to adjust or decrease the function. Also decreases the audio output level when the OSD menu is turned off.
⑤	**Up button** (△)	In the OSD menu, acts as the UP button to move the highlighted area up to select adjustment items.
⑥	**Down button** (▽)	In the OSD menu, acts as the DOWN button to move the highlighted area down to select adjustment items.
⑦	**Power button** (⏻)	Switches the power on/off. See also “Power On and Off Modes” on page 22.

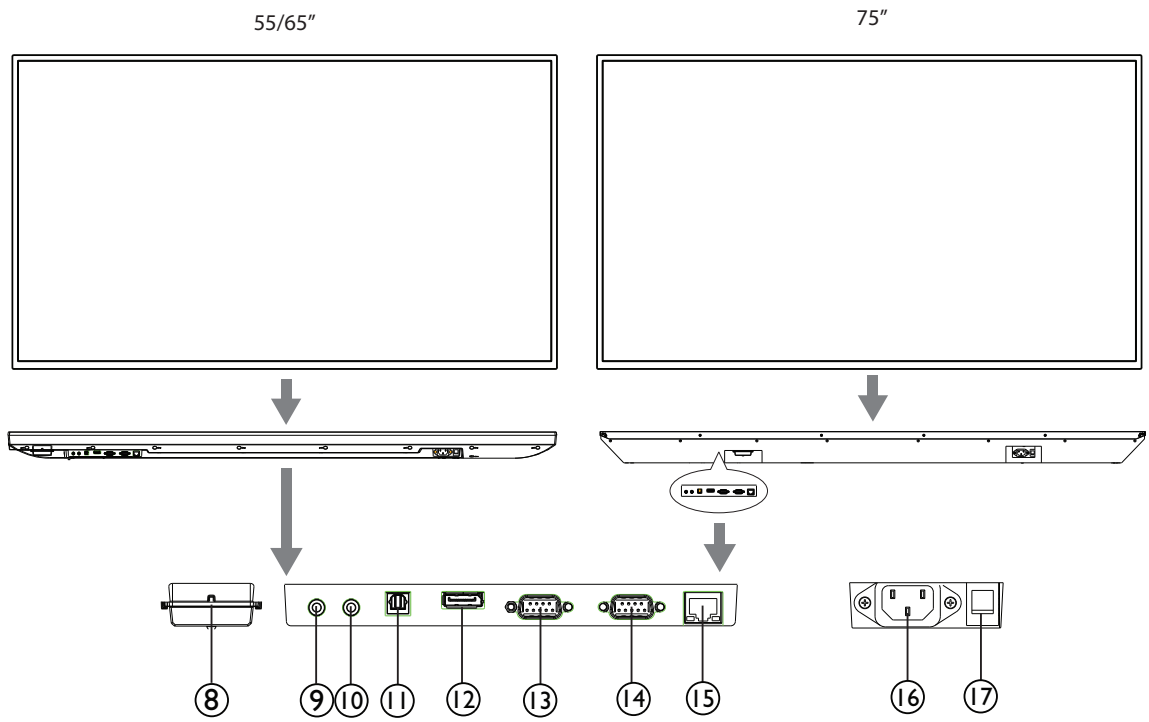
Ports & Connectors

SIDE VIEW:



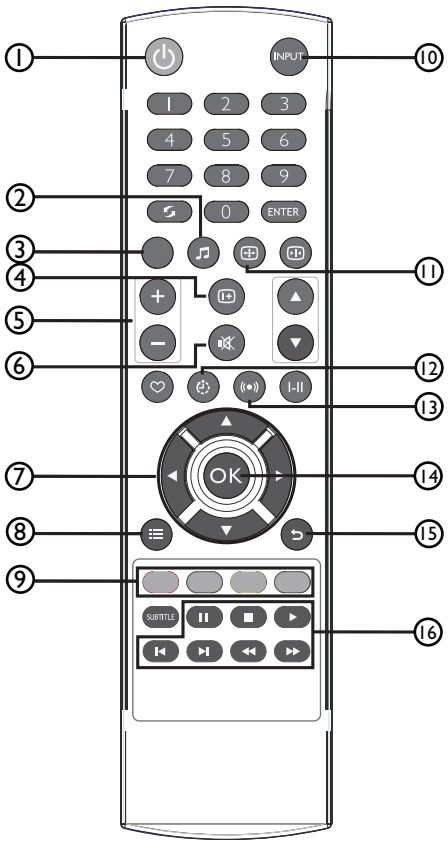
①	**Audio Out**	Connects to external speakers, audio amplifiers, etc. or outputs the signal that is supplied to the CVBS/Audio In connector.
②	**CVBS/Audio In (LINE IN)**	Connects to the Audio Out connector of a video source such as a computer, VCR, or DVD player when the display is connected to the source via the VGA In connector. For HDMI and DP video sources, a separate audio input source can be connected via this jack and then configured in the Audio Source item in the OSD menu, see “SOUND” on page 37.
③	**VGA In**	Connects to the analog video output (VGA) of a computer or other RGB equipment. This input can be used with an RGB or COMPONENT source.
④	**USB**	Connects to a personal computer or USB 2.0 device to display digital media.
⑤	**HDMI 1**	Connects to devices supporting audio/video data using the digital HDMI interface.
⑥	**HDMI 2**	Connects to devices supporting audio/video data using the digital HDMI interface.
⑦	**DVI-D In**	Connects to the digital video output of a computer or other display.

BOTTOM VIEW:



⑧	**Remote control sensor and Power Indicator**	Receives the signal from the remote control. See also “Using the Remote Control” on page 20. When the display is in active use the power indicator illuminates GREEN. When the display is powered off it illuminates RED. When a component failure is detected, the indicator will blink RED.
⑨	**IR In**	Connects an external IR sensor module to the display or connects to another display in an IR daisy chain, see “Setting Up an IR Daisy Chain” on page 29.
⑩	**IR Out**	Connects to the IR IN of a secondary LCD display monitor. Outputs the signal that is supplied to the IR IN connector, see “Setting Up an IR Daisy Chain” on page 29.
⑪	**Digital Audio**	Connects to external speakers, audio amplifiers, etc. or outputs the signal that is supplied to the CVBS/Audio In connector.
⑫	**DP In**	Connects to devices supporting audio/video data using the DisplayPort interface.
⑬	**RS232 In**	Connects to the RS232 OUT connector of a computer or other display.
⑭	**RS232 Out**	Connects to the RS232 IN connector of another display.
⑮	**LAN (RJ45 Ethernet)**	Connects to a router for LAN access.
⑯	**AC IN connector**	Connects to a power outlet via the supplied power cord.
⑰	**AC SWITCH**	Switches the main power of the display ON/OFF.

Remote Control



①	**POWER button**	Switches the power on/off.
②	**SOUND buttons**	Selects the sound mode options STANDARD, DYNAMIC and CUSTOM.
③	**PICTURE button**	Selects the picture mode options from STANDARD, DYNAMIC, CUSTOM or CINEMA.
④	**INFO button**	Displays the current screen resolution and refresh rate.
⑤	**VOLUME buttons (VOL)**	Increases the audio output levels. The plus (+) button increases and the minus (–) button decreases the audio output level.
⑥	**MUTE button**	Switches the mute function ON/ OFF.
⑦	**UP/DOWN/ RIGHT/ LEFT buttons**	Navigates the selection area in the OSD menu. (▲) button moves the selection area up, (▼) moves the selection area down, (◀) toggles the selection to the left, (▶) toggles the selection to the right.
⑧	**MENU button**	Switches the OSD menu mode on/off.
⑨	**MEDIA CONTROL buttons**	Contextual buttons providing various media control functions in specific menus. The functions of each button will be shown in the OSD menu in its corresponding color.
⑩	**INPUT button**	Displays the OSD menu to switch the video input. You can select [AV], [HDMI1], [HDMI2], [DVI-D], [DP], [VGA], [USB].
⑪	**ASPECT button**	Displays the current display aspect ratio.
⑫	**SLEEP TIMER button**	Changes the sleep timer setting or sets the sleep timer to off.
⑬	**SET ID button**	Changes the display ID setting for IR daisy chains.
⑭	**OK button**	Accepts the selection made in the OSD menu.
⑮	**BACK button**	Returns to the previous OSD menu.
⑯	**AUDIO/VIDEO CONTROL buttons**	Sets the control functions when playing media files. Fast reverse (◀◀), play (▶), fast forward (▶▶), track backwards (⏮), stop (■), pause (⏸), and track forward (⏭).

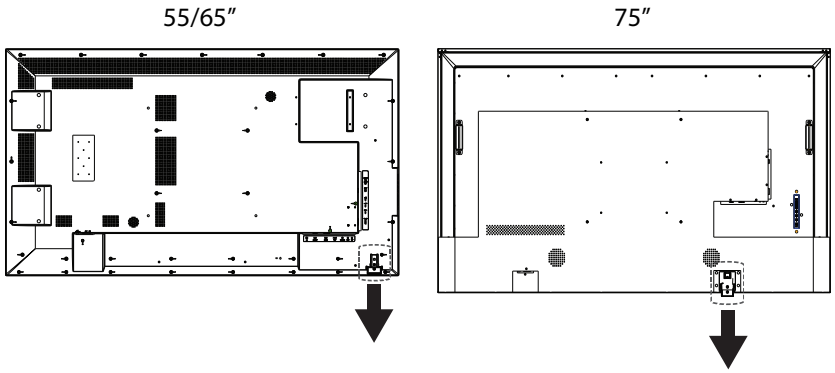
NOTE

If operation of the remote control is not available, you can use the control panel to access settings. See “Basic Operations of the OSD Screen” on page 33.

Using the Remote Control

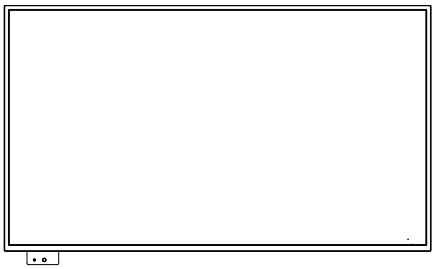
Setting Up the Infrared Remote Control Sensor

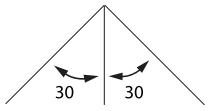
Before using the infrared remote control, the display's remote control sensor must be positioned. The remote control sensor is the small black box located on the back of left side of the display. Press the small button near the base of the remote control sensor, and slide the sensor away from the display until it locks in place. Reverse this procedure to return the sensor to its original position.

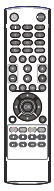


Using the Remote Control

Point the remote control toward the display's remote control sensor when making selections with the buttons. The operating range of the remote control is a distance of about 10m from the front of the remote control sensor. The horizontal and vertical angles of the remote control are approximately 30° within a distance of about 10m.







CAUTION

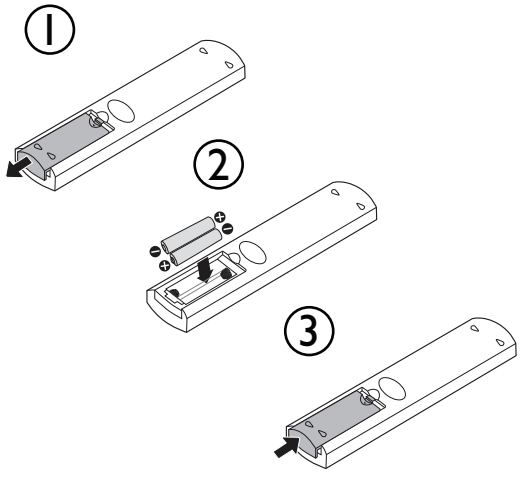
The remote control may not function when direct sunlight or strong illumination strikes the remote control sensor or when there is an object in its path.

Installing the Remote Control Batteries

The remote control is powered by two 1.5V AAA batteries.

To install or replace batteries:

1. Press and slide to open the cover.
2. Align the batteries according to the (+) and (–) indications inside the case.
3. Replace the cover.



Preparing Your Display for Use

1. Install in the desired location.

⚠ CAUTION

MOVING OR INSTALLING THE DISPLAY MUST BE DONE BY TWO OR MORE PEOPLE.

Failure to follow this caution may result in injury if the display falls.

⚠ CAUTION

Do not mount or operate the display upside down, face up or face down.

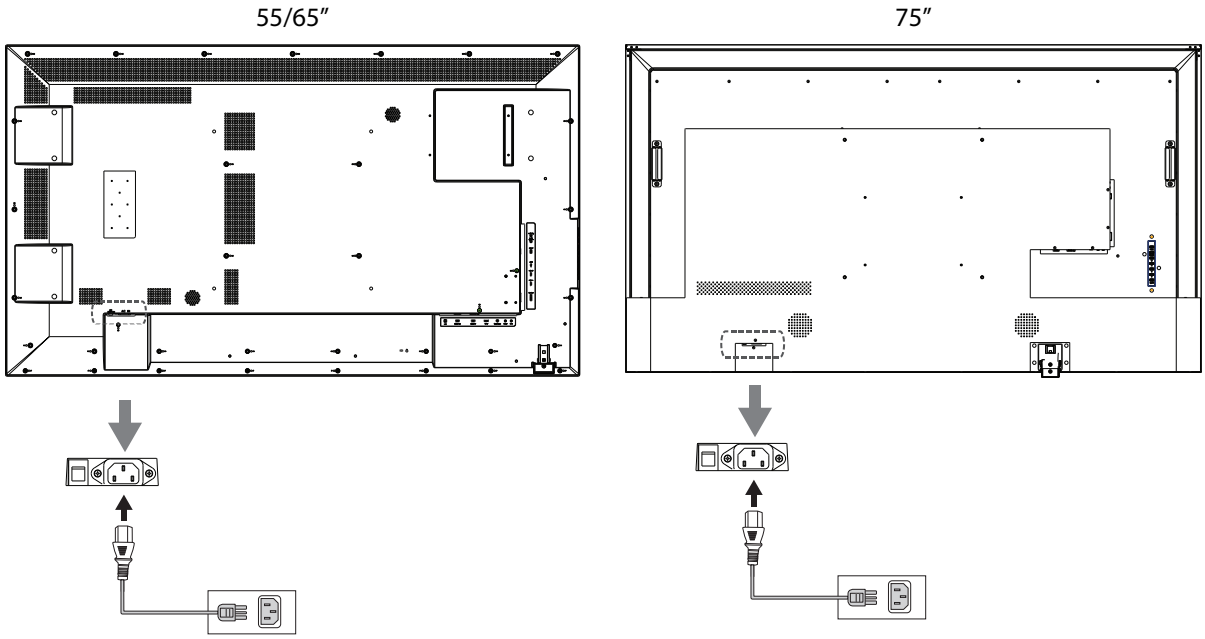
IMPORTANT

When setting the display down to install the wall mount, place it face down on a flat and stable surface covered by a protective sheet or cloth and a table cushion. DO NOT place the display on an uncovered surface.

2. Make connections.

(See “Connecting Devices to Your Display” on page 24)

3. Plug the supplied power cable into the display and a power source.



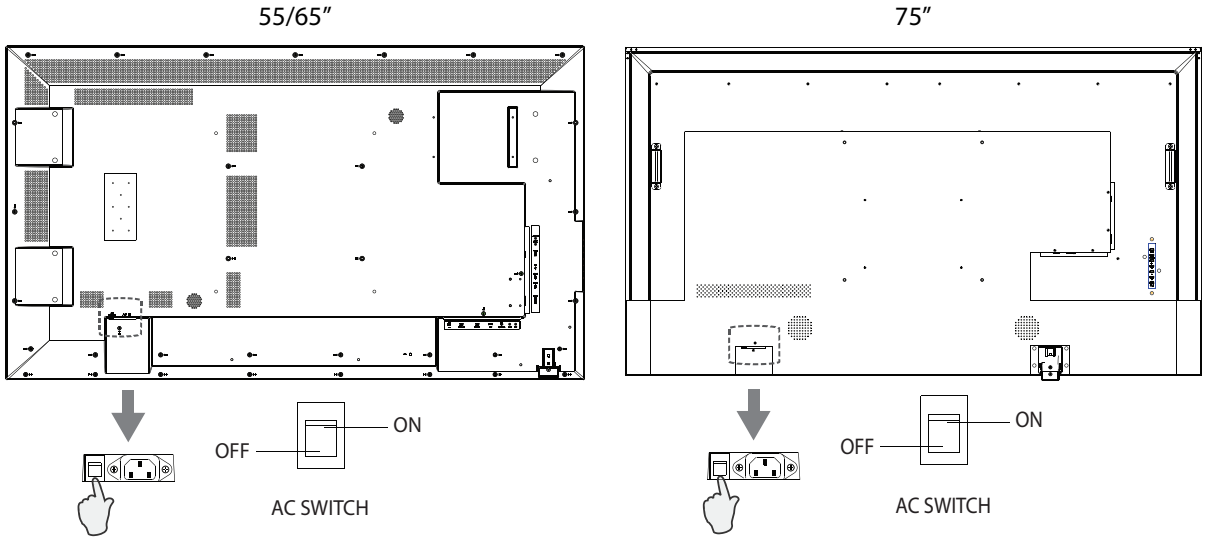
NOTE

Please refer to the “Safety Information” on page 5 of this manual for proper selection of AC power cord.

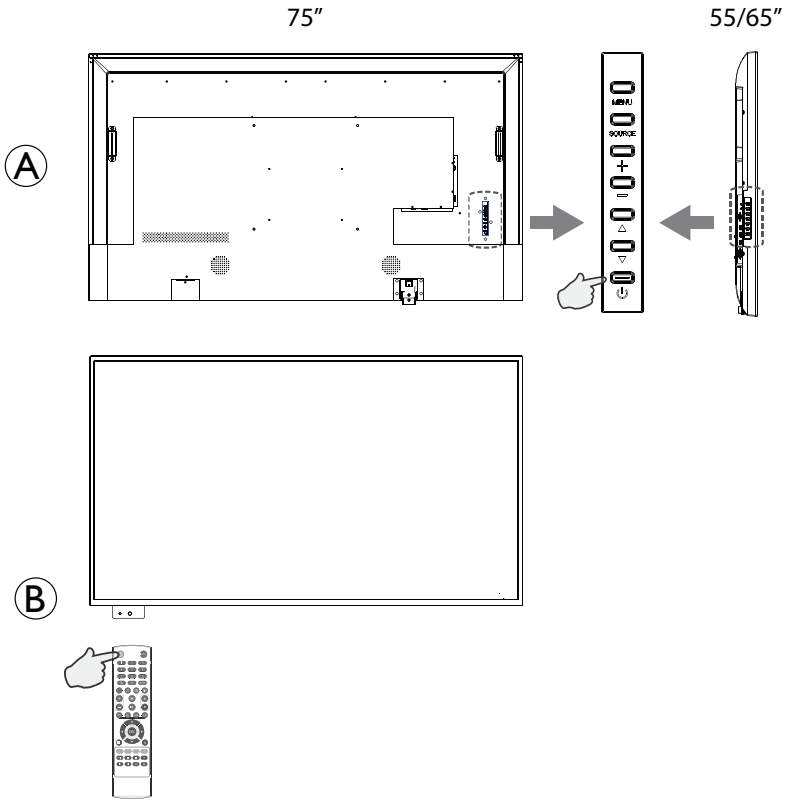
Operating Your Display

Power On and Off Modes

1. Turn the AC switch located at the bottom of the display on.



2. To power up the display, select either the Power button [⏻] on the control panel (A) or the Power button [⏻] on the remote control (B).



NOTE

The display power indicator will turn green while powered on and will turn red while powered off.

LED Power Indicator

Condition	Indicator	
	LED (RED)	LED (GREEN)
Off (=AC Off mode)	OFF	OFF
Off (=DC Off mode)	ON	OFF
On	OFF	ON
Schedule Standby (=System is waiting for wake up by scheduler which the user has set)	BLINK	BLINK
	0.5s Red ON,Green OFF; 0.5s Red OFF,Green ON	

Connecting Devices to Your Display

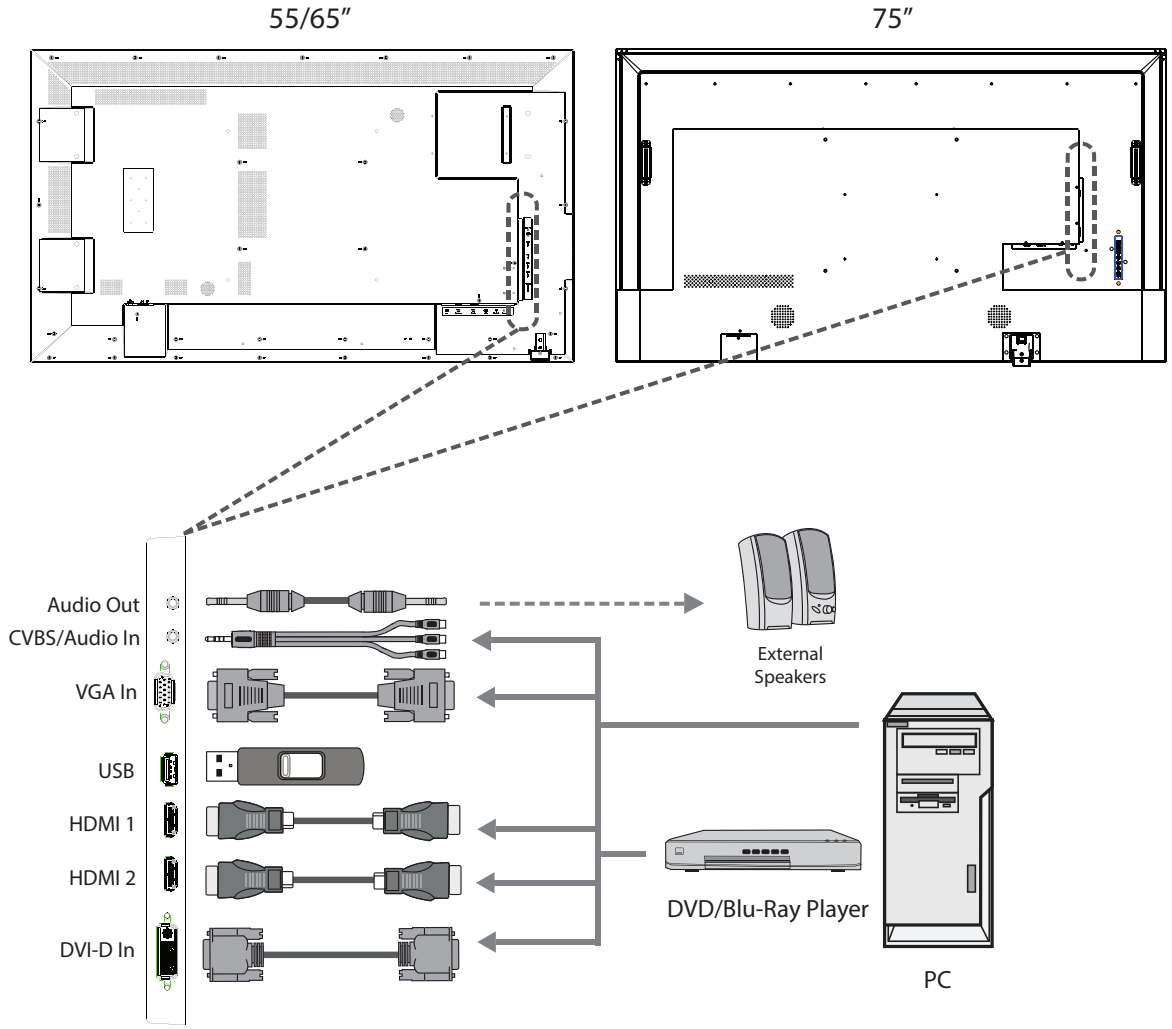
Before connecting any equipment:

- First turn off the power of all the attached equipment and then make connections to the display.
- Refer to the user manual included with each separate piece of equipment.

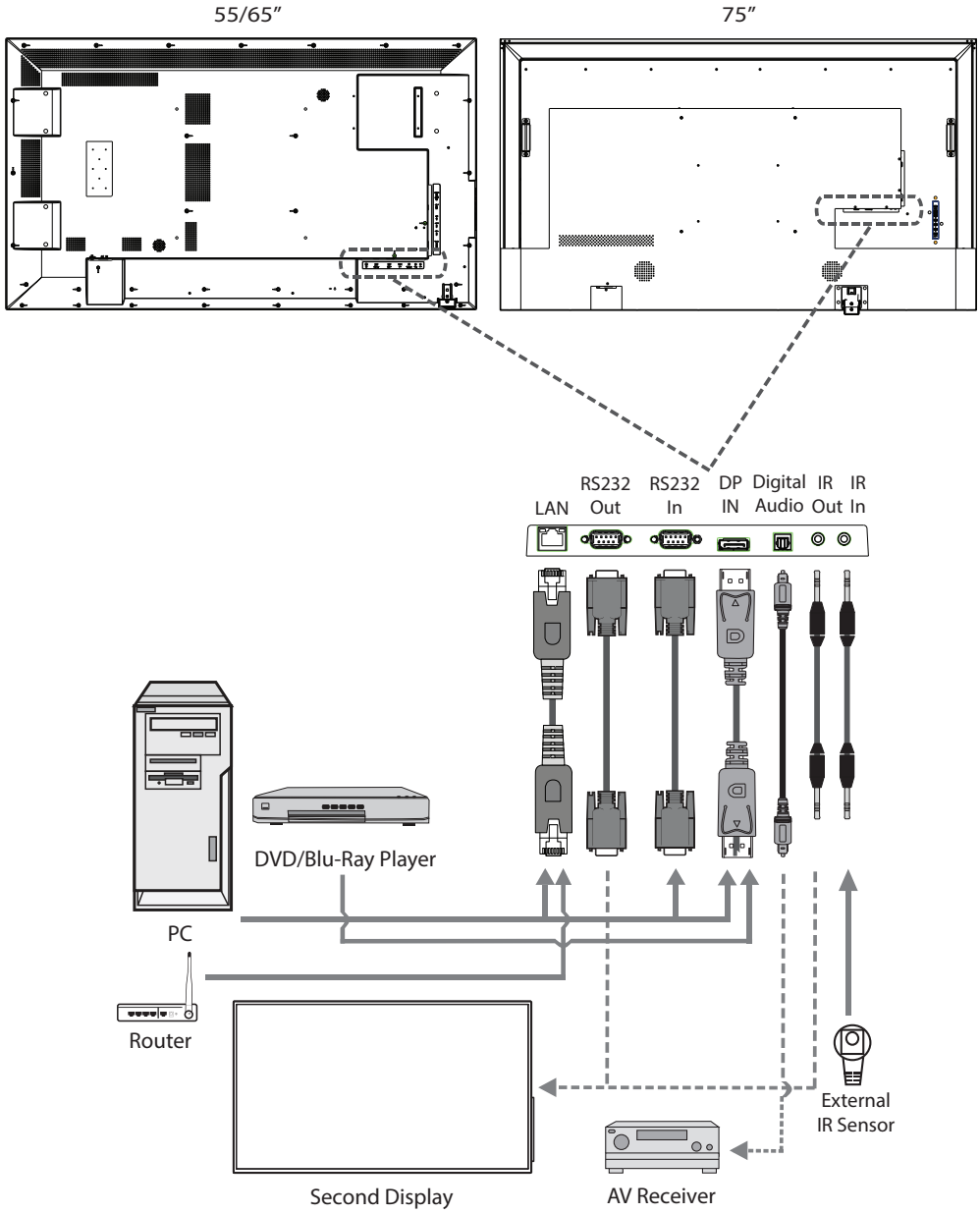
NOTE
Do not connect/disconnect cables when turning on the display or when turning on other external equipment as this may result in image loss.

NOTE
Use an audio cable without a built-in resistor. This type of audio cable turns down the sound.

CONNECTIONS (SIDE):



CONNECTIONS (BOTTOM):



Connecting equipment	Connecting video terminal	Input signal name on source menu	Connecting audio terminal	Input button on remote control
DVD/ Blu-Ray Player	CVBS HDMI 1 HDMI 2 DVI-D In DP In	AV HDMI1 HDMI2 DVI-D DP	Audio In HDMI1 or Audio In HDMI2 or Audio In Audio In DP or Audio In	INPUT > AV INPUT > HDMI1 INPUT > HDMI2 INPUT > DVI-D INPUT > DP
PC	HDMI 1 HDMI 2 DVI-D DP In	HDMI1 HDMI2 DVI-D DP	HDMI1 or Audio In HDMI2 or Audio In Audio In DP or Audio In	INPUT > HDMI1 INPUT > HDMI2 INPUT > DVI-D INPUT > DP
	VGA In	VGA	Audio In	INPUT > VGA
USB device	USB	USB	N/A	INPUT > USB

Analog Connections

Connecting with an Analog Video Source:

VGA connection:

1. Connect a VGA cable to the **VGA In** connector.
2. Select **VGA** using the [SOURCE] button on the display, or the [INPUT] button on the remote control. Once selected, the audio automatically switches to **Line In** on the display.

Audio with a VGA connection:

- Connect an audio cable (3.5-mm stereo mini), to the **CVBS/Audio In** connector. Because the audio automatically switches to **Line In**, the audio is output simply by connecting the cable.

Digital Connections

Connecting with a Digital Video Source:

HDMI Connection:

1. Connect an HDMI cable to the **HDMI1** or **HDMI2** connector.
2. Select **HDMI1** or **HDMI2** according to the connected connector by pressing the [SOURCE] button on the display or the [INPUT] button on the remote control.

NOTE
Please use an HDMI cable with HDMI logo.

DVI-D IN Connection:

1. Connect a DVI-D cable to the **DVI-D In** connector.
2. Select **DVI-D** using the [SOURCE] button on the display or the [INPUT] button on the infrared remote control.

DisplayPort Connection:

1. Connect a DisplayPort cable to the **DP In** connector.
2. Select **DP** using the [SOURCE] button on the display or the [INPUT] button on the infrared remote control.

Audio connection:

- For HDMI/DisplayPort, the default setting of audio source is a TMDS signal with HDMI/DP cable. Users can use an external audio source if an audio cable (ø3.5-mm stereo mini) is connected to the **CVBS/Audio In** connector. Open the OSD Menu and select **Sound** > **Audio Source** > **Line In**. (See “OSD (On-Screen-Display) Controls” on page 32).
- For DVI-D, connect an audio cable (3.5-mm stereo mini), to the **CVBS/Audio In** connector. Because the audio automatically switches to **Line In**, the audio is output simply by connecting the cable.

NOTE

It may take a moment for the signal to appear on the screen.

NOTE

Some display cards or drivers may not display an image correctly.

NOTE

The image may be reduced and may not be displayed full screen at a resolution of 1920 x 1080. Check the setting of the device’s video card.

LAN Connection:

To connect the display and a computer in network through a LAN hub.

1. Turn off the main power switch of the computer and the display. If you make a connection while the power is on, it the devices may fail.
2. Using a straight-type LAN cable, connect the computer to the LAN hub.
3. Using a straight-type LAN cable, connect the LAN hub to the **LAN** connector of the display.
4. Power on the display. Open the OSD Menu and select Setup > **Control Setting** > **LAN**.

NOTE

When you use a cross-type LAN cable, you can connect the display and the computer one-to-one without using a LAN hub, however, the computer may not be supported. It is recommended to check the operation in advance.

RS232 (Serial) Connection:

The Serial terminal conforms to the RS-232C interface specification, so that the display can be controlled by a computer which is connected to this terminal.

To connect the display and a computer through a serial connection:

1. Turn off the main power switch of the computer and the display. If you make a connection while the power is on, the devices may fail.
2. Using a RS-232C interface cable, connect the computer to the **RS232 In** connector of the display.
3. Power on the display. Open the OSD Menu and select **Setup** > **Control Setting** > **RS232**.

NOTE

Use a RS-232C cable to connect the **RS232 Out** connector to a second display if required.

Connecting a Personal Computer:

Some display cards with a vertical scanning frequency over 60MHz may display no image or display an image incorrectly. Your display projects the proper image by adjusting the factory preset timing signal automatically.

Typical factory preset signal timing:

Resolution	Scanning frequency		Remarks
	Horizontal	Vertical	
640 x 480	31.5 kHz	60 Hz	
800 x 600	37.9 kHz	60 Hz	
1024 x 768	48.4 kHz	60 Hz	
1280 x 768	48 kHz	60 Hz	
1360 x 768	48 kHz	60 Hz	
1280 x 1024	64 kHz	60 Hz	
1600 x 1200	75 kHz	60 Hz	Compressed image
1920 x 1080	67.5 kHz	60 Hz	Recommended resolution

Picture Aspect Ratio

You can set the aspect ratio of the screen by selecting an item for **Aspect Ratio** (OSD Menu) or by using the [ASPECT] button on the remote control. Select 4:3, 16:9, ZOOM, CINEMA, FULL 4:3 or FULL 16:9.

Setting Up an IR Daisy Chain

An IR daisy chain allows the user to connect multiple displays and operate them all with one remote control. Below are the steps for setting up and operating an IR daisy chain.

Setting a Display's Monitor ID Number

To program a unique Monitor ID for each display:

1. Press [MENU] on the remote control or the control panel to open the OSD Menu.
2. Navigate to **Multi Display Control** and select [OK].
3. Navigate to **Monitor ID** and choose a unique two-digit ID for the display.
4. Press [EXIT] on the remote control or [MENU] on the control panel to exit the OSD menu.

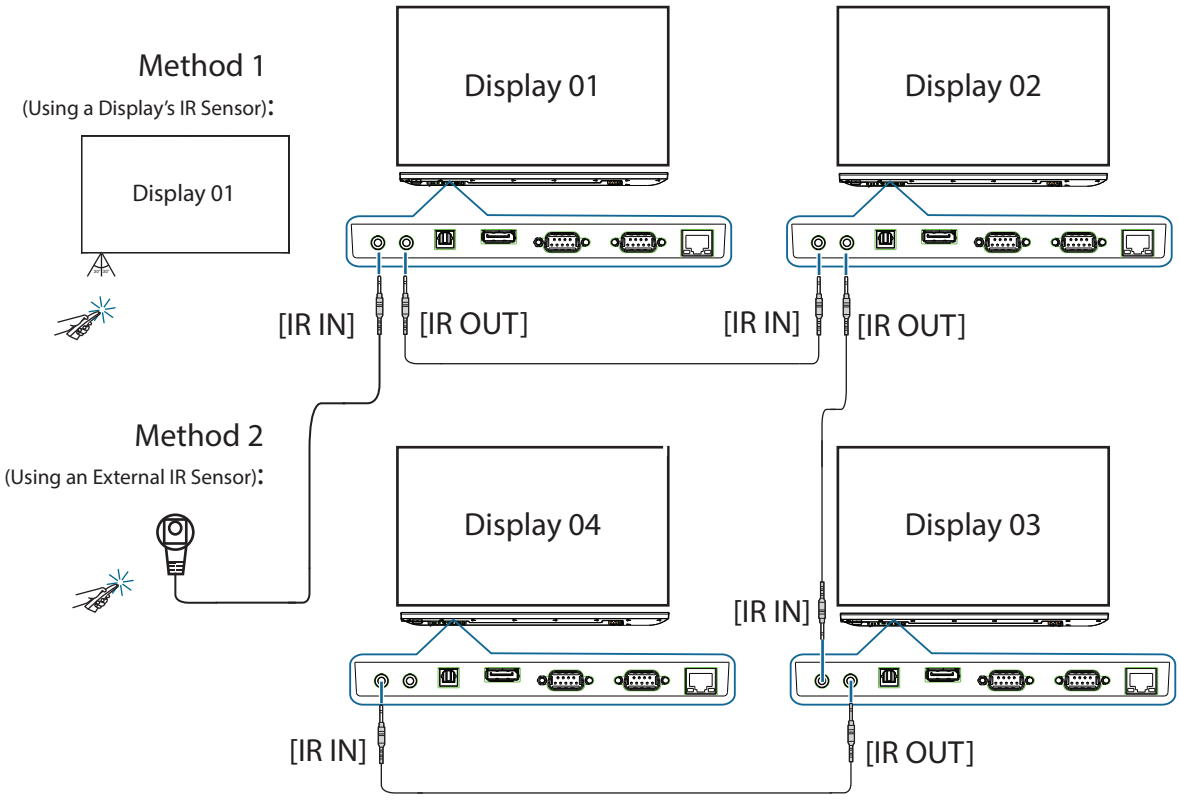
NOTE

Make sure that each display's Monitor ID is not the same as the other displays you want to connect.

Connecting Displays for an IR Daisy Chain

To connect multiple displays for an IR daisy chain, refer to the steps and the diagram below. Users have two methods for control of an IR daisy chain: using the IR sensor of a specified display (Method 1), or using an external IR sensor connected to the IR daisy chain (Method 2).

1. [Optional] Connect an external IR sensor to the [IR IN] port of the display you want to control.
2. Connect an IR cable from the [IR OUT] port of the display you want to control (eg- Display 01) to the [IR IN] port of the secondary display (eg- Display 02).
3. Connect an IR cable from the [IR OUT] port of the secondary display (eg - Display 02) to the [IR IN] port of the next display (eg - Display 03). Repeat this step for all subsequent monitors in the IR daisy chain.



NOTE

The maximum amount of displays permitted in an IR daisy chain is 25.

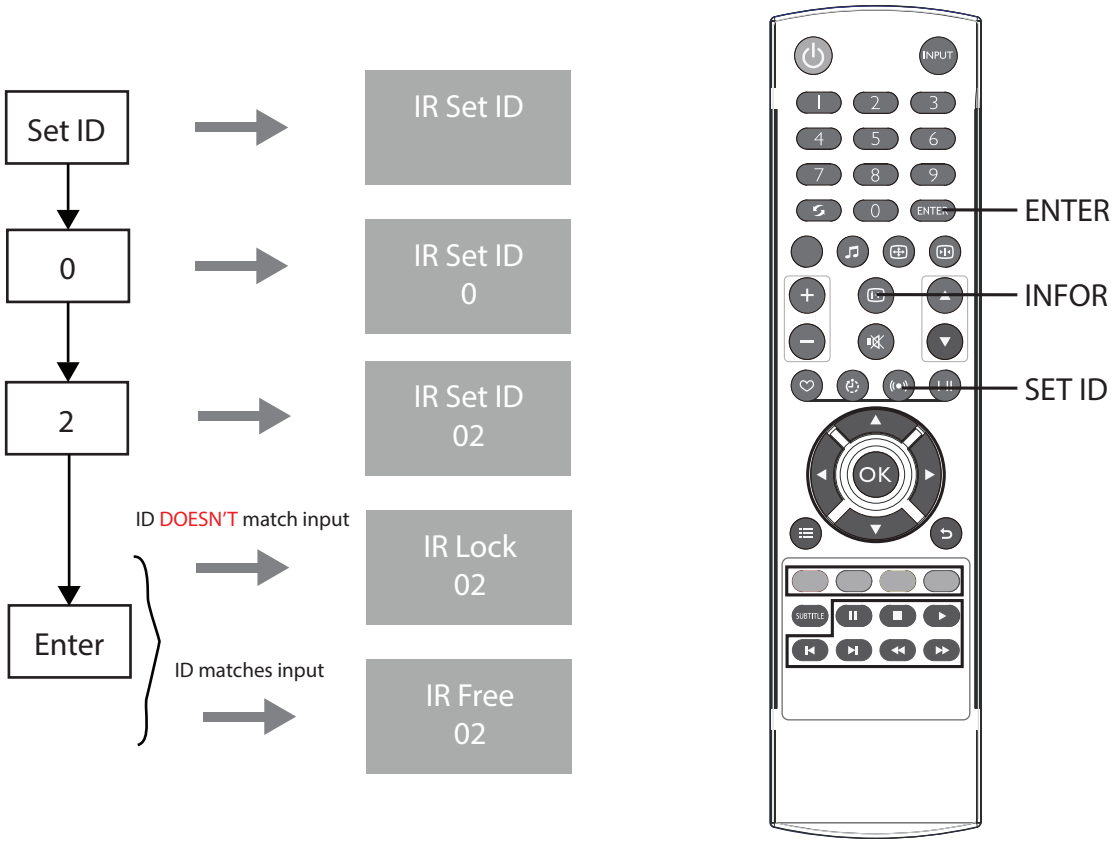
Controlling a Single Display in the IR Daisy Chain

To override the IR daisy chain and control a specific display in the IR loop, users can set the specified display to IR Free status.

1. On the remote control, press [Set ID], then the number keys of the display's Monitor ID, followed by the [Enter] key. The screen for the specified display will show the text **IR Free**, while the screen for the other displays (those that are not to be controlled) will show the text **IR Lock**.

NOTE

The number keys used for the display's ID is based on the **Monitor ID** in **Multi Display Control** on the OSD menu.



2. To clear the IR Free status and return to the original IR daisy chain settings, press the [Set ID] key.

NOTE

Press the [INFOR] key to show the display's Monitor ID and its current IR status. "IR Free" indicates IR Free status and "IR Lock" indicates the display cannot be controlled by the remote.

Returning All Displays to Default Settings

While using an IR daisy chain, users can return all the displays in an IR daisy chain to their default audio/video/source settings.

1. On the remote control, press [Set ID], then [0], then [0], followed by the [Enter] key.
2. The displays will all return to their default settings.

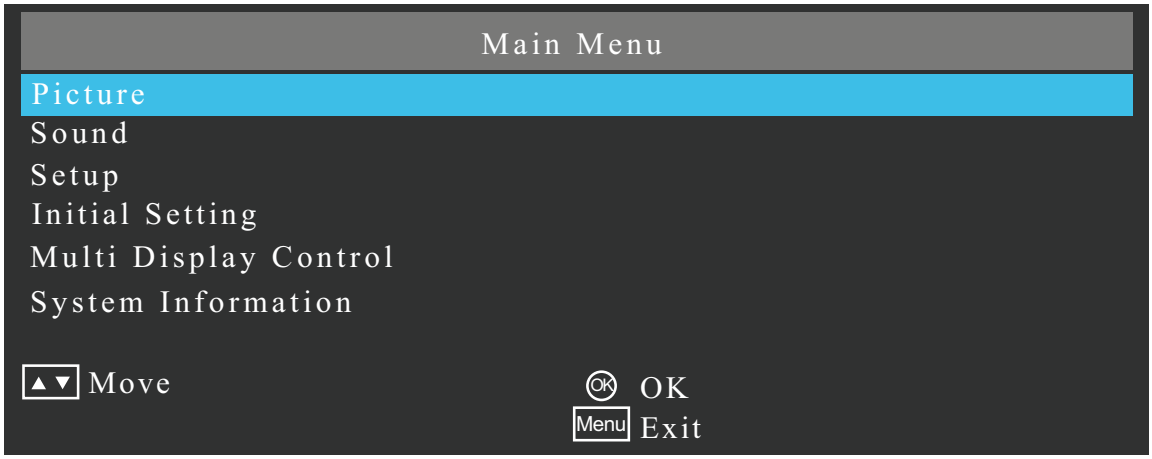
NOTE
The default source for all displays is DVI-D. Displays that are not connected with a DVI cable may have lost their signal. Check the connection and press [SOURCE] on the control panel of the display to reconfigure its input source.

OSD (On-Screen-Display) Controls

For this display, an OSD (On-Screen Display) function is used to allow you to easily adjust settings. You can use the OSD function to control the menu displayed on the screen and to adjust the picture, sound and other settings of the display.

To access the OSD Main Menu, press the [MENU] button on the remote control or the control panel.

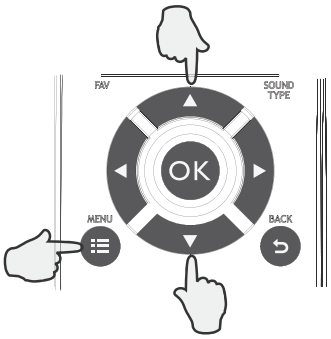
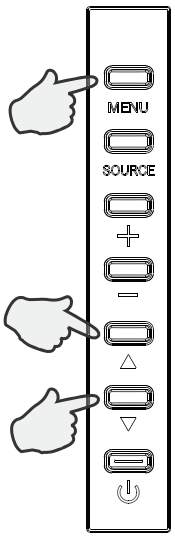
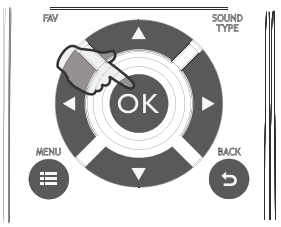
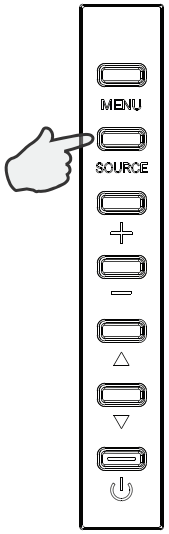
OSD Main Menu

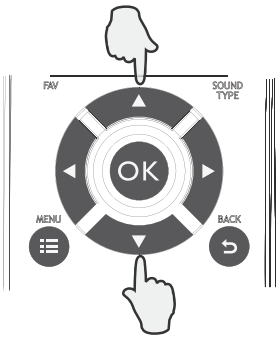
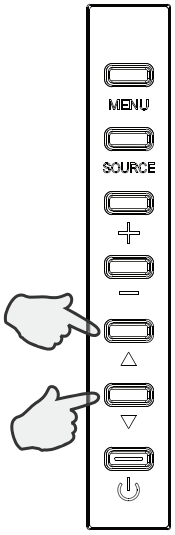
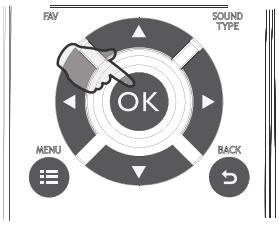
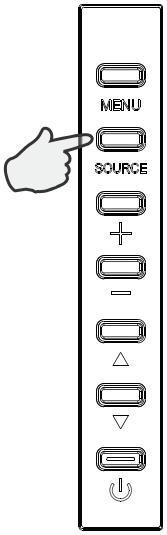


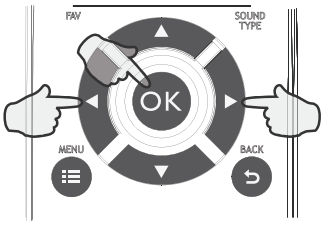
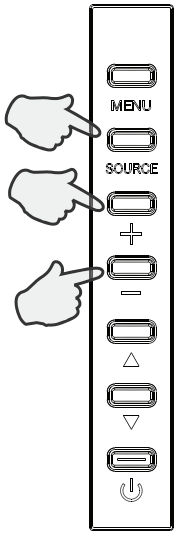
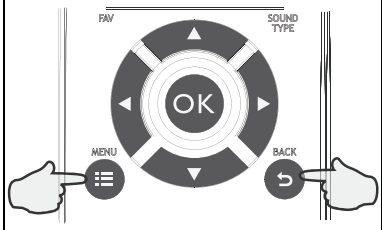
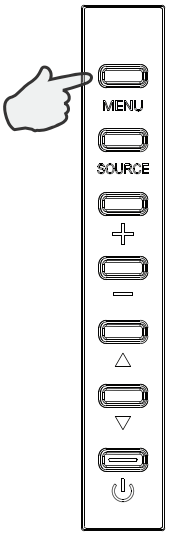
Sub-Menu Name	FUNCTION	See Page
Picture	Adjusts the picture settings of the display	36
Sound	Adjusts the audio settings of the display	37
Setup	Adjusts general settings of the display such as Scheduler, Power Save, and updating firmware	38
Initial Setting	Adjusts the language and time settings of the display	40
Multi Display Control	Adjusts the Tiling settings and Monitor ID	41
System Information	Displays the model number and software version of the display	42

Basic Operations of the OSD Screen

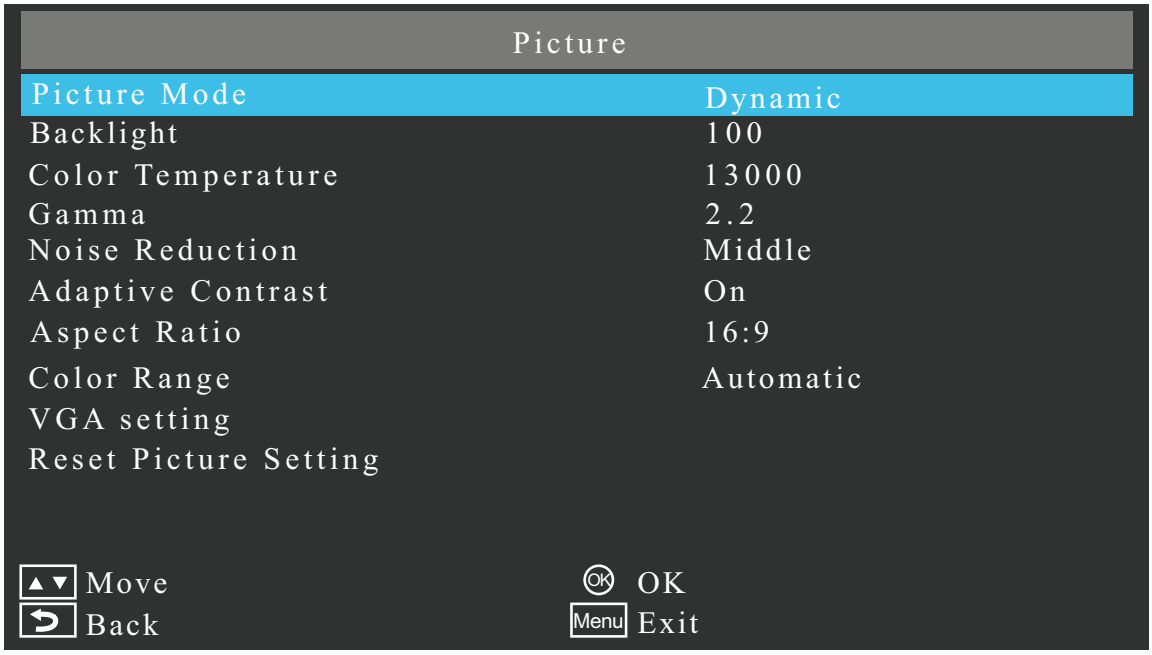
Make sure that the display is powered on and that the LED power indicator is green.

Step		Wireless Remote Control	Keypad Operation
1	Opening and Navigating the OSD Main Menu	Press the [MENU] button to display the OSD screen. Press the up (△)/down (▽) button to select an item in the main menu. 	Press the [MENU] button to display the OSD screen. Press the up (△)/down (▽) button to select an item in the main menu. 
2	Making Selections in the OSD Main Menu	Press the [OK] button to determine the selected item in the main menu. The top item in the relevant sub menu is selected. 	Press the [SOURCE] button to determine the selected item in the main menu. The top item in the relevant sub menu is selected. 

Step		Wireless Remote Control	Keypad Operation
3	Opening and Navigating OSD Sub-Menus	Press the up (△)/down (▽) button to navigate to an item in the sub menu. 	Press the up (△)/down (▽) button to navigate to an item in the sub menu. 
4	Making Selections in the OSD Sub-Menus	Press the [OK] button to select an item in the sub menu. 	Press the [SOURCE] button to determine the selected item in the sub menu. 

Step		Wireless Remote Control	Keypad Operation
5	Adjusting settings in the OSD sub-menus	Press the left (◁)/right (▷) button to adjust a setting or press the [OK] button to display further features of the setting. 	Press the plus (+)/minus (–) button to select a setting and press the [SOURCE] button to determine the setting. 
6	Returning to the previous menus and exiting the OSD Main Menu	Press the [BACK] button to exit from the current menu and return to the previous menu. Press the [MENU] button to exit from the OSD Menu. 	Press the [MENU] button to exit from the OSD Menu. 

PICTURE

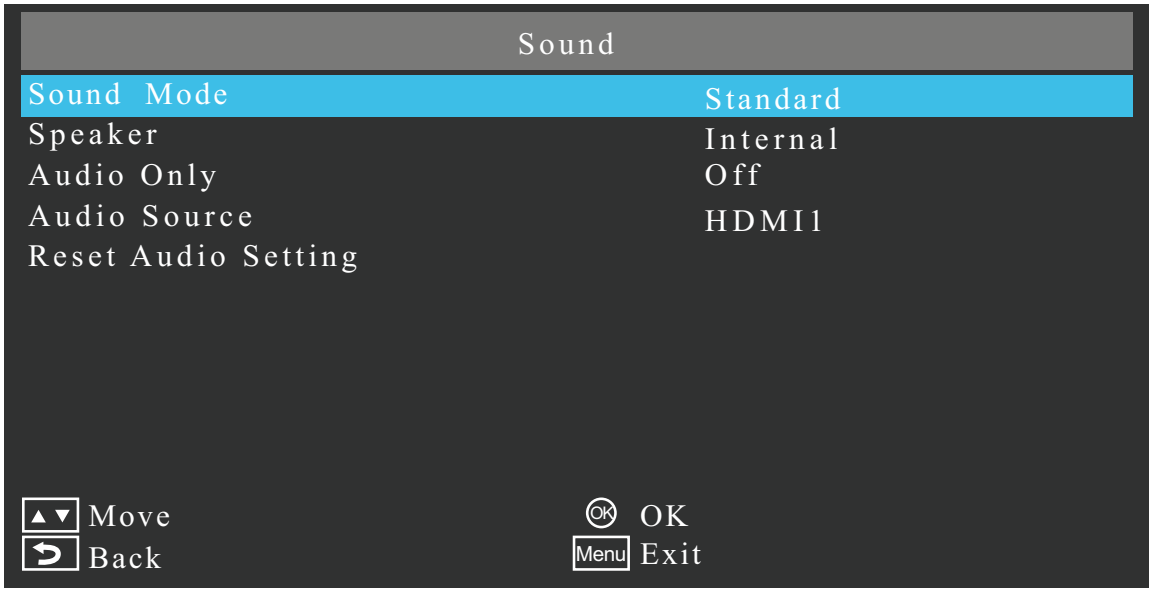


PICTURE	FUNCTION
Picture Mode	Select **Standard**, **Dynamic**, **Custom** or **Cinema**. Adjust **Contrast**, **Brightness**, **Sharpness**, **Tint**, and **Color**.
Backlight	Adjust the **Backlight** setting.
Color Temperature	Adjust the **Color Temperature** setting.
Gamma	Select a **Gamma** setting.
Noise Reduction	Adjust the **Noise Reduction** setting.
Adaptive Contrast	Set **Adaptive Contrast** to ON or OFF.
Aspect Ratio	Adjust the **Aspect Ratio** setting. • Select 4:3, 16:9, ZOOM, CINEMA, FULL SCREEN, FULL 4:3 or FULL 16:9.
Color Range	Adjust the **Color Range** setting
VGA setting	Adjust **H Position**, **V Position**, **Clock**, **Phase**, **Auto Adjustment** and **Auto**.
Reset Picture Setting	Resets the settings in the Picture menu back to their factory settings.

NOTE

For **Picture Mode**, **Noise Reduction**, **Aspect Ratio**, **VGA setting** and **Reset Picture Setting**, the default setting will change depending on the signal source.

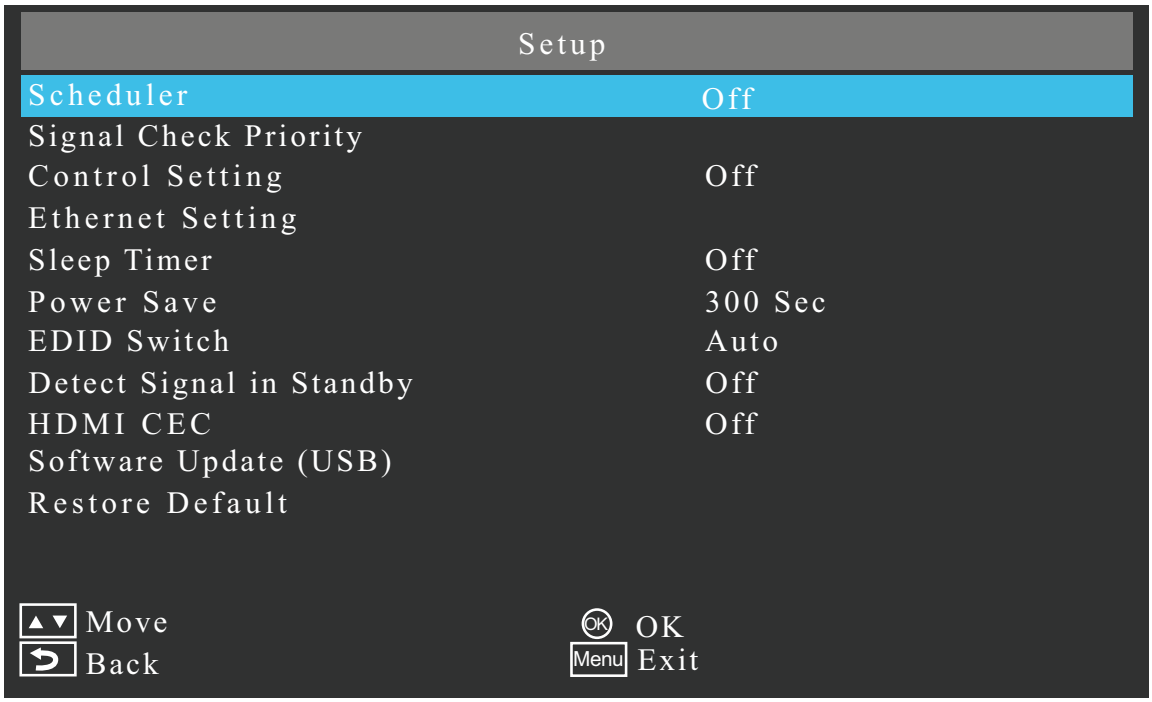
SOUND



SOUND	FUNCTION
Sound Mode	Select **Standard**, **Dynamic**, or **Custom**. Adjust **Treble**, **Bass**, and **Balance**.
Speaker	Set the **Speaker** setting to INTERNAL or EXTERNAL.
Audio Only	Select the **Audio Only** to ON or OFF.
Audio Source	Set the **Audio Source** to either Line In, HDMI1, HDMI2, or DP.
Reset Audio Setting	Resets the settings in the Sound menu back to their factory settings.

NOTE
For **Audio Source**, the default setting will change depending on the signal source.

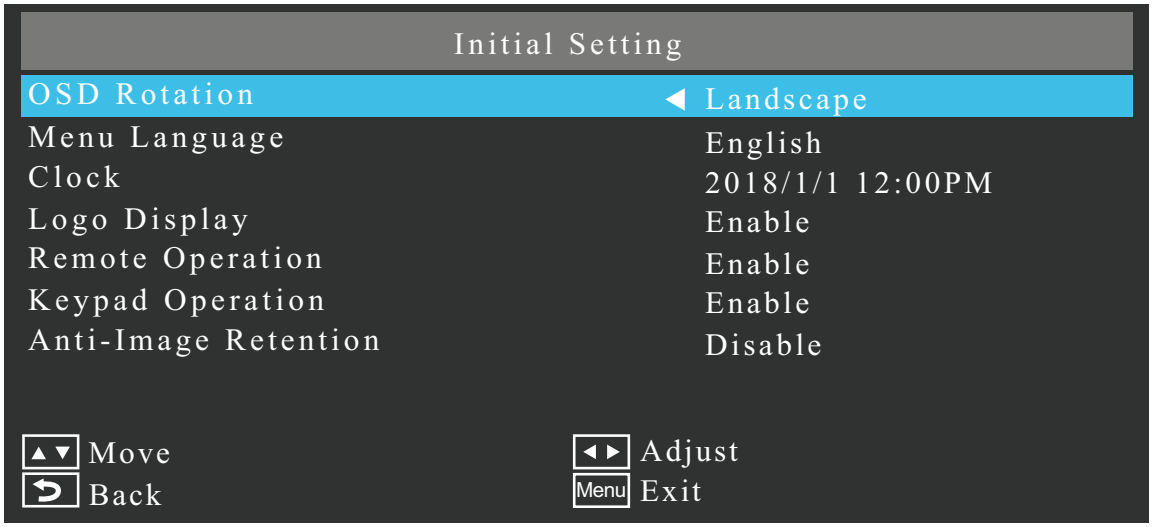
SETUP



SETUP	FUNCTION
Scheduler	Change the **Scheduler** setting. • The schedule function allows the display to be set to power on and off at different times. Up to seven different schedules can be programmed.
Signal Check Priority	When **Signal Check Priority** is enabled, the display attempts to find a valid signal source according to the Signal Check Priority setting at power on. • Set PRIORITY 1 to PRIORITY 5 (PRIORITY 1: highest priority) as the priority of each signal. When the current source signal is lost, the display attempts to find a new signal source according to the Signal Check Priority setting. • When the signal source for which PRIORITY 1 is set is not found, the display checks other sources in order of priority and switches to the available source with the highest priority. • When the signal source with the highest priority recovers, the display automatically switches to the source again. • When **Signal Check Priority** is disabled, the display uses the last used source at power on. • When **Signal Check Priority** is enabled and the signal source is USB, the USB data is automatically played at power on.
Control Setting	Change the **Control Setting** to OFF, RS232, or LAN.
Ethernet Setting	Adjust the **Ethernet Setting** for the display. Select DHCP or STATIC. If Static is selected, key in the IP, Mask, Gateway, and DNS addresses.
Sleep Timer	Change the **Sleep Timer** setting or set Sleep Timer to OFF.

SETUP	FUNCTION
Power Save	Change the **Power Save** setting or set Power Save Mode to OFF.
EDID Switch	Change the **EDID Switch** setting. If the signal source does not support YCbCr: 4:4:4, then the following settings are available: • EDID 1.4: supports up to 3840x2160@60Hz YCbCr 4:2:0 • EDID 2.0: supports up to 3840x2160@60Hz YCbCr 4:4:4
Detect Signal in Standby	Change the **Detect Signal in Standby** setting to ON or OFF. When the Detect Signal in Standby is ON, the display will wake up when a signal input is detected from HDMI1, HDMI2, DVI-D, DP or VGA.
HDMI CEC	Select the **HDMI CEC** settings to ON or OFF.
Software Update (USB)	Updates software via the USB port.
Restore Default	Resets the settings in the Setup menu back to their factory settings.

INITIAL SETTING



INITIAL SETTING	FUNCTION
OSD Rotation	Change the rotation of the OSD Menu to LANDSCAPE or PORTRAIT.
Menu Language	Change the language used for OSD Menu.
Clock	Set the time and date.
Logo Display	Change the **Logo Display** to ENABLE or DISABLE.
Remote Operation	Change the **Remote Operation** to ENABLE or DISABLE. • When **Remote Operation** is enabled and locked, press the following combination on the remote control: [MENU], left [◁], right [▷], up [△], and down [▽]. The **Remote Operation** will become unlocked and disabled.
Keypad Operation	Change the **Keypad Operation** to ENABLE or DISABLE.
Anti-Image Retention	Set **Anti-Image Retention** to ENABLE or DISABLE.

NOTE

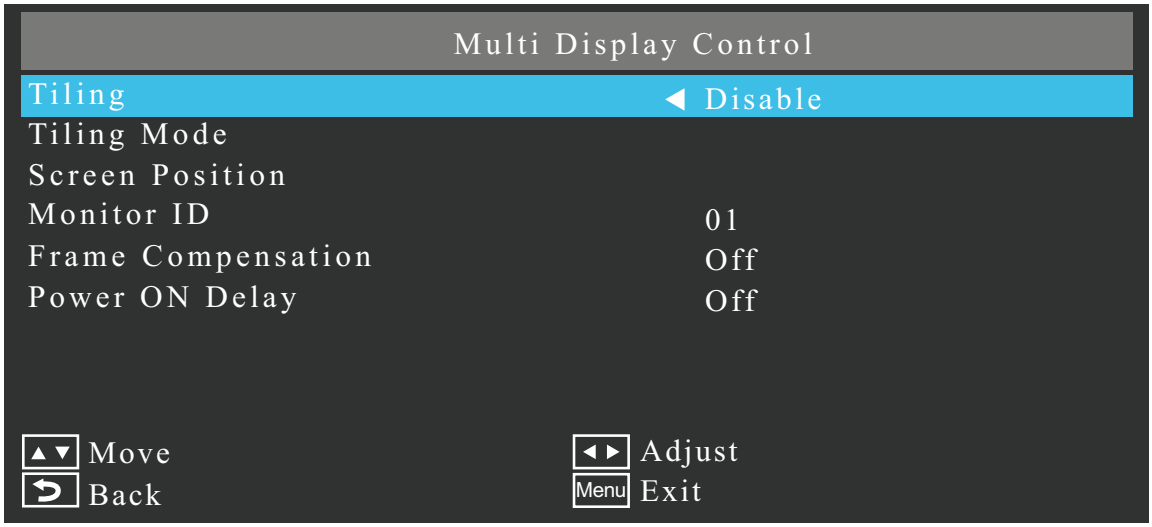
Image Persistance: Please be aware that LCD Technology may experience a phenomenon known as Image Persistence. Image Persistence occurs when a residual or “ghost” image of a previous image remains visible on the screen. Unlike CRT monitors, image persistence in LCD monitors is not permanent, but constant images being displayed for a long period of time should be avoided.

To alleviate image persistence, turn off the monitor for as long as the previous image was displayed. For example, if an image was on the monitor for one hour and a residual image remains, the monitor should be turned off for one hour to erase the image.

As with all personal display devices, dealer recommends displaying moving images and using a moving “Anti-Image Retention” at regular intervals whenever the screen is idle or turning off the monitor when not in use.

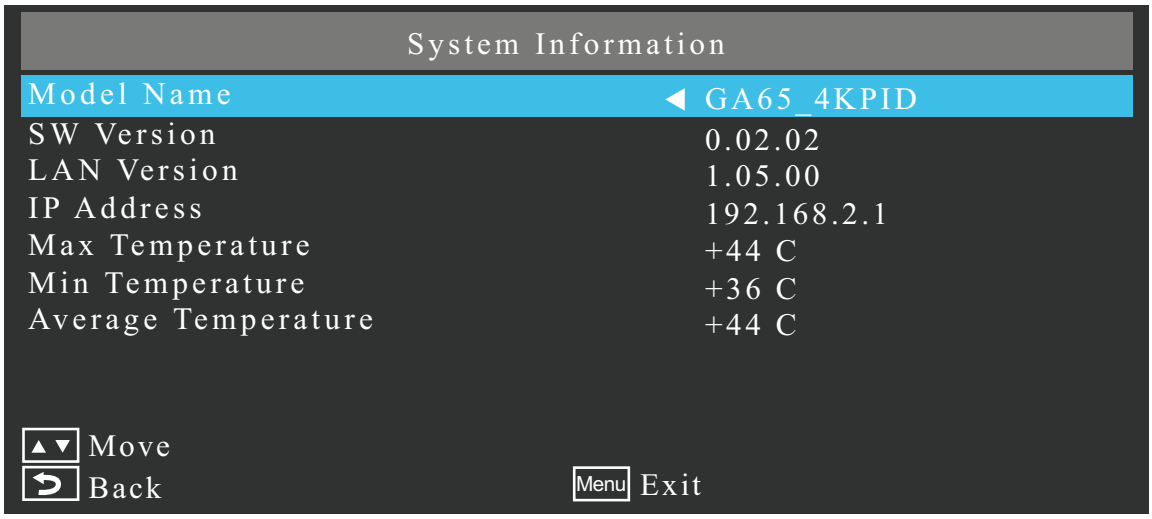
Please set **Anti-Image Retention**, **Clock** and **Scheduler** functions to further reduce the risk of Image persistence.

MULTI DISPLAY CONTROL



INITIAL SETTING	FUNCTION
Tiling	Change the **Tiling** setting to ENABLE or DISABLE.
Tiling Mode	Select the amount of HORIZONTAL and VERTICAL displays to be tiled. **NOTE** The Maximum number is 5 in each direction.
Screen Position	Select the position of the display in the tiling configuration once the Tiling Mode has been chosen.
Monitor ID	Select a unique **Monitor ID** number from between 01 and 25.
Frame Compensation	Set the **Frame Compensation** setting to ON or OFF.
Power ON Delay	Change the **Power ON Delay** setting or set to AUTO or OFF.

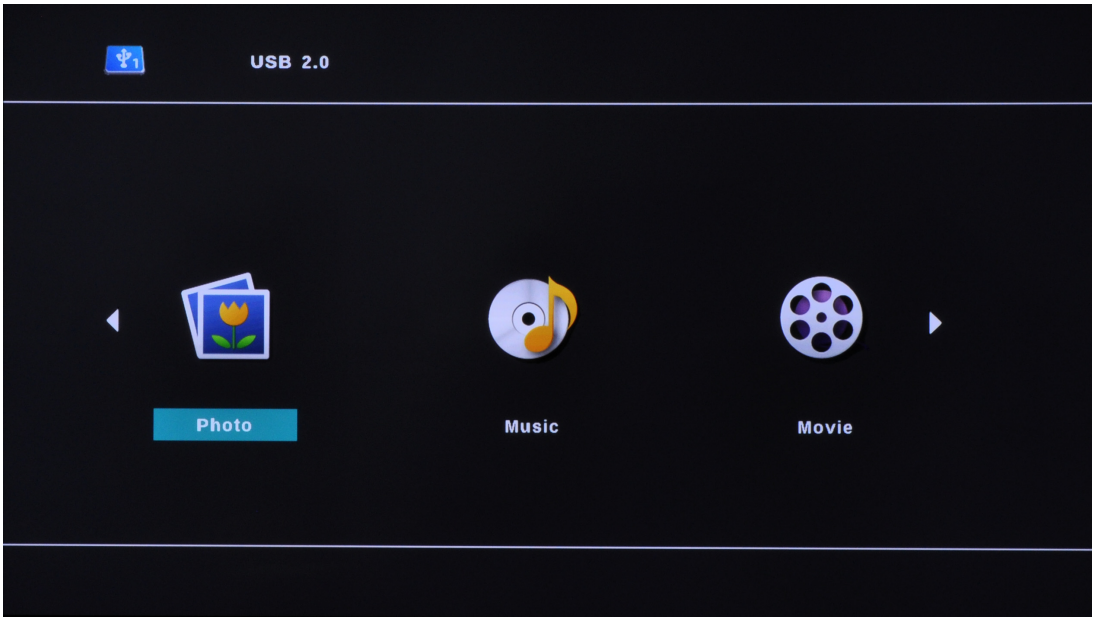
SYSTEM INFORMATION



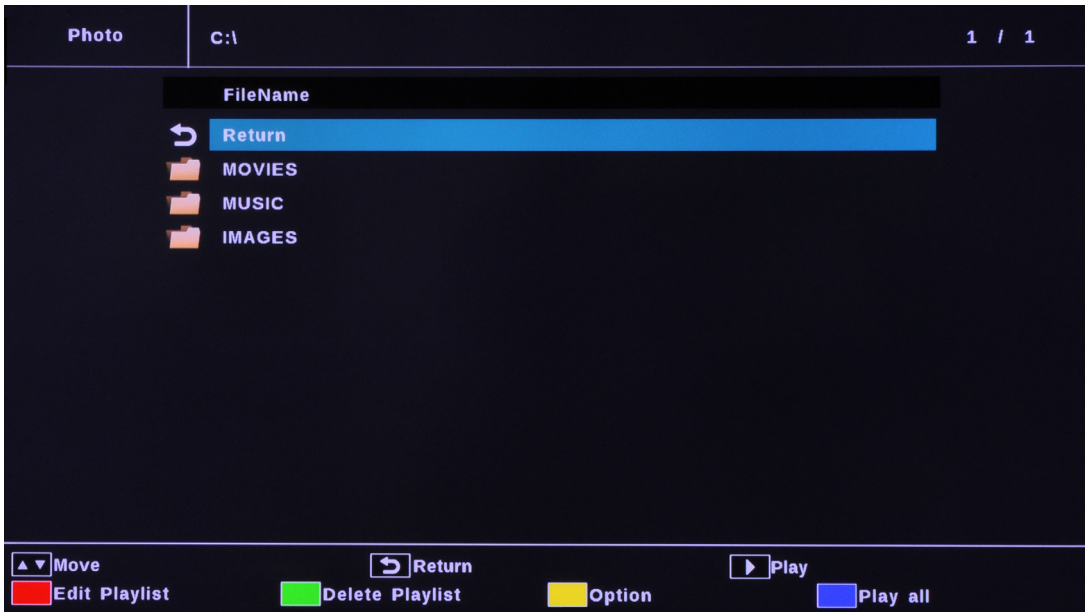
SYSTEM INFORMATION	FUNCTION
Model Name	Displays the model name of the display.
SW Version	Displays the version of the current software of the display.
LAN Version	Displays the version of the current LAN software of the display.
IP Address	Displays the current IP address of the display.
Max Temperature	Displays the maximum temperature recorded of the display.
Min Temperature	Displays the minimum temperature recorded of the display.
Average Temperature	Displays the average temperature recorded of the display.

Viewing Media from USB Storage Device

1. Insert USB storage medium into the USB port.
2. Use the [INPUT] button on the infrared remote control or the [SOURCE] button on the display to select USB as the input source.
3. The OSD menu will display three options: **Photo**, **Music** and **Movie**. To select the media type you wish to view, use the LEFT [◀] and RIGHT [▶] buttons on the infrared remote control, or use the [+] and [-] buttons on the control panel. To confirm your selection press the [OK] button on the remote control or [SOURCE] on the control panel.



4. When available, the USB storage medium will display on the screen as drive C. Open this drive by pressing the [OK] button on the infrared remote control or [SOURCE] on the control panel.
5. To navigate the contents of the USB storage medium, use the UP [△] and DOWN [▽] buttons on the infrared remote control or on the control panel. To confirm your selection press [OK] on the remote control or [SOURCE] on the control panel.



6. Use the audiovisual control buttons on the remote control to navigate and open media files; fast reverse (◀◀), play (▶), fast forward (▶▶), track backwards (⏮), stop (■), pause (⏸), and track forward (⏭).
7. When media files are being viewed in this way, the colored buttons on the infrared remote control will be active. Their functions are determined by context, and will be shown in the OSD menu at the bottom of the display. (See “Playing a Playlist” on page 47). The functions of the control panel buttons will also change. The following table explains the different control panel button functions according to media source.

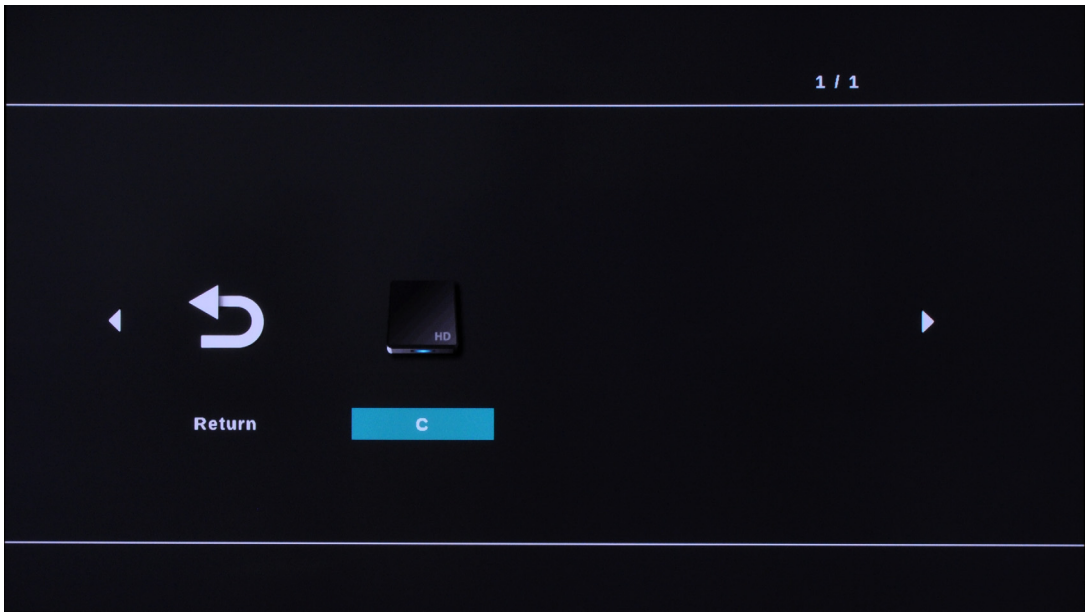
Control Panel Button Functions According To Media Source			
Control Panel Button	**Media Source**		
	Media Root page	Media list/playlist mode	Media player mode
INPUT	Input Source key	Exit	Exit
SOURCE	OK	On file: play/pause On folder: OK key	play/pause
+	Right key	Right key	Volume up
–	Left key	Left key	Volume down
△	Up key	Up key	Next image/music/ movie file
▽	Down key	Down key	Previous image/ music/movie file
⏻	Power off	Power off	Power off

Setting Up a Playlist

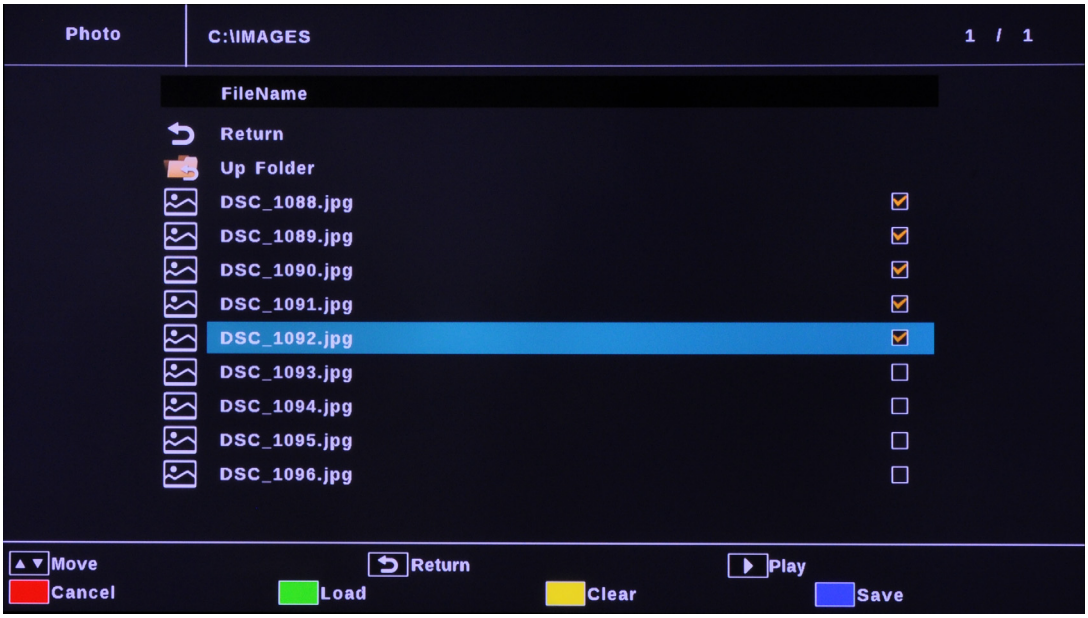
NOTE

Playlist functions can only be activated using the remote control.

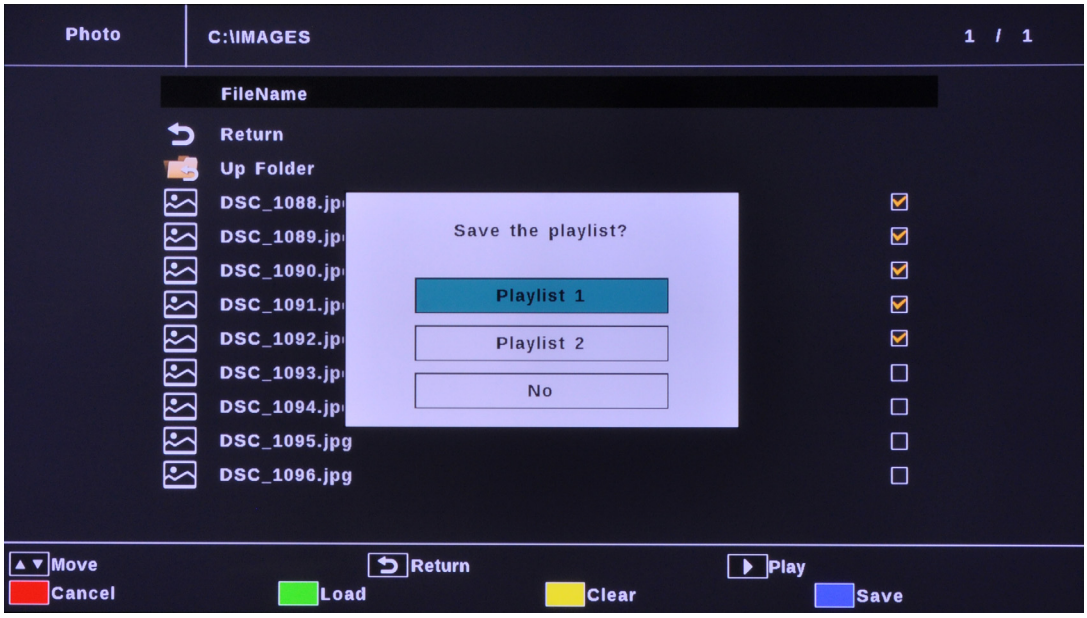
1. Enter one of the media type menus (**Photo**, **Music** or **Movie**).
2. The USB storage medium will display on the screen as drive C. Open this drive by pressing the [OK] button on the infrared remote control.



3. Use the UP (▲) and DOWN (▼) buttons on the infrared remote control to navigate the contents of the USB storage medium. Press the [RED] button to display playlist functions.
4. The playlist menu now displays. Use the UP (▲) and DOWN (▼) buttons on the infrared remote control to navigate and select files. Press the [OK] button to add a selected file to the playlist.

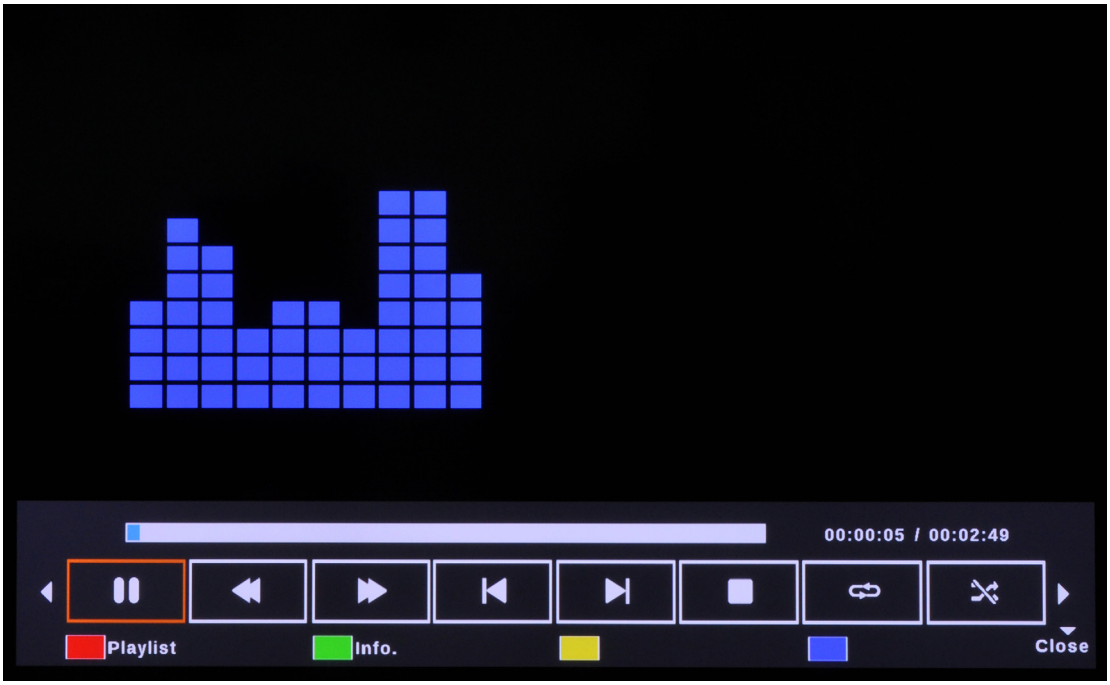


5. Use the colored buttons to select options in the playlist menu.
    - [BLUE]: **Save** selected files to a playlist.
    - [RED]: **Cancel** and return to the previous menu.
    - [GREEN]: **Load** an existing playlist.
    - [YELLOW]: **Clear** all selected files from the current playlist.



6. When saving the playlist choose either **Playlist 1** or **Playlist 2** and press [OK], or choose **No** to return to the previous menu.
7. If no playlist has been defined, select the [BLUE] button to **Play All** or the play [▸] button to play all the files in the current folder.

Playing a Playlist



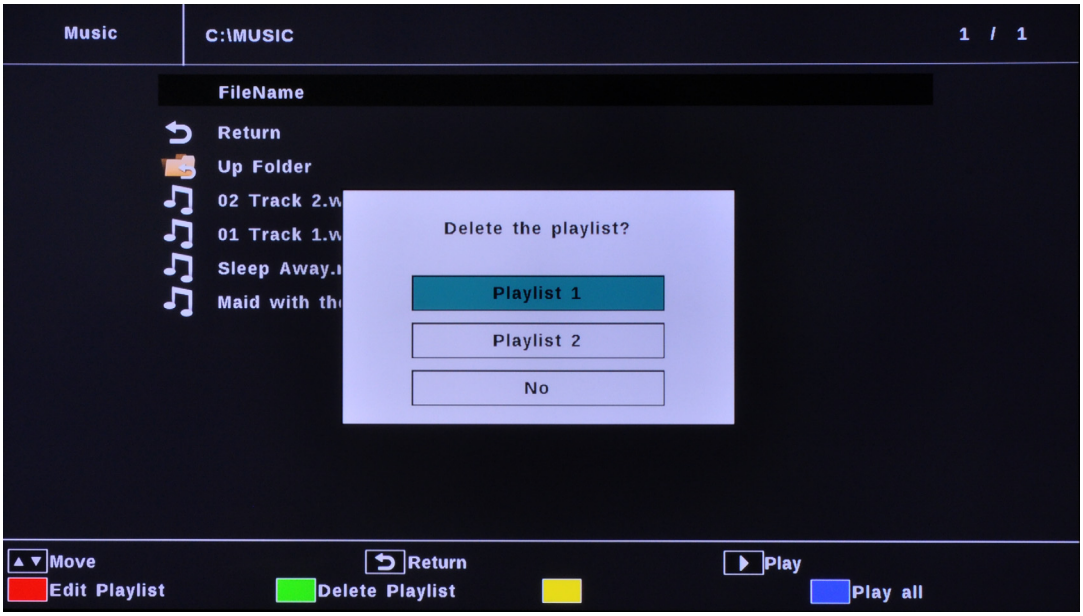
When playing a playlist, a playguide is available which provides additional functions. Use the UP (▲), button to display these functions, the LEFT (◀) and RIGHT (▶) buttons to navigate to these functions, the [OK] button to choose a function, and the [INFO] button to hide the playguide.

Playguide Functions	
Playguide Buttons	**Function**
	Pause/play
	Fast forward (not available in **Photo** mode)
	Rewind (not available in **Photo** mode)
	Previous photo/track/file
	Next photo/track/file
	Stop playback
	Play background music (only available in **Photo** mode)
	Stop background music (only available in **Photo** mode)
	Repeat: play all files repeatedly in sequence
	Repeat all files is turned off
	Repeat only current file
	Shuffle: play all files randomly
	Shuffle is turned off

Remote Control Button Functions With Playguide			
Remote Control Buttons	**Pictures**	**Music**	**Movies**
▲	Show playguide	Show playguide	Show playguide
▼	Hide playguide	Hide playguide	Hide playguide
◀ / ▶	Select item (play/ pause/skip-up/skip-down/stop/music/ repeat/shuffle/ SSTime/ SSTransition)	Select item (pause or play/fast forward/ rewind/skip-up/skip-down/repeat/shuffle)	Select item (pause or play/fast forward/ rewind/skip-up/skip-down/repeat/shuffle)
OK	Choose item (play/ pause/skip-up/skip-down/stop/music/ repeat/shuffle/ SSTime/ SSTransition)	Choose item (pause or play/fast forward/ rewind/skip-up/skip-down/repeat/info)	Choose item (pause or play/fast forward/ rewind/skip-up/skip-down/repeat/info)
⏵	Resume play after pause	Resume play after pause	Resume play after pause
■	Stop and return to list window	Stop and return to list window	Stop and return to list window
⏸	Pause slideshow	Pause playback	Pause playback
⏩	Not used	Fast forward	Fast forward
⏪	Not used	Rewind	Rewind
⏭	Next photo	Next track	Next file
⏮	Previous photo	Previous track	Previous file
[BLUE]	Not used	Not used	Not used
[RED]	[PLAYLIST]: Show playlist details	[PLAYLIST]: Show playlist details	[PLAYLIST]: Show playlist details
[GREEN]	[INFO]: Show details of current file	[INFO]: Show details of current file	[INFO]: Show details of current file
[YELLOW]	[OPTION]: Slide show options	Not used	Not used
INFOR	Show/hide playguide	Show/hide playguide	Show/hide playguide
⮌	Return to list window	Return to list window	Return to list window

Deleting a Playlist

1. Select [GREEN] button on the remote control to activate the Delete Playlist window.



2. Use the UP [▲] or DOWN [▼] buttons to select either **Playlist 1** or **Playlist 2** to delete. Press [OK] to confirm. To cancel, select **No** and press [OK].

Playing Background Music

When viewing photos it is possible to play background music simultaneously, if the folder from which the photos are being played also contains music, and the music has been added to a playlist.

1. When playing a photo playlist, press the UP (▲) button to display the playguide.

2. Use the LEFT (◀), and RIGHT (▶), buttons to navigate to the background music OFF icon , and press [OK].
3. The background music ON icon will appear and the music will play automatically.

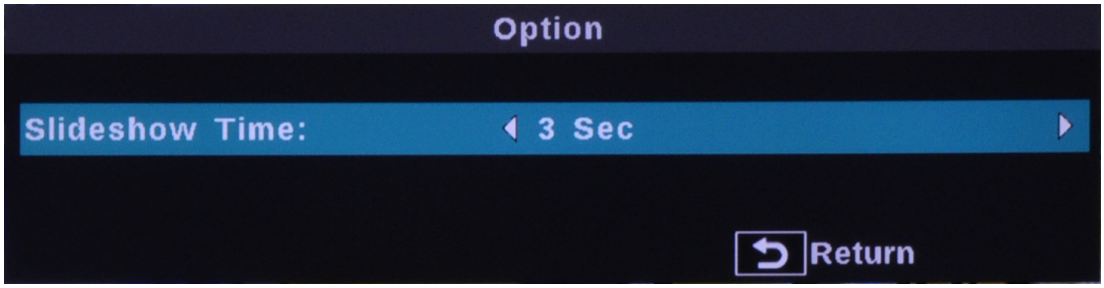
NOTE

When the background music ON button is selected, the following order is followed:

- If Playlist 1 has been created in the current directory, then that will be played.
- If Playlist 1 has not been created in the current directory, then Playlist 2 will be played.
- If Playlist 2 has not been created in the current directory, then all music files in the current directory will be played.

Slideshow Settings

When in photo viewing mode, it is possible to change the viewing duration of an image (or all images in a playlist), using a slideshow. Use the [YELLOW] button to display these slideshow options.



Slideshow Time: Set the time to wait between presenting each image in the slideshow:

- 3 seconds-20 seconds/1 second intervals

Controlling the Display Remotely

In order to control this display remotely, there are two communication interfaces supported: **RS-232C and LAN**. Computers can communicate to the display via the two connections. You can select the communication interface in the OSD menu. The two connection types for connecting a computer to the display are shown below:

1. RS-232C:
    - Use a RS-232C cross cable (reversed).
    - For connection with a 25-pin serial port connector on the computer, a conversion adapter (commercially available) is required.
    - For direct connection using RS-232C, use RXD, TXD, and GND lines.
2. LAN:
    - Use a RJ45 connector for Ethernet networking.

RS-232C Remote control

NOTE

Please contact your local agent for details of the control functions. See “Basic Commands” on page 54 for detailed command sets.

The following operations are supported control commands.

Control Command Function Overview	
Main operations	**Description**
Reset	Restores settings to their defaults. Reset commands including Picture Reset, Sound reset, etc.
Power ON or OFF	Turns the display on or off.
Volume control and mute	Adjusts the volume.
Input source	Switches between input signals.
Items about picture	Adjusts picture mode, backlight, etc
Items about sound	Adjusts sound mode, speaker, etc.
Items about multi-display control	Includes options used to set up multiple displays, such as screen position, display ID, etc.
Items about initial setting	Uses commands to adjust initial setting options, such as language, RTC time, OSD rotation, etc. For example, selecting the language can change the on-screen menu language.

Command Protocol

1. The communication protocol setting is as follows:

Communication Settings	
Protocol	**RS-232C**
Baud rate	9600 [bps]
Data length	8 [bit]
Parity bit	None
Stop bit	1 [bit]
Flow control	None

2. Control command protocol:

The command is structured by the **command length code, Checksum, ID code, command type code, function code, data code and end code**. The length of the command is different for each function.

Command Protocol	
Command length code	Total byte of message excluding CR (end code).
Checksum	Calculate Checksum by XOR of all bytes.
ID code	Identification for each of the displays.
Command type code	0x73: Set command; 0x67: Get command; 0x72: Reply command; 0x2B: Valid command reply; 0x2D: Invalid command reply
Command code	Each control function is assigned to a unique command code.
Data code (value)	Value of each control function
End code (CR)	0x0D

A remote tool (terminal software), helps users send control commands more conveniently. When developing terminal software, please send command packets within 50ms x (length +1) (known as the "timeout period") and reserve enough delay time to execute next command. The detail delay time is listed in the command table for reference.

If the computer does not send the command packet within the timeout period, a transmission error will occur. If the display receives the command, it will send a return command to the computer. The computer checks the return command to see whether or not the command it sent was received, and must receive the return command before sending the next command.

Basic Commands

Several basic commands are shown here as examples. Note that these commands are used when a single computer connects to a single display. Contact your dealer for advanced command specifications if you want to connect multiple displays, or perform complicated controls using other commands than the basic commands.

Set command

Command format: Length (1 byte) + Checksum (1 byte) + ID (1 byte) + Cmd Type (1 byte) + Cmd Code(1 byte) + Value(>=3 byte) + CR (1 byte)

Example 1: Set Brightness as 76 for ID-02 and this command is valid

Send Packet									
Byte	0	1	2	3	4	5	6	7	8
Name	Length	Check sum	ID	Cmd Type	Cmd Code	Value			End
						Byte1	Byte2	Byte3	
Hex	0x38	0x33	0x02	0x73	0x46	0x30	0x37	0x36	0x0D

checksum = (0x38)^(0x02)^(0x73)^(0x46)^(0x30)^(0x37)^(0x36)^(0x0D) = 0x33

Return packet					
Byte	0	1	2	3	4
Name	Length	Check sum	ID	Cmd Type	End
Hex	0x34	0x10	0x02	0x2B	0x0D

checksum = (0x34)^(0x02)^(0x2B)^(0x0D) = 0x10

Example 2: Set Brightness as 176 for ID-02 and this command is invalid

Send packet									
Byte	0	1	2	3	4	5	6	7	8
Name	Length	Check sum	ID	Cmd Type	Cmd Code	Value			End
						Byte1	Byte2	Byte3	
Hex	0x38	0x32	0x02	0x73	0x46	0x31	0x37	0x36	0x0D

checksum = (0x38)^(0x02)^(0x73)^(0x46)^(0x31)^(0x37)^(0x36)^(0x0D) = 0x32

Return packet					
Byte	0	1	2	3	4
Name	Length	Check sum	ID	Cmd Type	End
Hex	0x34	0x16	0x02	0x2D	0x0D

checksum = (0x34)^(0x02)^(0x2D)^(0x0D) = 0x16

Example 3: Set Brightness as 76 for all monitors

Send packet									
Byte	0	1	2	3	4	5	6	7	8
Name	Length	Check sum	ID	Cmd Type	Cmd Code	Value			End
						Byte1	Byte2	Byte3	
Hex	0x38	0x31	0x00	0x73	0x46	0x30	0x37	0x36	0x0D

checksum = (0x38)^(0x00)^(0x73)^(0x46)^(0x30)^(0x37)^(0x36)^(0x0D) = 0x31

Return packet
No return packet

Get command

Command format: Length (1 byte) + ID (2 byte) + Cmd Type (1 byte) + Cmd Code(1 byte) + Value(>=3 byte) + CR (1 byte)

Example 1: Get Brightness from ID-05 and this command is valid, and the Brightness value is 67.

Send Packet									
Byte	0	1	2	3	4	5	6	7	8
Name	Length	Check sum	ID	Cmd Type	Cmd Code	Value			End
						Byte1	Byte2	Byte3	
Hex	0x38	0x29	0x05	0x67	0x4E	0x30	0x30	0x30	0x0D

checksum = (0x38)^(0x05)^(0x67)^(0x4E)^(0x30)^(0x30)^(0x30)^(0x0D) = 0x29

Return Packet									
Byte	0	1	2	3	4	5	6	7	8
Name	Length	Check sum	ID	Cmd Type	Cmd Code	Value			End
						Byte1	Byte2	Byte3	
Hex	0x38	0x3D	0x05	0x72	0x4E	0x30	0x36	0x37	0x0D

checksum = (0x38)^(0x05)^(0x72)^(0x4E)^(0x30)^(0x36)^(0x37)^(0x0D) = 0x3D

Example 2: Get Model Name from ID-05, and the Model Name is GA55_4KPID

Send Packet											
Byte	0	1	2	3	4	5	6	7	8	9	10
Name	Length	Check sum	ID	Cmd Type	Cmd Code	Value					
						Byte1	Byte2	Byte3	Byte4	Byte5	Byte6
Hex	0x44	0x08	0x05	0x67	0x20	0x03	0x00	0x00	0x00	0x00	0x00

Send Packet											
Byte	11	12	13	14	15	16	17	18	19	20	
Name	Value									End	
	Byte7	Byte8	Byte9	Byte10	Byte11	Byte12	Byte13	Byte14	Byte15		
Hex	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x0D	

checksum =
(0x44)^(0x05)^(0x67)^(0x20)^(0x03)^(0x00)^(0x00)^(0x00)^(0x00)^(0x00)^(0x00)^(0x00)^(0x00)^(0x00)^(0x00)^(0x00)^(0x00)^(0x00)^(0x0D) = 0x08

Return Packet											
Byte	0	1	2	3	4	5	6	7	8	9	10
Name	Length	Check sum	ID	Cmd Type	Cmd Code	Value					
						Byte1	Byte2	Byte3	Byte4	Byte5	Byte6
Hex	0x44	0x66	0x05	0x72	0x20	0x03	0x47 ('G')	0x41 ('A')	0x35 ('5')	0x35 ('5')	0x5F ('_')

Byte	11	12	13	14	15	16	17	18	19	20	
Name	Value									End	
	Byte7	Byte8	Byte9	Byte10	Byte11	Byte12	Byte13	Byte14	Byte15		
Hex	0x34 ('4')	0x4B ('K')	0x50 ('P')	0x49 ('I')	0x44 ('D')	0x00	0x00	0x00	0x00	0x0D	

checksum =
(0x44)^(0x05)^(0x72)^(0x20)^(0x03)^(0x47)^(0x41)^(0x35)^(0x35)^(0x5F)^(0x34)^(0x4B)^(0x50)^(0x49)^(0x44)^(0x00)^(0x00)^(0x00)^(0x00)^(0x0D) = 0x66

LAN Remote Control

When you connect the display and the computer using a LAN hub and a LAN cable (See “LAN Connection:” on page 27), and then configure the network settings using **Ethernet Setting** in the **Setup** menu of the OSD, you can control the display remotely using the same commands as for RS-232C.

Setting procedure:

1. Select LAN as the communication interface used for the serial communication function. (See “Controlling the Display Remotely” on page 52, and also "SETUP" on page 38 to adjust the **Control Setting** function in the **Setup** menu.)
2. Set the following network parameters using the OSD menu.
   - DHCP client ON/OFF, IP address, subnet mask and default gateway.
3. Set the IP address described above and the port number (4660) using the application program of your computer to perform the socket communication.
4. Send the same control command as for RS-232C via TCP/IP socket communication.
5. Check the return command sent from the display. When it is received successfully, the setting is complete.

NOTE

- Broadcast mode: Set command with ID="0" (0x00) will set all monitors in the same time, and they will not reply command.
- If LAN mode is used, ID is not the identification for each of the monitor but IP, and the monitor will reply the same ID as received from the controller except "0".

Control Functions - Set Command List

Mode	Set Function	Len	Cmd Type	Cmd Code (Hex)	
All	Power	8	s	3C	
	Volume	8	s	57	
	Mute	8	s	58	
	Video Source	8	s	41	
Picture	Picture Mode	8	s	A1	
	Contrast	8	s	44	
	Brightness	8	s	46	

	Value Range (ASCII Bytes)	Wait Response Time (ms)	Remark
	000: Standby	2000	
	001: On	15000	
	000–100	400	
	000: Off	550	
	001: On	550	
	000: VGA	5000	
	001: HDMI1	10000	
	002: HDMI2	10000	
	003: AV	5000	
	006: DVI	10000	
	007: DP	10000	
	010: USB-Photo	10000	Auto play the playlists in USB device. If playlist 1 exists, play the playlist 1. If playlist 1 does not exist, play the playlist 2. If playlist 2 does not exist, play the files in the root directory.
	011: USB-Music	10000	Auto play the playlists in USB device. If playlist 1 exists, play the playlist 1. If playlist 1 does not exist, play the playlist 2. If playlist 2 does not exist, play the files in the root directory.
	012: USB-Movie	10000	Auto play the playlists in USB device. If playlist 1 exists, play the playlist 1. If playlist 1 does not exist, play the playlist 2. If playlist 2 does not exist, play the files in the root directory.
	000: Dynamic	400	
	001: Standard	400	
	002: Cinema	400	
	003: Custom	400	
	000–100	350	
	000–100	350	

Mode	Set Function	Len	Cmd Type	Cmd Code (Hex)	
Picture	Sharpness	8	s	48	
	Tint	8	s	A3	
	Color	8	s	A2	
	Backlight	8	s	AB	
	Color Temp	8	s	AD	
	Aspect Ratio	8	s	54	
	Auto Adjustment Execute	8	s	B5	
	VGA Clock frequency	8	s	B6	
	VGA Phase	8	s	B7	
	VGA H.Position	8	s	B8	
	VGA V.Position Inc	8	s	B9	
	VGA V.Position Dec	8	s	BE	
	Gamma	8	s	4A	
	Noise Reduction	8	s	4B	
	Adaptive Contrast	8	s	4C	
	Color Range	8	s	4D	

	Value Range (ASCII Bytes)	Wait Response Time (ms)	Remark
	000–100	200	
	000–100	150	
	000–100	150	
	000–100	350	
	5000–13000K. 0: 5000K,1: 5100K, …, 50: 10000K, 51: 13000K, 52: Native.	150	
	000: 4:3	750	
	001: 16x9	750	
	002: Zoom	750	
	003: Cinema	750	
	006: Full 4:3	750	
	007: Full 16:9	750	
		3000	For VGA only to execute auto adjustment.
	000–100	450	
	000–100	450	
	000–100	450	
		450	VGA V.Position OSD range 0–100
		450	VGA V.Position OSD range 0–100
	000: Gamma 2.2	250	
	001: Gamma 2.4	250	
	002: Gamma native	250	
	000: Off	200	
	001: Weak	200	
	002: Middle	200	
	003: Strong	200	
	000: Off	200	
	001: On	200	
	000: 16–235	200	
	001: 0–255	200	
	002: Auto	200	

Mode	Set Function	Len	Cmd Type	Cmd Code (Hex)	
Picture	Picture Reset	8	s	49	
Sound	Sound Mode	8	s	56	
	Treble	8	s	59	
	Bass	8	s	5A	
	Balance	8	s	5C	
	Speaker	8	s	B1	
	Audio Source	8	s	B0	
	Sound Reset	8	s	5E	
Multi Display Control	Monitor ID	8	s	5F	
	H Monitor (Tiling mode)	8	s	C6	
	V Monitor (Tiling mode)	8	s	C7	
	H Position	8	s	C8	
	V Position	8	s	C9	
	Frame Comp.	8	s	CA	
	Tiling	8	s	4F	
	Power On Delay	8	s	CE	

	Value Range (ASCII Bytes)	Wait Response Time (ms)	Remark
		600	Values not required.
	000: Standard	300	
	001: Dynamic	300	
	002: Custom	300	
	000–100	300	
	000–100	300	
	000–100	300	
	000: Internal	500	
	001: External (= Line out, no S/PDIF)	500	
	000: means HDMI1 when the input source is HDMI1; means HDMI2 when the input source is HDMI2; means DVI-D when the input source is DVI-D.	300	
	001: Line In	300	
		500	Values not required.
	001–025	350	
	001–005	650	
	001–005	650	
	001–005	650	
	001–005	650	
	000: Off	350	
	001: On	350	
	000: Disable	3300	
	001: Enable	3300	
	000: Off	350	
	001–060: Power on after x*0.5 seconds.	350	Value= 6 means 6*0.5 = 3s (power on after 3s).
	061: Auto	350	

Mode	Set Function	Len	Cmd Type	Cmd Code (Hex)	
Setup	On/Off Timer	14	s	D7	
	signal priority	8	s	61	

	Value Range (ASCII Bytes)	Wait Response Time (ms)	Remark
	Byte1 to Byte9 (1) Byte1: Decide which Timer is selected, and its enable/disable setting. Bit1[3:0]=0x1 to 0x07. There are totally 7 Timers. This value is used to decide which Timer is selected. Bit[7]: Reserved, should be 0. Bit[6]: Reserved, should be 0. Bit[5]: The Timer is enable or not. Byte1[5]=1 means enable. Bit[4]: Byte1[4]=0 means schedule option is in power off mode. Byte1[4]=1 means schedule option is in power on mode. (2) Byte2: The Day of the On/Off Timer: bit0 for Sunday, bit1 for Monday, bit2 for Tuesday, bit3 for Wednesday, bit4 for Thursday, bit5 for Friday and bit6 for Saturday. Bit 7 should be 0. (3) Byte3: The Hour of the Timer. Byte3=0x00 to 0x17. (4) Byte4: The Minute of the Timer. Byte4=0x00 to 0x3B. (5) Byte5: Select the Video Source. 0x00=VGA, 0x01=HDMI1, 0x02=HDMI2, 0x03=AV, 0x06=DVI, 0x0A: Photo-Playlist1, 0x0B: Music-Playlist1, 0x0C: Movie-Playlist1, 0x0D: Photo-Playlist2, 0x0E: Music-Playlist2, 0x0F: Movie-Playlist2. (6) Byte69 are reserved and should be 0x00.	600	Note: Some video sources are not supported if the model doesn't have this feature. E.g., Byte1=0x61 means the Timer no.1 is selected and enabled, and its On Timer is enabled, Off Timer is disabled. E.g., Byte1=0x53 means the Timer no.3 is selecedt and enabled, and its On Timer is disabled, Off Timer is enabled. E.g., Byte2=0x02 means the Timer is on Monday. E.g., Byte3=0x08, Byte4=0x1E means the On Timer is at 8:30. E.g., Byte5=0x17, Byte6=0x00 means the Off Timer is at 23:00. E.g., Byte7=0x00 means the selected Video Source is VGA.
	Byte1: Priority ID and value can be 0x0: priority1, 0x1: priority2, 0x2: priority3, 0x3: priority4, 0x4: priority5. Byte2: Signal type and value can be 0x0: VGA, 0x1: HDMI1, 0x2: HDMI2, 0x3: AV, 0x6: DVI, 0x7: DP, 0x0A: Photo-Playlist1, 0x0B: Music-Playlist1, 0x0C: Movie-Playlist1, 0x0D: Photo-Playlist2, 0x0E: Music-Playlist2, 0x0F: Movie-Playlist2.	600	

Mode	Set Function	Len	Cmd Type	Cmd Code (Hex)	
Setup	Enable Signal Check	8	s	60	
	Reset signal priority	8	s	62	
	Power Save	8	s	CB	
	Sleep Timer	8	s	53	
	All Reset	8	s	68	
Initial Setting	OSD Rotation	8	s	C5	
	Language	8	s	55	
	RTC Year	8	s	BD	
	RTC Month	8	s	BF	

	Value Range (ASCII Bytes)	Wait Response Time (ms)	Remark
	000: Disable	600	
	001: Enable	600	
		600	Values not required.
	000: Off	350	
	001–010: power off after x*30s	350	For example, value 005 means 5*30s = 150s (power off after 150s).
	000: Off	300	
	001: 5min	300	
	002: 15min	300	
	003: 30min	300	
	004: 60min	300	
	005: 90min	300	
	006: 120min	300	
	007: 180min	300	
		3000	Values not required.
	000: Landscape	350	
	001: Portrait	350	
	000: English	150	
	001: French	150	
	002: German	150	
	003: Spanish	150	
	004: Japanese	150	
	018–046	150	For example, value=018 means Year 2018. If the setting is invalid (for example, Year 2017 doesn't have the date of Feb/29), return "Invalid Command Reply".
	001–012	150	For example, value=001 means January If the setting is invalid (for example, Februrary doesn't have the date of Feb/31), return "Invalid Command Reply".

Mode	Set Function	Len	Cmd Type	Cmd Code (Hex)	
Initial Setting	RTC Day	8	s	C0	
	RTC Hour	8	s	C1	
	RTC Minute	8	s	C2	
	IR Control	8	s	63	
	Keypad Control	8	s	65	
	Anti-Image Retention	8	s	66	
	Logo Display	8	s	51	
Others	Aging Mode	8	s	6B	
	Test Pattern	8	s	6C	
	All User Reset	8	s	69	
	Factory Reset	8	s	6A	
	Adjust Frame Comp Left	8	s	8B	
	Adjust Frame Comp Right	8	s	8C	
	Adjust Frame Comp Upper	8	s	95	

	Value Range (ASCII Bytes)	Wait Response Time (ms)	Remark
	001–031	150	If the setting is invalid (for example, Day31 does not exist in April), return "Invalid Command Reply".
	000–023	150	
	000–059	150	
	000: Disable	150	There is no function for all the buttons at the remote control, except to key in password.
	001: Enable	150	
	000: Disable	150	There is no function for all the buttons at the keypad, except to key in password.
	001: Enable	150	
	000: Off	150	
	001: Picture shift	150	
	000: Disable	150	
	001: Enable	150	
	000: Disable	500	
	001: Enable	500	
	000: Off	500	
	001: White	250	
	002: Red	250	
	003: Green	250	
	004: Blue	250	
	005: Black	250	
		20000	Values not required. Reset all Main Menu OSD values to default. (Reset the RTC Time.)
		20000	Values not required. 1. Reset total working time. 2. Reset all Main Menu OSD values to default. (Reset the RTC Time.)
	9–19	1500	
	9–19	1500	
	9–19	1500	

Mode	Set Function	Len	Cmd Type	Cmd Code (Hex)	
Others	Adjust Frame Comp Down	8	s	A0	
	Slide Show Time	8	s	6F	

Control Functions - Get Command List

OSD Mode	Get Function	Len	Cmd Type	Cmd Code (Hex)	
All	Power	8	g	56	
	Volume	8	g	51	
	Mute	8	g	52	
	Signal Status	8	g	32	
	5V	10	g	57	
	12V	10	g	58	
	Operation Time	10	g	5F	
	Cumulative working time	10	g	88	
	Thermal Sensor Value	10	g	5A	

	Value Range (ASCII Bytes)	Wait Response Time (ms)	Remark
	9–19	1500	
	003–020	300	3s–20s

	Value Range (ASCII Bytes)	Wait Response Time (ms)	Remark
	000: Standby	150	
	001: On		
	000–100	100	
	000: Off	100	
	001: On		
	000: Signal unstable (or no signal)	100	
	001: Signal stable (Active Sync exists)		
	00000–05000	100	Value=4846 means 4.846V
	00000–12000	100	Value=11707 means 11.707V
	00000–99999 (Operation time when normal power off process is executed.)	100	Unit: hour
	00000–99999	100	Unit: hour
	(1) Input value: Byte1-Byte2-...Byte5. (a) Byte1=0x0: Get the thermal sensor value from the main board. (b) Byte2 to Byte5 are reserved, should be 0x00. (2) Return value: Byte1-Byte2-...Byte5. (a) Byte1=0x01: The thermal sensor value is from the main board. (b) Byte2: If the thermal value is >=0, Byte2='+' (0x2B). If the thermal value is <0, Byte2='-' (0x2D). (c) Byte3 to Byte5: The absolute value of the temperature in ASCII format.	100	For example, if the temperature is 5? from the main board, the return value should be: Byte1=0x01, Byte2=0x2B, Byte3=0x30, Byte4=0x30, Byte5=0x35.

OSD Mode	Get Function	Len	Cmd Type	Cmd Code (Hex)	
All	Video Source	8	g	55	
Picture	Picture Mode	8	g	95	
	Contrast	8	g	4D	
	Brightness	8	g	4E	
	Sharpness	8	g	4F	
	Tint	8	g	97	
	Color	8	g	96	
	Backlight	8	g	98	
	Color Temp	8	g	9A	
	Color Temperature Gain Value	14	g	DF	
	Aspect Ratio	8	g	60	

	Value Range (ASCII Bytes)	Wait Response Time (ms)	Remark
	000: VGA	100	
	001: HDMI1		
	002: HDMI2		
	003: AV		
	006: DVI		
	007: DP		
	009: USB		
	010: USB-Photo		
	011: USB-Music		
	012: USB-Movie		
	000: Dynamic	100	
	001: Standard		
	002: Cinema		
	003: Custom		
	000–100	100	
	000–100	100	
	000–100	100	
	000–100	100	
	000–100	100	
	000–100	100	
	5000–13000K. 0: 5000K,1: 5100K, …, 50: 10000K, 51: 13000K, 52: Native.	100	
	Byte1 to Byte9 (1) Byte 1 to Byte 3: 0–0x7FF for Red Gain in hex format. (2) Byte 4 to Byte 6: 0–0x7FF for Red Gain in hex format. (3) Byte 7 to Byte 9: 0–0x7FF for Red Gain in hex format.	100	E.g., Byte1=0, Byte2= 0x07, Byte3=0xFF ==> 0x7FF=2047
	000: 4:3	100	
	001: 16x9		
	002: Zoom		

OSD Mode	Get Function	Len	Cmd Type	Cmd Code (Hex)	
Picture	Aspect Ratio	8	g	60	
	VGA Clock frequency	8	g	A2	
	VGA Phase	8	g	A3	
	VGA H.Position	8	g	A4	
	VGA V.Position	8	g	A5	
	Gamma	8	g	35	
	Noise Reduction	8	g	36	
	Adaptive Contrast	8	g	3D	
	Color Range	8	g	3E	
Sound	Sound Mode	8	g	50	
	Treble	8	g	46	
	Bass	8	g	47	
	Balance	8	g	48	
	Speaker	8	g	9C	

	Value Range (ASCII Bytes)	Wait Response Time (ms)	Remark
	003: Cinema	100	
	005: Dot by dot		
	006: Full 4:3		
	007: Full 16:9		
	000–100	100	For VGA only.
	000–100	100	For VGA only.
	000–100	100	For VGA only.
	000–100	100	For VGA only.
	000: Gamma 2.2	100	
	001: Gamma 2.4		
	002: Gamma native		
	000: Off	100	
	001: Weak		
	002: Middle		
	003: Strong		
	000: Off	100	
	001: On		
	000: 16–235	100	
	001: 0–255		
	002: Auto		
	000: Standard	100	
	001: Dynamic		
	002: Custom		
	000–100	100	
	000–100	100	
	000–100	100	OSD value=RS232 value-50
	000: Internal	100	
	001: External		

OSD Mode	Get Function	Len	Cmd Type	Cmd Code (Hex)	
Sound	Audio Source	8	g	9B	
Setup	On/Off Timer	14	g	D8	

	Value Range (ASCII Bytes)	Wait Response Time (ms)	Remark
	000: means HDMI1 when the input source is HDMI1; means HDMI2 when the input source is HDMI2; means DVI-D when the input source is DVI-D.	100	
	001: Line In		
	Input value: Byte1-Byte2-Byte3…Byte9. (1) Byte1[3:0]: The Number of the On/Off Timer. There are totally 7 On/Off Timers, and this byte is used to select which timer is going to be accessed. (2) Byte1[7:4] is reserved, should be 0. (3) Byte2 to 9 are reserved, should be 0x00. Return value "Byte1 to Byte9. (1) Byte1: Decide which Timer is selected, and its enable/disable setting. Bit1[3:0]=0x1–0x07. There are totally 7 Timers. This value is used to decide which Timer is selected. Bit[7]: Reserved, should be 0. Bit[6]: The Timer is enable or not. Byte1[5]=1 means enabled. Bit[4], Bit[5]: Bit[4]=0, Bit[5]=0 means schedule option is in power off mode; Bit[4]=0,Bit[5]=1 means schedule option is in power on mode; Bit[4]=1,Bit[5]=0 means non. (2) Byte2: The Day of the On/Off Timer: bit0 for Sunday, bit1 for Monday, bit2 for Tuesday, bit3 for Wednesday, bit4 for Thursday, bit5 for Friday, bit6 for Saturday. Bit 7 should be 0. (3) Byte3: The Hour of the Timer. Byte3=0x00–0x17. 0xff means non. (4) Byte4: The Minute of the Timer. Byte4=0x00–0x3B. 0xff means non.	100	See the return value examples below: E.g., Byte1=0x61 means the Timer no.1 is selected and enabled, and its On Timer is enabled, Off Timer is disabled. E.g., Byte1=0x53 means the Timer no.3 is selected and enabled, and its On Timer is disabled, Off Timer is enabled. E.g., Byte2=0x02 means the Timer is on Monday. E.g., Byte3=0x08, Byte4=0x1E means the On Timer is at 8:30. E.g., Byte5=0x17, Byte6=0x00 means the Off Timer is at 23:00. E.g., Byte7=0x00 means the selected Video Source is VGA.

OSD Mode	Get Function	Len	Cmd Type	Cmd Code (Hex)	
Setup					
	Network Setting	14	g	DD	

	Value Range (ASCII Bytes)	Wait Response Time (ms)	Remark
	(5) Byte5: Select the Video Source. 0x00=VGA, 0x01=HDMI1, 0x02=HDMI2, 0x03=AV, 0x04=YPbPr, 0x06=DVI, 0x0A: Photo-Playlist1, 0x0B: Music-Playlist1, 0x0C: Movie-Playlist1, 0x0D: Photo-Playlist2, 0x0E: Music-Playlist2, 0x0F: Movie-Playlist2. 0xff means non. (6) Byte6–9 are reserved and should be 0x00."		
	Input Value: Byte1-Byte2-Byte3…Byte9. (1) Byte1=0x00: IP Setup Mode Byte1=0x01: IP Address Byte1=0x02: Get Subnet Mask Byte1=0x03: Default Gateway Byte1=0x04: Primary DNS Byte1=0x05: Secondary DNS Byte1=0x06: MAC Address (2) Byte2 to 9 are reserved, should be 0x00. Return value: Byte1-Byte2-Byte3…Byte9. The Byte1 at the return value should be the same as the value of Byte1 at Input value. Byte2 to Byte15 should be in hex value format. (1) If Byte1=0x00 (IP Setup Mode) is at Input value, the return value should be Byte1=0x00 Byte2=0x00: Manual 0x01: DHCP Byte3 to 9 are reserved, should be 0x00.	100	E.g., Subnet Mask=255.255.255.0, the return value: Byte1=0x02, Byte2=0xFF, Byte3=0xFF, Byte4=0xFF, Byte5=0x00, Byte6 to 9=0x00.

OSD Mode	Get Function	Len	Cmd Type	Cmd Code (Hex)	
Setup					
	Enable Signal Check	8	g	4A	
	Signal Check Priority	14	g	4B	

	Value Range (ASCII Bytes)	Wait Response Time (ms)	Remark
	(2) If Byte1=0x01(IP Address) is at Input value, the return value should be E.g., IP address=169.254.81.38 Byte1=0x01 (same as Byte1 at Input value) Byte2=0xA9 (=169), Byte3=0xFE (=254), Byte4=0x51(=81), Byte5=0x26 (=38) Byte6 to 9 are reserved, should be 0x00. (3) If Byte1=0x02 to 0x05 at Input value, refer to (2). (4) If Byte1=0x06 (MAC Address) at Input value, the return value should be E.g., MAC address=00:22:64:7E:2C:82 Byte1=0x06 (same as Byte1 at Input value) Byte2=0x00, Byte3=0x22, Byte4=0x64, Byte5=0x7E, Byte6=0x2C, Byte7=0x82 Byte8 to 9 are reserved, should be 0x00.		
	000: Disable	100	
	001: Enable		
	(1)Byte1 to Byte5: value can be 0x0: VGA, 0x1: HDMI1, 0x2: HDMI2, 0x3:AV, 0x6:DVI, 0x7:DP, 0x0A:Photo-Playlist1, 0x0B:Music-Playlist1, 0x0C:Movie-Playlist1, 0x0D:Photo-Playlist2, 0x0E:Music-Playlist2, 0x0F:Movie-Playlist2. If input source does not set, return 0xFF Byte1: Priority1 input signal Byte2: Priority2 input sugnal Byte3: Priority3 input signal Byte4: Priority4 input sugnal Byte5: Priority5 input signal	100	

OSD Mode	Get Function	Len	Cmd Type	Cmd Code (Hex)	
Setup	Power Save	8	G	D1	
	Sleep Timer	8	G	43	
Initial Setting	Language	8	g	64	
	RTC Year	8	g	A9	
	RTC Month	8	g	AA	
	RTC Day	8	g	AB	
	RTC Hour	8	g	AC	
	RTC Minute	8	g	AD	
	IR Control	8	g	53	
	Keypad Control	8	g	5D	

	Value Range (ASCII Bytes)	Wait Response Time (ms)	Remark
	000: Off	100	
	001–010: Power off after x*30s		For example, value 005 means 5*30s = 150s (power off after 150s).
	000: Off	100	
	001: 5min		
	002: 15min		
	003: 30min		
	004: 60min		
	005: 90min		
	006: 120min		
	007: 180min		
	000: English	100	
	001: French		
	002: German		
	003: Spanish		
	004: Japanese		
	018–046	100	For example, value=018 means Year 2018. If the RTC is not enabled, return "Invalid Command Reply".
	001–012	100	For example, value=001 means January. If the RTC is not enabled, return "Invalid Command Reply".
	001–031	100	If the RTC is not enabled, return "Invalid Command Reply".
	000–023	100	If the RTC is not enabled, return "Invalid Command Reply".
	000–059	100	If the RTC is not enabled, return "Invalid Command Reply".
	000: Disable	100	All the buttons at the remote control have no function.
	001: Enable		
	000: Disable	100	All the buttons at the keypad board have no function.
	001: Enable		

OSD Mode	Get Function	Len	Cmd Type	Cmd Code (Hex)	
Setup	Anti-Image Retention	8	g	5C	
	Logo Display	8	g	41	
Multi Display Control	Monitor ID	8	g	5E	
	H Monitor (Tiling mode)	8	g	BB	
	V Monitor(Tiling mode)	8	g	BC	
	H Position	8	g	C5	
	V Position	8	g	CE	
	Frame Comp.	8	g	D0	
	Power On Delay	8	g	94	
	Tiling	8	g	44	
Others	Aging Mode	8	g	6B	
	Test Pattern	8	g	6F	
	Adjust Frame Comp Left	8	g	8E	
	Adjust Frame Comp Right	8	g	8F	
	Adjust Frame Comp Upper	8	g	90	
	Adjust Frame Comp Down	8	g	91	
	Slide Show Time	8	g	89	

	Value Range (ASCII Bytes)	Wait Response Time (ms)	Remark
	000: Off	100	
	001: Picture Shift		
	000: Disable	100	
	001: Enable		
	001–025	100	
	001–005	100	
	001–005	100	
	001–005	100	
	001–005	100	
	000: Off	100	
	001: On		
	000: Off	100	
	001–060: Power on after x*0.5 seconds		Value= 6 means 6*0.5 = 3s (power on after 3s).
	061: Auto		
	000: Disable	100	
	001: Enable		
	000: Disable	100	
	001: Enable		
	000: Off	100	
	001: White		
	002: Red		
	003: Green		
	004: Blue		
	005: Black		
	9–19	100	
	9–19	100	
	9–19	100	
	9–19	100	
	003–020	100	3s to 20s

OSD Mode	Get Function	Len	Cmd Type	Cmd Code (Hex)	
System Information	Model Info	20	g	20	

	Value Range (ASCII Bytes)	Wait Response Time (ms)	Remark
	(1) Input value: Byte1-Byte-Byte3…Byte15. Byte2 to Byte11=0x00 Byte1=0x03: Get Model Name Byte1=0x04: Get Scaler Firmware Version Byte1=0x05: Get LAN Firmware Version Byte1=0x07: Get Firmware Built Date Byte1=0x08: Get Firmware Built Time Byte1=0x09: Get Panel Info. (2) Return value: Byte1-Byte2-Byte3…Byte15. The Byte1 value at the return value should be the same as the value of Byte1 at input value. Byte2 to Byte15 should be in ASCII format. Example 1: If Customer=Generic, Byte1=0x01, Byte2='G', Byte3='e',...Byte8='c', Byte9 to Byte11=0x00. Example 2: If the Scaler Firmware Version=1.02, Byte1=0x03, Byte2='1', Byte3='.', Byte4='0', Byte5='2', Byte6 to Byte11=0x00.	200	

Troubleshooting

No picture

- The signal cable should be completely connected to the display card/computer.
- The display card should be completely seated in its slot.
- Check the main Power Switch, it should be in the ON position.
- Power Switch and computer power switch should be in the ON position.
- Check to make sure that a supported mode has been selected on the display card or system being used. (Please consult display card or system manual to change graphics mode.)
- Check the display and your computer's display card with respect to compatibility and recommended settings.
- Check the signal cable connector for bent or pushed-in pins.
- The display automatically goes into OFF at the preset time period after signal is lost. Press the power button.

Power Button does not respond

- Unplug the power cord of the display from the AC outlet to turn off and reset the display.
- Check the main Power Switch on the back side of the display.

Image persistence

- Please be aware that LCD Technology may experience a phenomenon known as Image Persistence.

  Image Persistence occurs when a residual or "ghost" image of a previous image remains visible on the screen. Unlike CRT monitors, image persistence in LCD monitors is not permanent, but constant images being displayed for a long period of time should be avoided. To alleviate image persistence, turn off the display for as long as the previous image was displayed.

  For example, if an image was on the display for one hour and a residual image remains, the display should be turned off for one hour to erase the image.

NOTE

As with all personal display devices, dealer recommends displaying moving images and using a moving "Anti-Image Retention" at regular intervals whenever the screen is idle or turning off the monitor when not in use.

Image is unstable, unfocused or swimming is apparent

- Signal cable should be completely attached to the computer.
- Use the OSD **Image Adjust** controls to focus and adjust display by increasing or decreasing the fine adjustment.
- When the display mode is changed, the OSD **Image Adjust** settings may need to be re-adjusted.
- Check the display and your computer's display card with respect to compatibility and recommended signal timings.
- If your text is garbled, change the video mode to non-interlace and use 60Hz refresh rate.
- The image may be distorted when turning the power on or changing the settings.

LED on display is not lit (no green or red color can be seen)

- Power Switch should be in the ON position and power cord should be connected.
- Check the main Power Switch, it should be in the ON position.
- Make certain the computer is not in a power-saving mode (touch the keyboard or mouse).
- Check to see that the power indicator option in the OSD is set to ON.

Red LED on monitor is blinking

- A certain failure might have occurred, please contact your nearest authorized dealer service facility.
- Display is powered off by the inside temperature being higher than the normal operating temperature. Power on the display again after confirming the inside temperature has been reduced to normal operation temperature.

Display image is not sized properly

- Use the OSD **Image Adjust** controls to increase or decrease the coarse adjustment.
- Check to make sure that a supported mode has been selected on the display card or system being used. (Please consult display card or system manual to change graphics mode.)

Selected resolution is not displayed properly

- Use OSD **Display Mode** to enter Information menu and confirm that the appropriate resolution has been selected. If not, select corresponding option.

No Sound

- Check to see if audio cable is properly connected.
- Check to see if mute is activated.
- Check to see if volume is set at minimum.
- Check to see if computer supports an audio signal. If unsure, contact the computer manufacturer.
- Check to see if SURROUND is set to ON.
- Check the external speaker switch.

Remote Control is not available

- Check the status of the Remote Control's batteries.
- Check if batteries are inserted correctly.
- Check if the Remote Control is pointing at the monitor's remote sensor.
- Check the **Remote Operation** setting status.
- The remote control system may not function when direct sunlight or strong illumination strikes the remote control sensor of the display, or when there is an object in the path.

Scheduler/Sleep Timer function is not working properly

- The **Scheduler** function will be disabled when the **Sleep Timer** is set.
- If the **Sleep Timer** function is enabled and the power to the display is turned off when the power supply is interrupted unexpectedly, then the **Sleep Timer** will be reset.

Interference in TV

- Check components for shielding, move away from monitor if necessary.

The computer's power management does not work

- It is recommended to choose "S3" at the "Power Management" item in the BIOS (abbreviation of Basic Input / Output System) computer's setup screen.

Either faint vertical or horizontal stripes may appear, depending on the specific display pattern. This is no product fault or degradation.

Product Specifications

NOTE

- These models comply with the specifications listed below.
- Designs and specifications are subject to change without notice.
- These models may not be compatible with features and/or specifications that may be added in the future.

Viewable Size (H x V)	
55”	1209.6 x 680.4mm
65”	1428.5 x 803.5mm
75”	1650.24 x 928.26mm

Power Source	
	55”/65”75”
Input Voltage	AC100-240V ±10% (50/60Hz)
Power Consumption in Power Saving mode	Power switch off (DC-OFF, standby): <0.5W Main power switch off: 0W

Power Consumption	
55”	~200W Max
65”	~234W Max
75”	~350W Max

Input Signal - PC Input		
Input Connector	Analog	D-SUB 15-pin or YPbPr cable (YPbPr CVBS Common)
	Digital	HDMI x 2 (PC/AV Common, HDCP supported), DVI-D (HDCP supported), DP ((HDCP supported)
Horizontal Frequency	Analog: 15.625 kHz - 67.5 kHz, Digital: 31.5 kHz - 67.5 kHz	
Vertical Frequency	50 Hz - 60 Hz	
Pixel Clock	Analog	13.5 - 148.5.0 MHz
	Digital	25.0 - 148.5.0 MHz
Video Signal	Analog: Analog RGB, Digital: TMDS (with HDCP)	
Sync Signal	Analog: Separate (TTL), Composite (TTL), Sync on Green, Digital: TMDS	

Supported Resolutions					
Support Timing	Info OSD display information in below table				
	AV	**PC**	**DVI**	**HDMI**	**DP**
NTSC-M	NTSC				
640x480 60Hz		640x480@60Hz	640x480@60Hz	640x480@60Hz	640x480@60Hz
640x480 75Hz		640x480@75Hz	640x480@75Hz	640x480@75Hz	640x480@75Hz
800x600 60Hz		800x600@60Hz	800x600@60Hz	800x600@60Hz	800x600@60Hz
800x600 75Hz		800x600@75Hz	800x600@75Hz	800x600@75Hz	800x600@75Hz
1024x768 60Hz		1024x768@60Hz	1024x768@60Hz	1024x768@60Hz	1024x768@60Hz
1024x768 75Hz		1024x768@75Hz	1024x768@75Hz	1024x768@75Hz	1024x768@75Hz
1280x960 60Hz		1280x960@60Hz	1280x960@60Hz	1280x960@60Hz	1280x960@60Hz
1280x1024 60Hz		1280x1024@60Hz	1280x1024@60Hz	1280x1024@60Hz	1280x1024@60Hz
1360x768 60Hz		1360x768@60Hz	1360x768@60Hz	1360x768@60Hz	1360x768@60Hz
1600x1200 60Hz		1600x1200@60Hz	1600x1200@60Hz	1600x1200@60Hz	1600x1200@60Hz
1366x768 60Hz		1366x768@60Hz	1366x768@60Hz	1366x768@60Hz	
1920x1080 60Hz		1920x1080@60Hz	1920x1080@60Hz	1080p@60Hz	1080p@60Hz
1280x800 60Hz		1280x800@60Hz	1280x800@60Hz	1280x800@60Hz	1280x800@60Hz
720x480p 60Hz			720x480@60Hz	480p@60Hz	480p@60Hz
1280x720p 60Hz			1280x720@60Hz	720p@60Hz	720p@60Hz
1920x1080i 60Hz			1920x1080@60Hz	1080i@60Hz	1080i@60Hz
1440x480i 60Hz				480i@60Hz	
1440x480P 60Hz					480p@60Hz
1920x1080p 60Hz			1920x1080@60Hz	1080p@60Hz	1080p@60Hz
720x576p 50Hz			720x576@50Hz	576p@50Hz	576p@50Hz
1280x720p 50Hz			1280x720@50Hz	720p@50Hz	720p@50Hz
1920x1080i 50Hz			1920x1080@50Hz	1080i@50Hz	
1440x576i 50Hz				576i@50Hz	
1440X576P 50Hz					576p@50Hz
1080p 24Hz			1920x1080@24Hz	1080p@24Hz	1080p@24Hz
1080p 25Hz			1920x1080@25Hz	1080p@25Hz	1080p@25Hz
1080p 30Hz				1080p@30Hz	1080p@30Hz
1920x1080P 50Hz					1080p@50Hz
3840x2160 24Hz				3840x2160@24Hz	
2560x1080p 50Hz				2560x1080@60Hz	
3840x2160 30Hz				3840x2160@30Hz	3840x2160@30Hz

Supported Resolutions					
3840x2160 50Hz				3840x2160@50Hz	3840x2160@50Hz
3840x2160 60Hz				3840x2160@60Hz	3840x2160@60Hz
4096x2160 30Hz				4096x2160@30Hz	
4096x2160-50Hz					4096x2160@50Hz
4096x2160 60Hz				4096x2160@60Hz	4096x2160@60Hz
1280x768 75Hz					1280x960@60Hz
1280x800 75Hz					1280x800@75Hz
1280x1024 75Hz					1280x1024@75Hz
1400x1050 60Hz					1400x1050@60Hz
1400x1050 75Hz					1400x1050@75Hz
1440x900 60Hz					1440x900@60Hz
1440x900 75Hz					1440x900@75Hz
1600x1200 75Hz					1600x1200@75Hz
1680x1050 60Hz					1680x1050@60Hz
1680x1050 75Hz					1680x1050@75Hz
1920x1200 60Hz					1920x1200@60Hz
1920x1200 75Hz					1920x1200@75Hz

Audio Input/Output		
Input Connector	Analog	3.5mm jack
	Digital	HDMI x 2 (digital audio)
Output Connector	Analog	3.5mm jack
	Digital	SPDIF

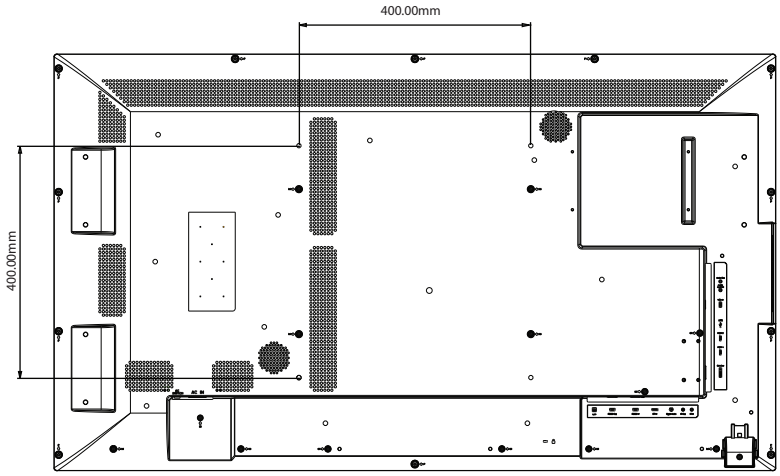
Dimensions		
55”	Width	49.0” (1246mm)
	Height	28.3” (719mm)
	Depth	2.7” (69mm)
65”	Width	57.6” (1463mm)
	Height	33.2” (844mm)
	Depth	2.8” (70mm)
75”	Width	65.9” (1675.7mm)
	Height	37.5” (953.7mm)
	Depth	3.8” (96.1mm)

Mass (weight)	
55”	Net 17.0kg (37.5lb); Gross 24.0kg (52.9lb)
65”	Net 24.0kg (52.9lb); Gross 33.5kg (73.9lb)
75”	Net 48.0kg (105.8lb); Gross 55.0kg (121.3lb)

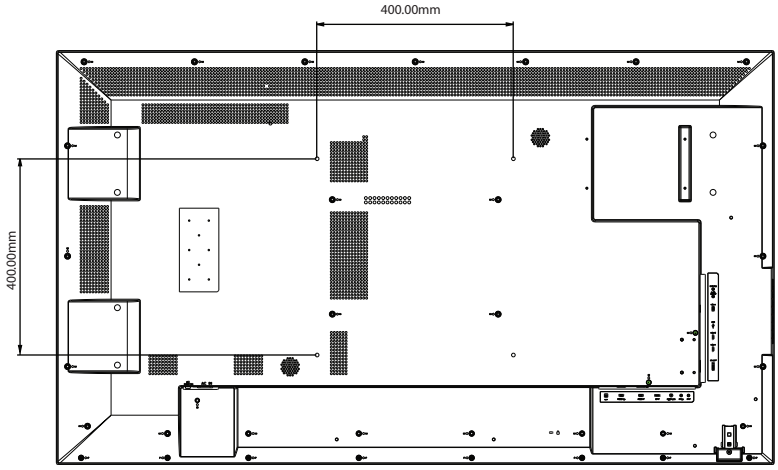
NOTE
Technical specifications are subject to change without notice.

Appendix – Vesa Mount Screw Locations

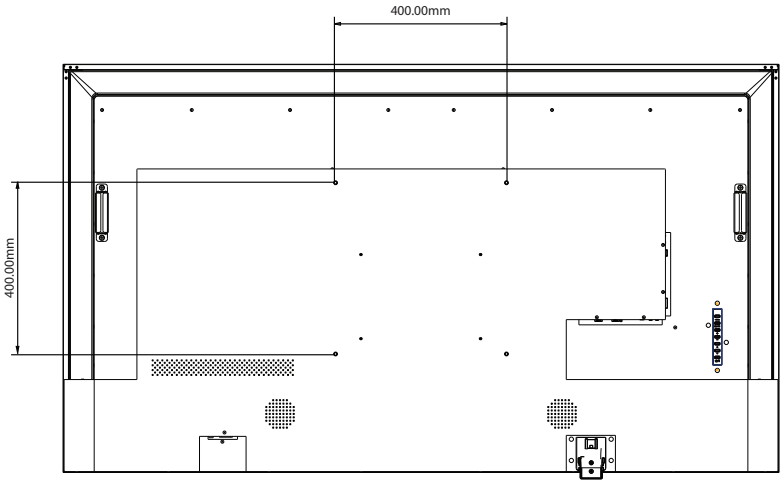
55”:



65”:



75”:



Appendix – Supported Media

Video Specifications

File Extension	Container	Video codec	Maximum Resolution	Max Frame Rate	MPEG1 (L2& L3)	AC3	L-PCM
.dat .mpg .mpeg	MPG	MPEG1	1080P	30fps	V	V	V
	MPEG	MPEG2	1080P	30fps			
.ts .trp .tp .m2ts	TS	MPEG2	1080P	30fps	V	V	
		H.264	1080P	30fps			
.vob	MPEG2-PS	MPEG2	1080P	30fps	V	V	V
.mkv	MKV	H.264	1080P	30fps	V	V	V
		MPEG1	1080P	30fps			
		MPEG2	1080P	30fps			
		MPEG4	1080P	30fps			
.avi	AVI	MPEG2	1080P	30fps	V	V	V
		MPEG4	1080P	30fps			
		H.264	1080P	30fps			
.avi	AVI	Motion JPEG	640X480	30fps	V	V	V

NOTE

4K and 2K are NOT supported

Audio Specifications

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)	AC3	32kbps ~ 640Kbps	32Khz, 44.1Khz, 48Khz
.wma .asf	WMA	128bps ~ 320Kbps	8Khz ~ 48Khz
N/A (work with video files only)	LPCM	64Kbps ~ 1.5 Mbps	8Khz ~ 48Khz

Image Specifications

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

NOTE

Resolution is a reference for design, and not a hardware limitation. The larger the resolution, the larger the size of the DRAM; therefore, the larger the resolution, the longer time it will take to display on screen.

NOTE

Maximum number of files per directory = 1998

Manufacturer’s Recycling and Energy Information

IT Equipment Recycling Information

Acer is strongly committed to environmental protection and views recycling, in the form of salvaging and disposal of used equipment, as one of the company's top priorities in minimizing the burden placed on the environment.

We at Acer are very conscious of the environmental effects of our business and strive to identify and provide the best working procedures to reduce the environmental impact of our products. For more information and help when recycling, please go to this website:
http://www.acergroup.com/public/Sustainability/

Visit www.acer-graoup.com for further information on the features and benefits of our other products.

Disposal instructions

Do not throw this electronic device into the trash when discarding. To minimize pollution and ensure utmost protection of the global environment, please recycle. For more information on the Waste from Electrical and Electronics Equipment (WEEE) regulations, visit
http://www.acer-group.com/public/Sustainability

Energy Saving

This monitor features an advanced energy saving capability. When a Display Power Management signal is sent to the monitor, the Energy Saving mode is activated. The monitor enters a single Energy Saving mode.

Mode	LED color
Normal Operation*1, *2	Green
Energy Saving Mode*1, *3 (Power Save)	Amber
Energy Saving Mode*1, *3 (AUTO STANDBY)	Red
Power Off	Red

*1: without any option, with factory settings.

*2: depends on destination.

*3: VGA input only.

WEEE Mark (European Directive 2012/19/EU)

Disposing of your used product: In the European Union

EU-wide legislation as implemented in each Member State requires that used electrical and electronic products carrying the mark (left) must be disposed of separately from normal household waste. This includes monitors and electrical accessories, such as signal cables or power cords. When you dispose of such products, please follow the guidance of your local authority or ask the shop where you purchased the product, or if applicable, follow applicable legislation or agreement you may have. The mark on electrical and electronic products may only apply to the current European Union Member States.

Outside the European Union

If you wish to dispose of used electrical and electronic products outside the European Union, please contact your local authority and ask for the correct method of disposal.

For EU: The crossed-out wheeled bin implies that used batteries should not be put to the general household waste! There is a separate collection system for used batteries, to allow proper treatment and recycling in accordance with legislation.

According the EU directive 2006/66/EC, the battery can't be disposed improperly. The battery shall be separated to collect by local service.