

LDM163G-183

All-in-One Direct View LED Display User Guide

IMPORTANT: Please read this User Guide to obtain important information on installing and using your product in a safe manner, as well as registering your product for future service. Warranty information contained in this User Guide will describe your limited coverage from ViewSonic® Corporation, which is also found on our web site at <http://www.viewsonic.com> in English, or in specific languages using the Regional selection box of our website.

Model No. VS20734
P/N: LDM163G-183

Thank you for choosing ViewSonic®

As a world-leading provider of visual solutions, ViewSonic® is dedicated to exceeding the world's expectations for technological evolution, innovation, and simplicity. At ViewSonic®, we believe that our products have the potential to make a positive impact in the world, and we are confident that the ViewSonic® product you have chosen will serve you well.

Once again, thank you for choosing ViewSonic®!

Safety Precautions

Please read the following **Safety Precautions** before you start using the device.

- Keep this user guide in a safe place for later reference.
- Read all warnings and follow all instructions.
- Ensure there is no direct airflow from air conditioning blowing on the display.
- Do not use the device near water. To reduce the risk of fire or electric shock, do not expose the device to moisture.
- Avoid exposing the device to direct sunlight or other sources of sustained heat.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other devices (including amplifiers) that may increase the temperature of the device to dangerous levels.
- When moving the device, be careful not to drop or bump the device on anything.
- Do not place the device on an uneven or unstable surface. The device may fall over resulting in an injury or a malfunction.
- Verify the wall can support the display's weight. If not, reinforce the wall before installation.
- Do not place any heavy objects on the device or connection cables.
- If smoke, an abnormal noise, or a strange odor is present, immediately turn the device off and call your dealer or ViewSonic®. It is dangerous to continue using the device.
- Do not attempt to circumvent the safety provisions of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade and the third prong are provided for your safety. If the plug does not fit into your outlet, obtain an adapter and do not attempt to force the plug into the outlet.
- When connecting to a power outlet, DO NOT remove the grounding prong. Please ensure grounding prongs are NEVER REMOVED.
- Protect the power cord from being treaded upon or pinched, particularly at the plug, and at the point where it emerges from the equipment. Ensure that the power outlet is located near the equipment so that it is easily accessible.
- Only use attachments/accessories specified by the manufacturer.
- When a cart is used, use with caution when moving the cart/equipment combination to avoid injury from tipping over.



- Disconnect the power plug from the AC outlet if the device is not being used for a long period of time.
- Place the device in a well-ventilated area.
- Do not cover the surface of the display with any material.
- Do not block the air circulation around the display.
- Keep flammable materials away from the display.
- Refer all servicing to qualified service personnel. Service will be required when the unit has been damaged in any way, such as:
 - » if the power supply cord or plug is damaged;
 - » if liquid is spilled onto or objects fall in the unit;
 - » if the unit is exposed to moisture;
 - » if the unit does not operate normally or has been dropped.
- Do not assemble the display by yourself.
- This panel is an advanced product that contains millions of pixels. You may occasionally see pixel spots when viewing the screen. Since these deactivated pixels are not a defect, the performance and reliability of the product is not affected.

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Introduction

Package Contents

Item	Description	Quantity	Note
Installation Guide		1	
LED Display	Cabinet Section	6	One Left (A), four Middle (B, C, D, E), and one Right (F).
	LED Module	144	The quantity of spare LED modules varies by country.
System Control Box	System Control Box	2	
	System Control Box Cover	3	
	Connector Plate	2	
Wall Installation	Wall Mount Brackets	5	3 x 1197 mm 2 x 597 mm
	Wall Mount Connector Plate	2	
	Mounting Brackets	16	
Accessories	Screws	120 x M4 x 12 mm 20 x M6 x 80 mm expansion 12 x M6 x 8 mm 88 x M6 x 16 mm 38 x M4 x 8 mm	
	Hand Tools	2 x Hex keys (2.5 mm) 2 x Hex keys (3 mm) 2 x Hex keys (4 mm) 2 x Hex keys (5 mm) 2 x Screwdrivers	
	Anti-Static Gloves	2 pairs	

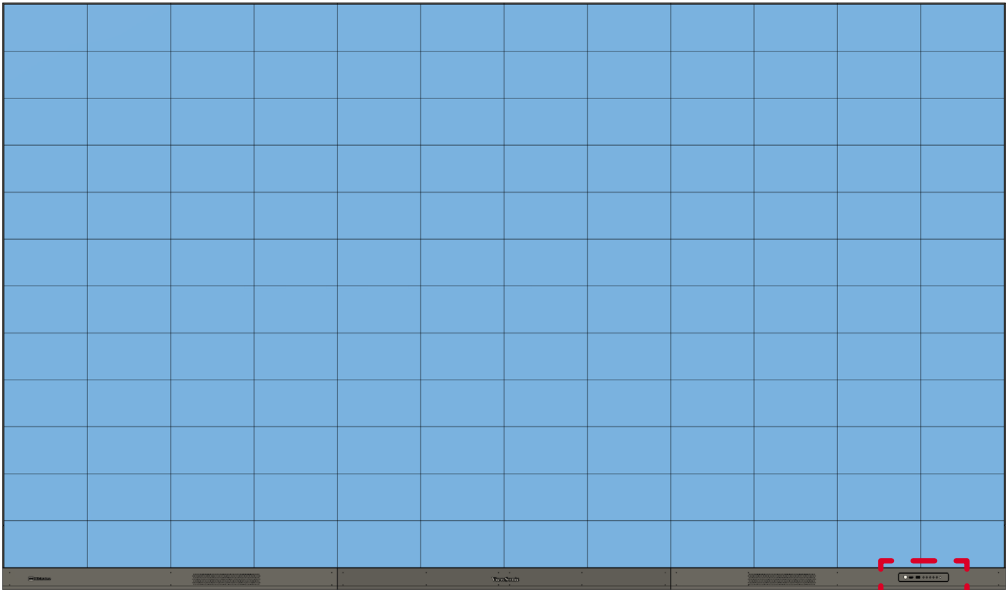
Item	Description	Quantity	Note
Remote Control		1	
LED Module Removal Tool		1	
USB Thumb Drive		1	

Note:

- This product is packed in a wooden crate.
- Due to the size and weight, it is recommended that two or more people handle it.

Product Overview

Front View



Control Panel & I/O

Rear View



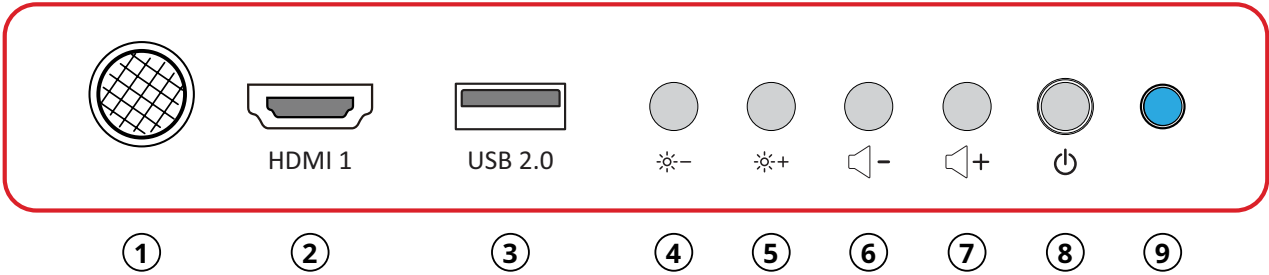
Bottom View



Circuit Breaker

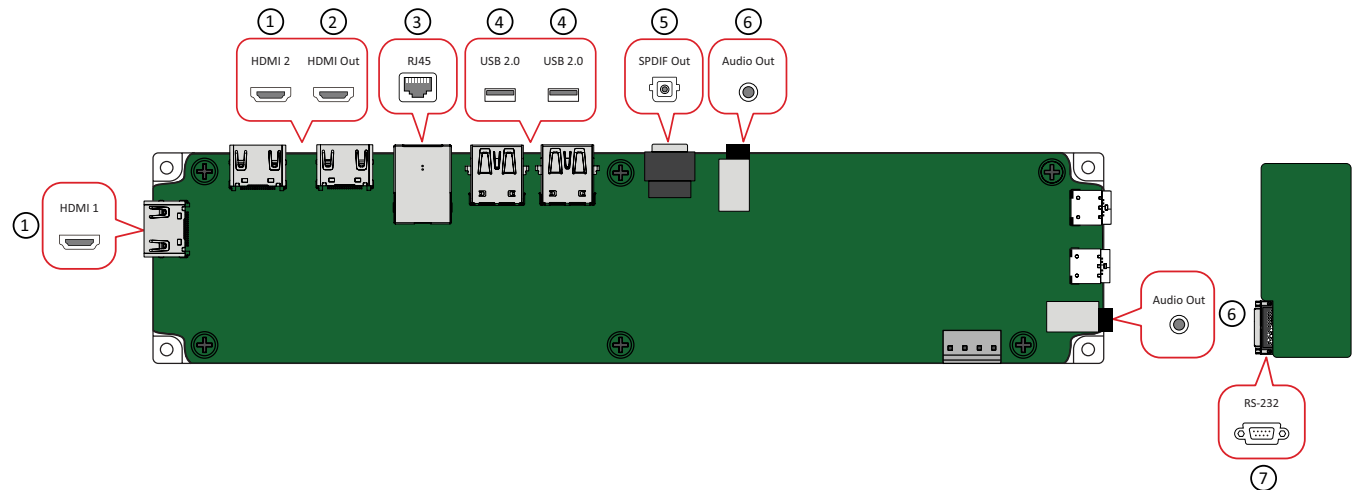
Main System Control Board

Control Panel and I/O



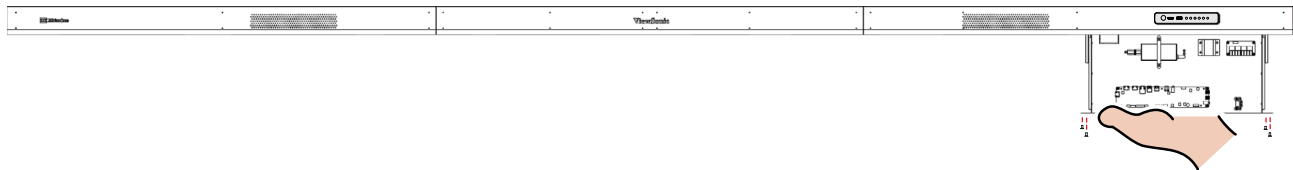
Item		Description
1	IR Receiver	Receiver for remote control signal.
2	HDMI 1	High definition input: connect to PC with HDMI output, set-top box, or other video device.
3	USB 2.0	Support data and audio transmission (5V/0.5A).
4	Brightness Decrease	Decrease the brightness level.
5	Brightness Increase	Increase the brightness level.
6	Volume Decrease	Decrease the volume level.
7	Volume Increase	Increase the volume level.
8	Power	Power on, standby, and wake button.
9	Indicator Light	Power status indicator light.

I/O Ports



Item		Description
1	HDMI 1 ^{1/2}	High definition input: connect to PC with HDMI output, set-top box, or other video device.
2	HDMI Out	Extend the display's content out to another display device.
3	RJ45	Standard RJ45 control connection interface.
4	USB 2.0 ¹	Support data and audio transmission (5V/0.5A).
5	SPDIF Out	Multi-channel optical audio signal.
6	Audio Out ²	Audio output to an external audio device.
7	RS-232	Serial control port.

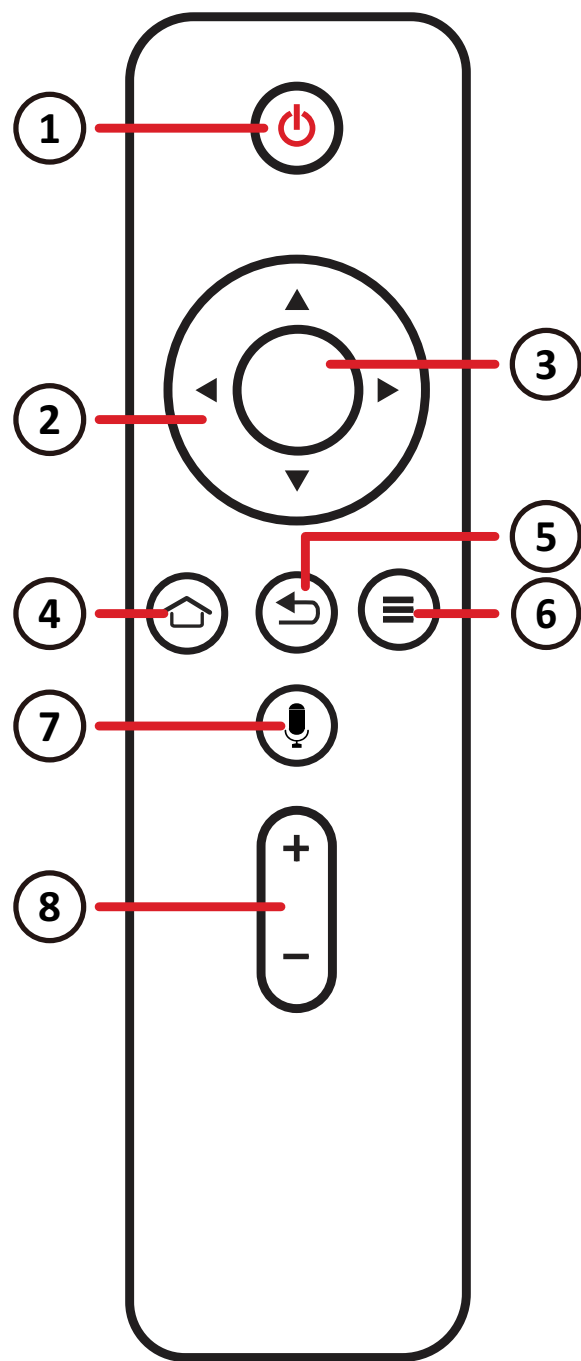
Important: The I/O ports are built on the main system control board at the bottom of the System Control Box. To access the main system control board, hold the tray, while removing the four screws, to prevent the control board from falling.



1 – The **HDMI 1** port and one USB Type A (**USB 2.0**) port can be accessed externally.
2 – One of the **Audio Out** ports is already pre-connected to the internal speakers.

Remote Control

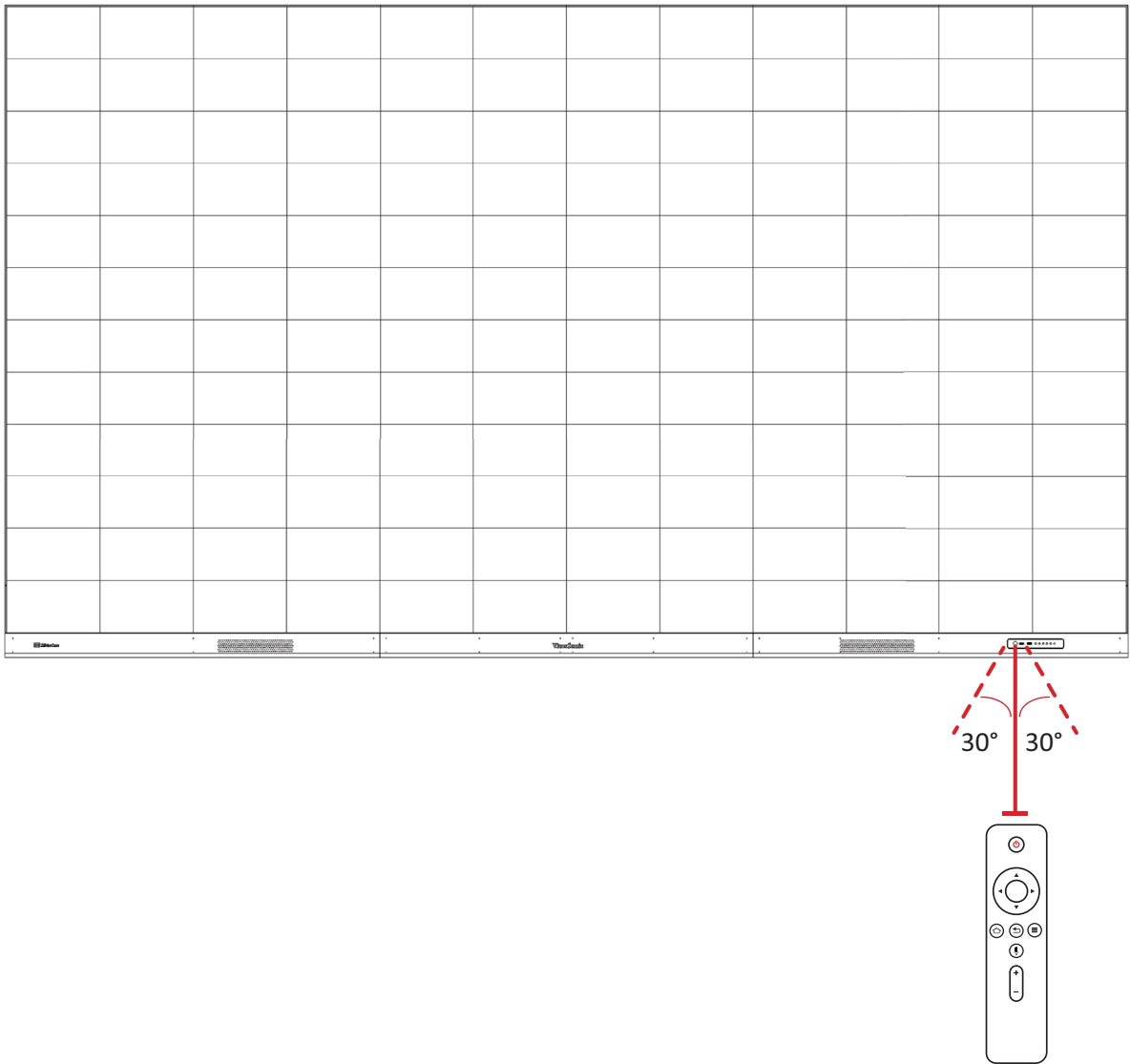
Overview



Button			Description
1		Power	Turn the display on or off.
2		Navigation	Navigate menus and make adjustments.
3		OK	Confirm the selection.
4		Home	Go to the Home screen.
5		Return	Return to the previous screen or exit a menu.
6		Menu	Open the display settings or On-Screen Display Menu.
7			<i>This button is unsupported.</i>
8		Volume Control	Adjust the volume level.

Remote Control Receiver Range

The operating range of the remote control is shown here. It has an effective range of 6 meters (20 feet), 30° degrees left and right. Please make sure there is nothing obstructing the remote control's signal to the receiver.



Inserting Remote Control Batteries

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

To insert batteries into the remote control:

1. Remove the cover on the rear of the remote control.
2. Insert two "AAA" batteries, ensuring the positive (+) symbol on the battery matches the positive (+) symbol on the battery post.
3. Replace the cover by aligning it with the slot on the remote control and snapping the latch shut.

Important: There is a risk of explosion if batteries are installed with incorrect polarity.

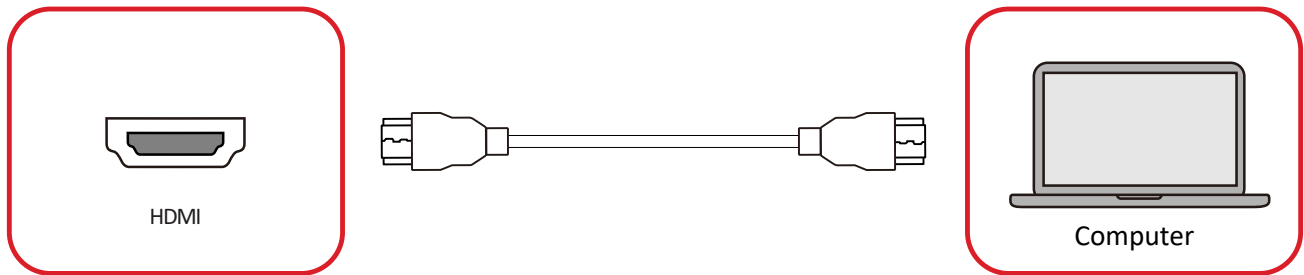
Note:

- It is recommended that you do not mix battery types.
- Avoid exposure to heat or steam.
- Do not allow water or other liquids to splash on the remote control. If the remote control becomes wet, wipe it dry immediately.
- Always dispose of old batteries in an environmentally friendly way. Contact your local government for more information on how to dispose of batteries safely.

Making Connections

Connecting to Video

HDMI



Connect an HDMI cable from your external device to the **HDMI 1/HDMI 2** port on the display.

Note: The **HDMI 1** port can be accessed externally, while the **HDMI 2** port is on the main system control board.

HDMI Out

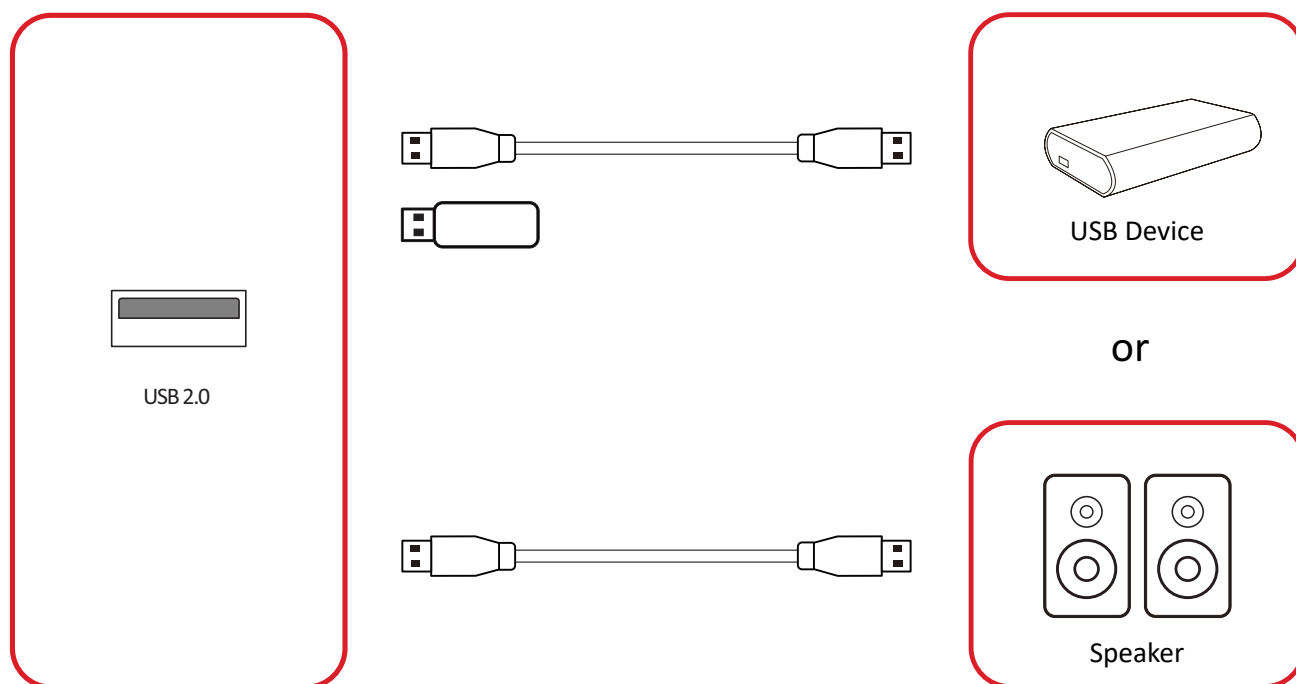


To output video via an external display device, connect an HDMI cable to the **HDMI IN** port of your external display device, and the other end to the **HDMI OUT** port of the display.

Note: The **HDMI OUT** port is on the main system control board.

USB Connection

USB Type A



Plug the USB device or storage drive into the USB Type A (**USB 2.0**) port on the display.

Note: An additional USB Type A port is on the main system control board.

Control Connection

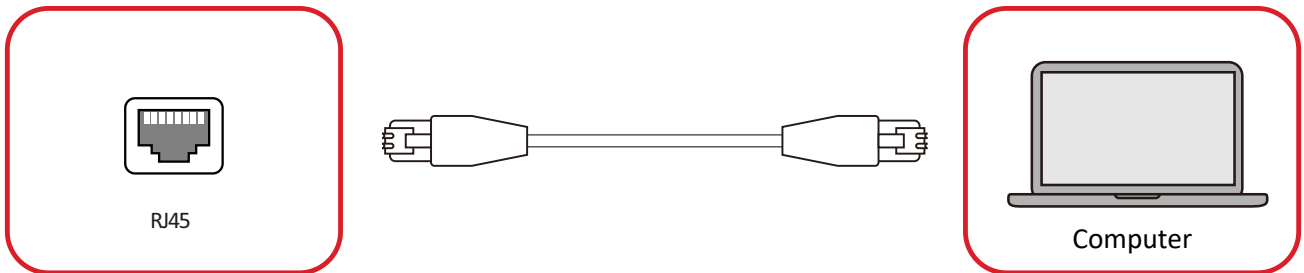
RS-232 (DB 9-pin)



When you use a RS-232 serial cable to connect the display to an external computer or control system, certain functions can be controlled remotely such as: power on and off, volume adjustment, input select, brightness, and more.

Note: The **RS-232** port is on the main system control board.

RJ45 (LAN)



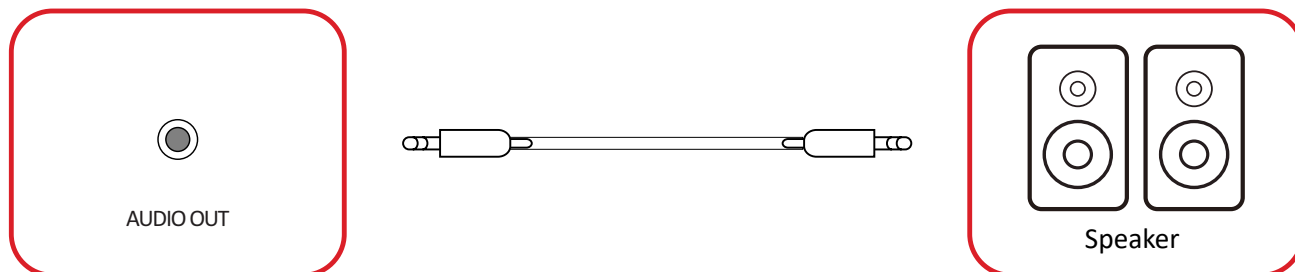
When you use an Ethernet cable to connect the display to an external computer or control system, certain functions can be controlled remotely such as: power on and off, volume adjustment, input select, brightness, and more.

Note: The **RJ45** port is on the main system control board.

Audio Connection

Audio Out

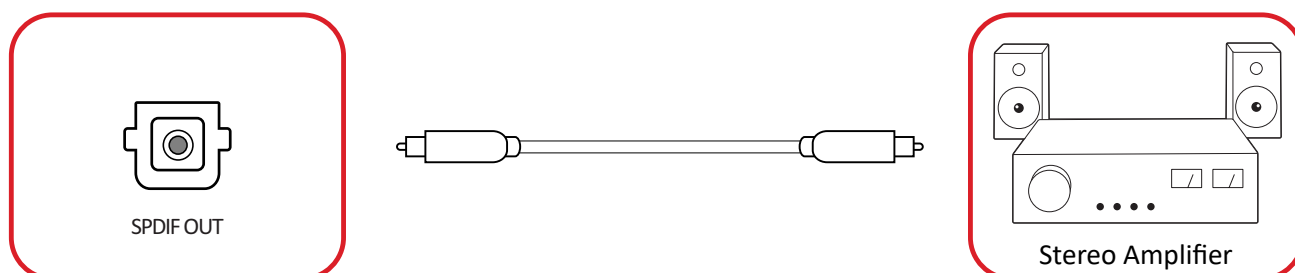
To play audio from the display through an external speaker, connect one end of an audio cable to the external speaker, and the other end to the display's **Audio Out** port.



Note: The display is equipped with two **Audio Out** ports. Both are on the main system control board.

SPDIF

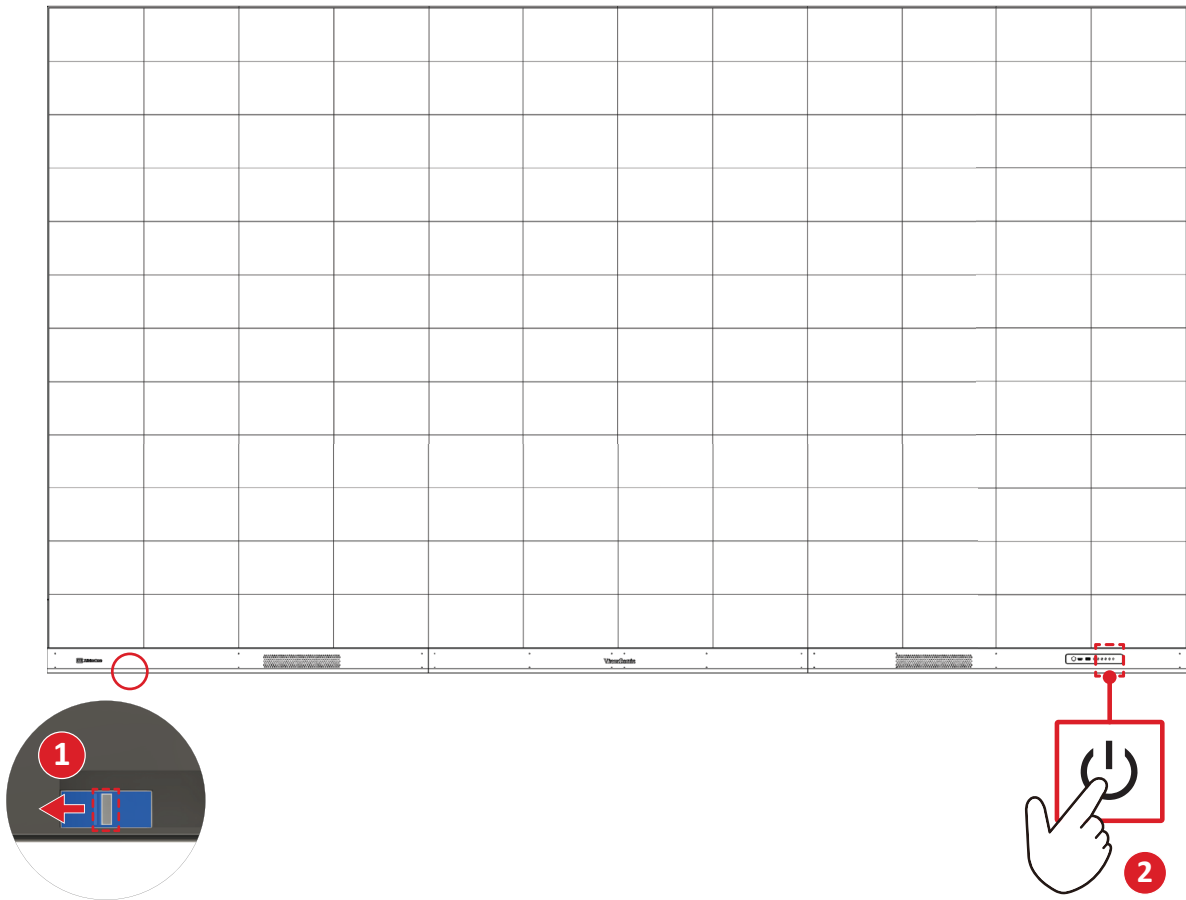
To play audio from the display through an external speaker, connect one end of an optical cable to the external speaker, and the other end to the display's **SPDIF Out** port.



Note: The **SPDIF Out** port is on the main system control board.

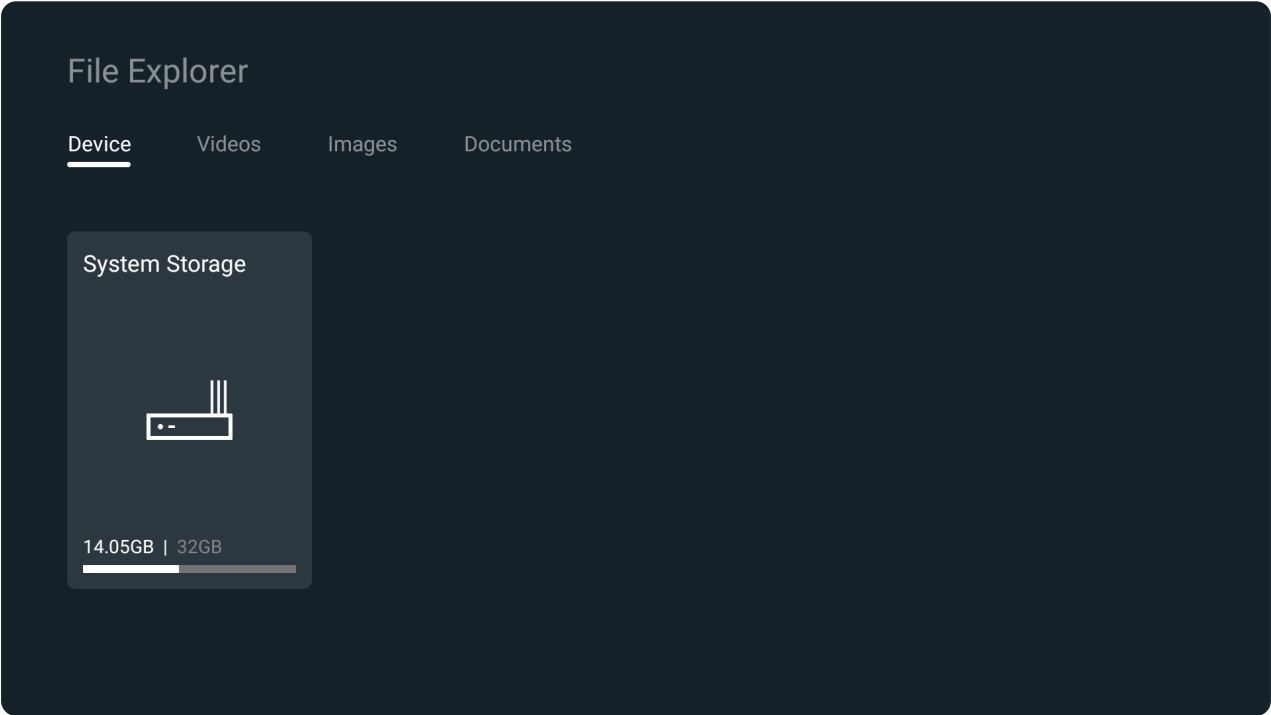
Using Your Display

Turning the LED Display On/Off



1. Make sure the power cord is connected and plugged into a power outlet.
2. At the bottom of the System Control Box, turn on the circuit breaker.
3. Press the **Power** button to turn on the display.
4. To turn the display off, press the **Power** button again.

Home Screen



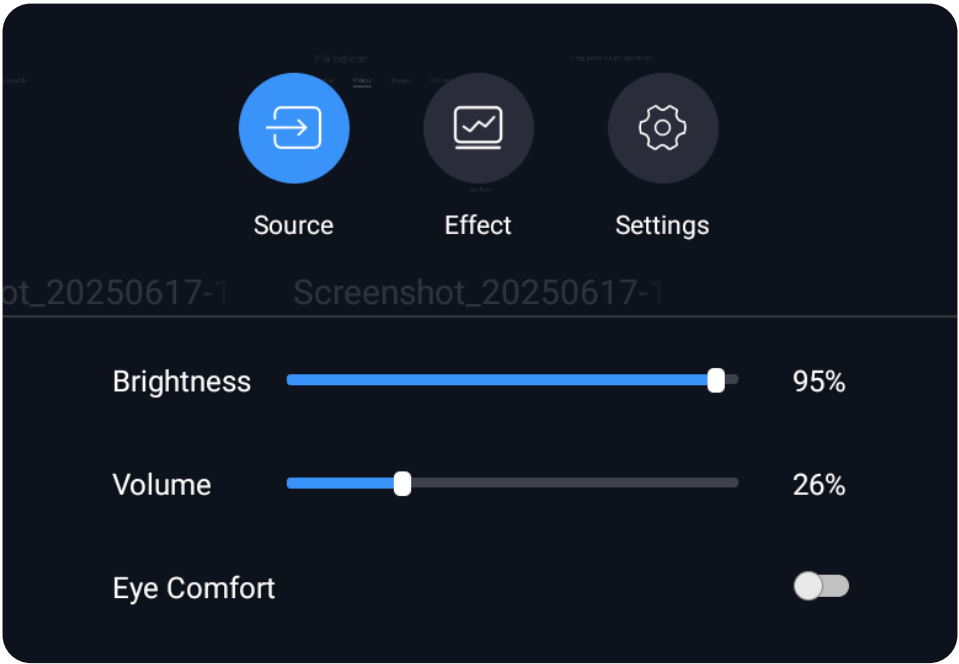
Item	Description
Device	Manage local or USB files and folders.
Videos	View and play video files.
Images	View photo files.
Documents	View document files.

Note:

- Press the **Home** button at any time to return to the Home Screen.
- For the supported file formats, please refer to “Supported File Formats”.

Quick Menu

Press the **Menu** button to activate the Quick Menu, navigate the On-Screen Display Menu, and change settings.



Menu	Description
Source	Select the input source.
Effect	Select a pre-defined picture setting.
Settings	Enter the On-Screen Display Menu.
Brightness	Adjust the brightness level.
Volume	Adjust the volume level.
Eye Comfort	Block high-energy blue light for a more comfortable viewing experience.

Configuring the Settings

General Operations

1. Press the **Menu** button to display the Quick Menu. Then, navigate to **Settings** and press the **OK** button to open the On-Screen Display Menu.
2. Press the **Navigation** (↑/↓) buttons to select the main menu. Then press the **OK** button to enter the selected menu.
3. Press the **Navigation** (↑/↓) buttons to select the desired menu option. Then press the **OK** button to enter the sub-menu.
4. Press the **Navigation** (↑/↓/←/→) buttons to adjust/select the settings. Then press the **OK** button to confirm.

Note: Some sub-menu options may have another sub-menu layer.

5. To exit the menu, press the **Menu** button.

On-Screen Display Menu Tree

Main Menu	Sub-menu	Menu Option	
Network	Wired Network	Automatic	
		Manual	IPv4
			Subnet Mask
			Default Gateway
			DNS Server
Picture	Picture Mode	Standard Mode	
		Soft Mode	
		Movie Mode	
		Conference Mode	
	Brightness	(-/+, 5~100)/1	
	Saturation	(-/+, 0~100)/1	
	Contrast	(-/+, 0~100)/1	
	Color Temperature	(-/+, 0~100)/1	
	Hue		
	Reset		
	Eye Comfort		
Sound	Volume	(-/+, 0~100)/1	
	Audio Output	Default Audio (Speakers)	
		External 3.5mm Audio	
		USB Audio	

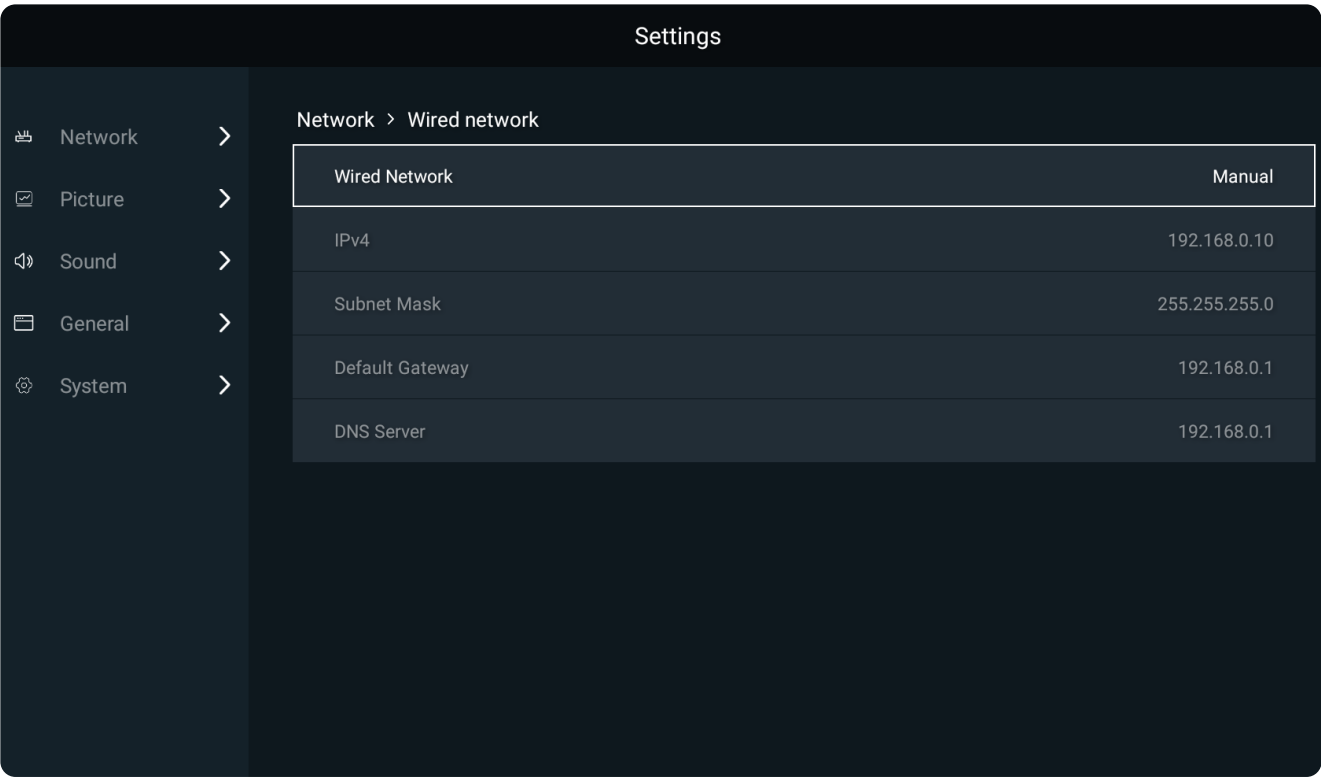
Main Menu	Sub-menu	Menu Option	
General	Date & Time	Set Automatically	Date
			Time
			Time Zone
		24-Hour Time	
		Date Format	
	Language & Keyboard	Language	English
			Français
			Español
			Deutsch
			中文 (繁體)
			中文 (简体)
		Keyboard	System Input Method
	Boot Animation	Startup Animation	
	Image Enhancement	Image Enhancement	Natural
			Standard
			Extreme
	Boot on Source	Remember Signal	
		HDMI 1	
		HDMI 2	
		USB	
		Automatic jump after signal source access	
General	Standby Options	Enter Standby When No Signal	Close
			30 sec/15 min/30 min
	Power Option	Exit Standby on Signal	
		Hibernate	
		Sleep	
	Dehumidify		

Main Menu	Sub-menu	Menu Option	
System	Scheduled Sleep/ Wake-up	Scheduled Sleep	Sleep Time
			Repeat
		Scheduled Wakeup	Wakeup Time
			Repeat
			Wakeup Mode
	Factory Reset		
	System Update	Local Update	
	About	Device Name	
		System version	
	Device self-test	FPGA_ddr initialization state	
		Ethernet port daughter card link status	
		Product Package Type	
		Product Name	
		ARM MAC address	
		Product SN number	

Menu Options

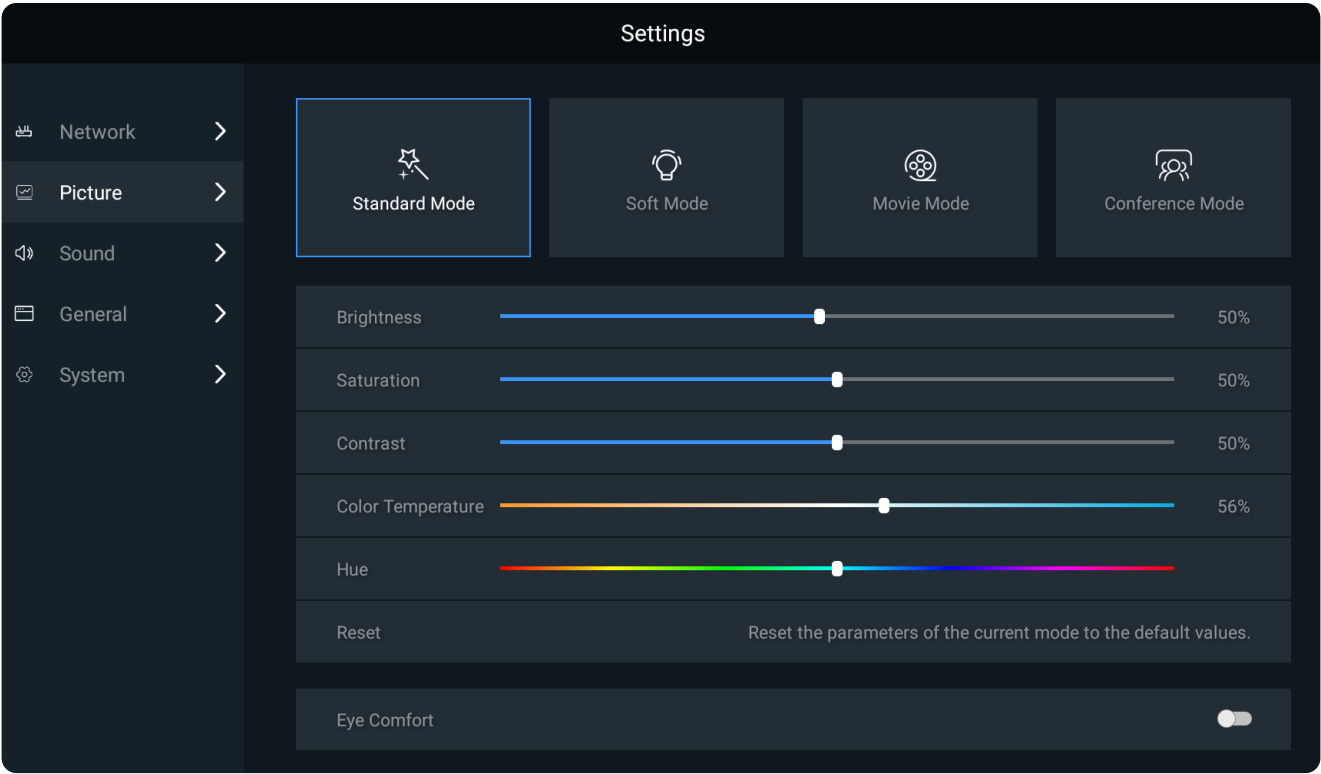
Network

Note: If a wired network is used, the display must be connected to the LAN/RJ45 port using an Ethernet cable.



Sub-menu	Description
Automatic	Retrieve the IPv4 address, subnet mask, and other network information from the DHCP server automatically.
Manual	Set the network settings manually.

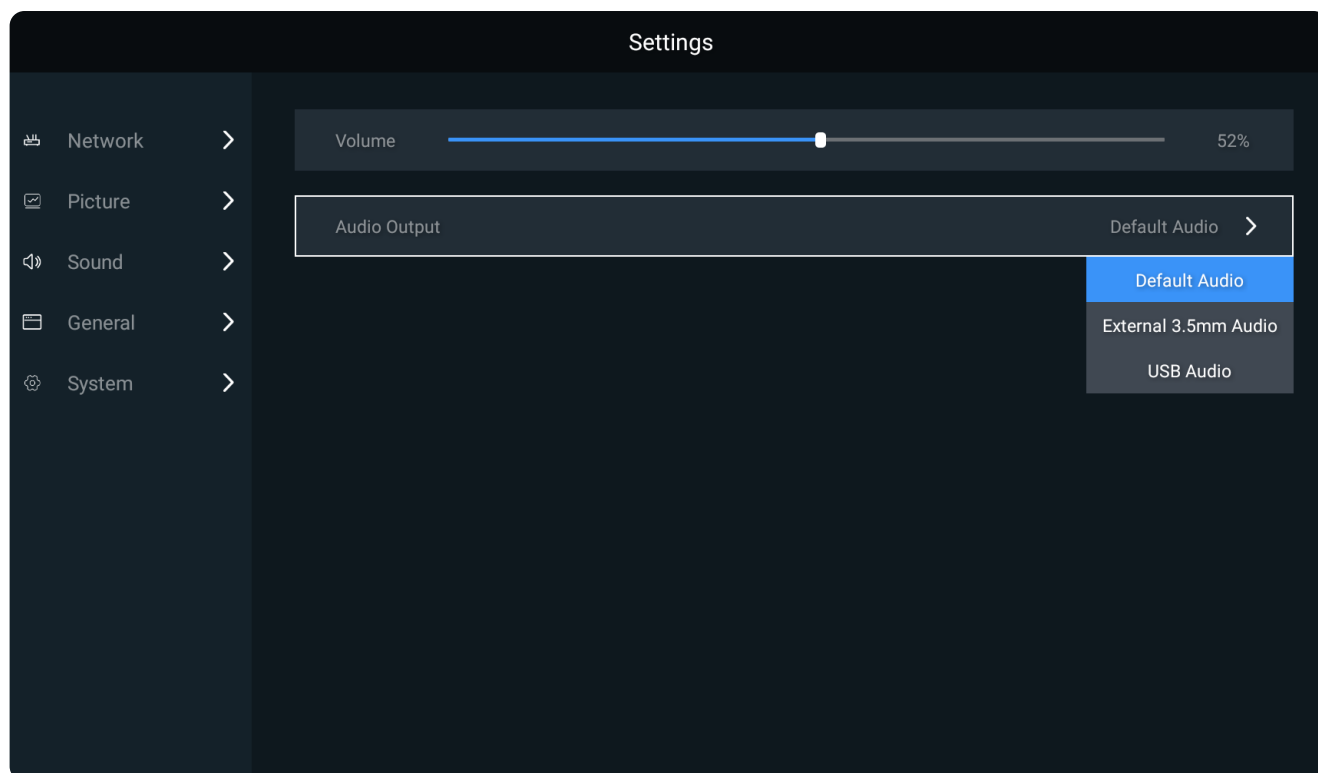
Picture



Sub-menu	Description
Picture Mode ¹	Adjust the default settings (e.g. brightness, saturation, contrast, color temperature, or hue) of a pre-defined picture mode.
Eye Comfort	Block high-energy blue light for a more comfortable viewing experience.

1 – To return to the default settings of a pre-defined picture mode, select it then select **Reset**.

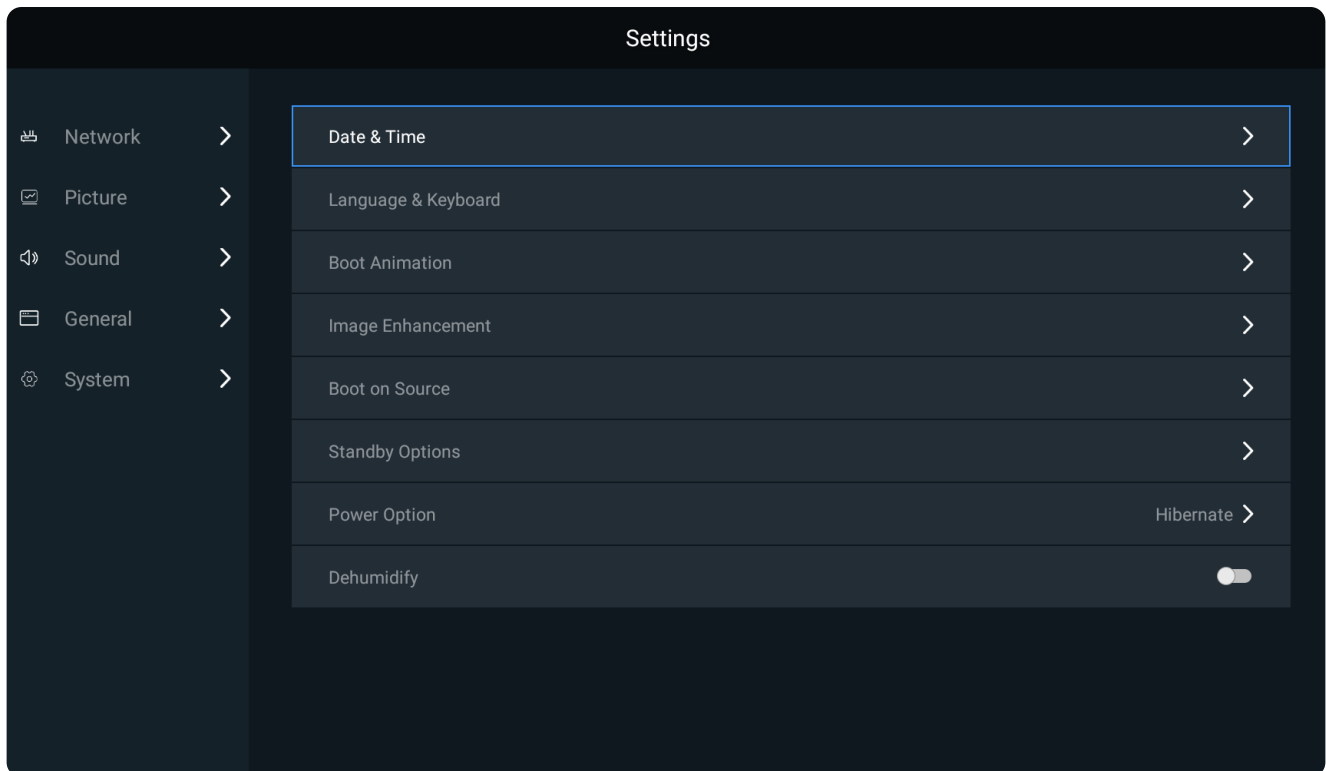
Sound



Sub-menu	Description
Volume	Adjust the volume level.
Audio Output²	Select an audio output source.

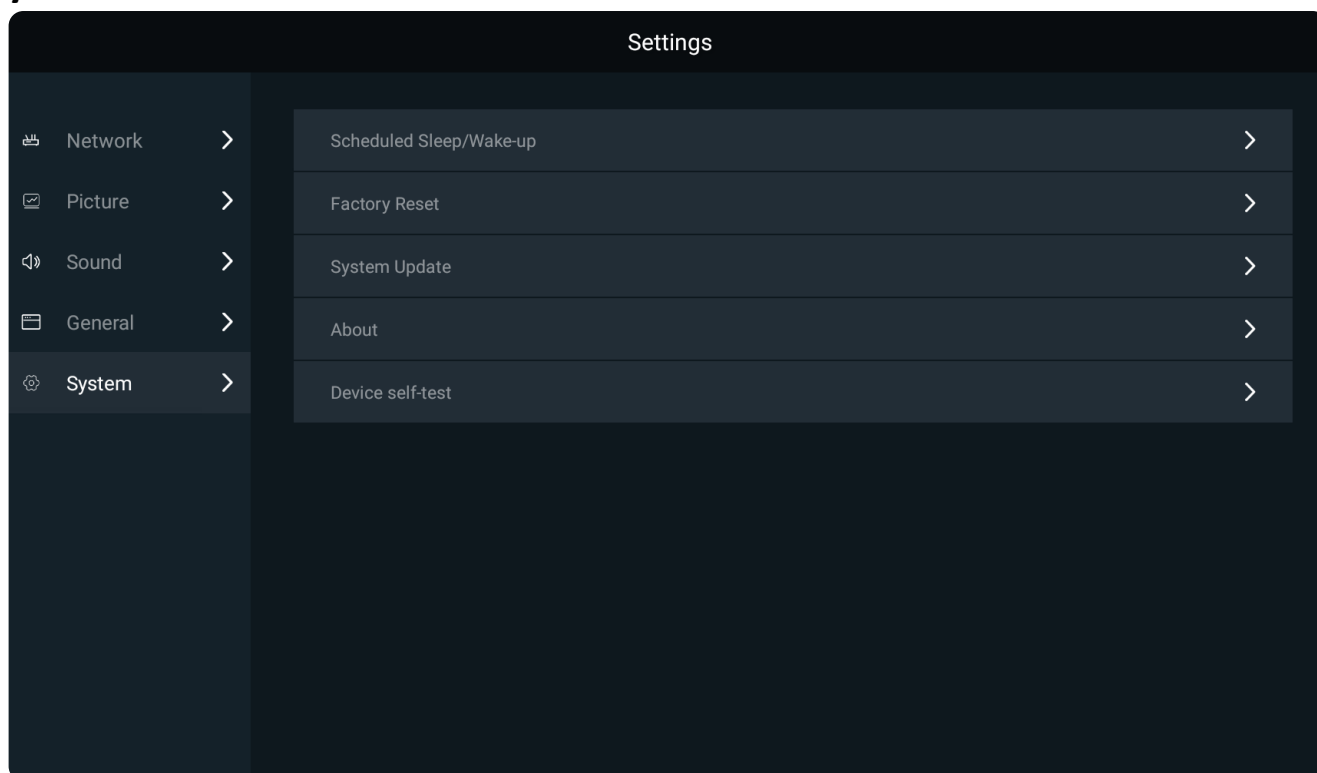
² – To output audio from the **SPDIF Out** port, select **External 3.5 mm Audio**.

General



Sub-menu	Description	
Date & Time	Set the date and time of the display.	
Language & Keyboard	Set the language and keyboard input method.	
Boot Animation	Set a preferred boot logo or animation file.	
Image Enhancement	Select a preferred edit option to further improve the quality of the screen image.	
Boot on Source	Select the input source to enter automatically after the display is turned on.	
Standby Options	Enter Standby When No Signal	Puts the display in standby mode automatically after a set period of time once no input signal is detected.
	Exit Standby on Signal	Wake up the display from standby mode automatically once an input signal is detected.
Power Option	Put the display into Hibernate or Sleep mode when you press the Power button while the display is on.	
Dehumidify	Remove the excess moisture from the display automatically.	

System



Sub-menu	Description
Schedule Sleep/ Wake-up³	Set a schedule to turn the display on and off.
Factory Reset	Reset all On-Screen Display Menu settings to their default values.
System Update	Update the firmware from a USB thumb drive or check the version number.
About	View information about the display.
Device self-test	Check if the display is functioning properly.

³ – To turn on this function, make sure **Sleep** is selected in the **General > Power Options** menu.

Appendix

Specifications

Item	Category	Specifications
Model		LDM163G-183
LED Screen	Type	Direct View LED Display
	Size	163"
	Active Size (H x V)	3,600 mm x 2,025 mm
		141.7" x 79.7"
	Pitch Size	1.88 mm
	Resolution	FHD, 1920 x 1080
	Refresh Frequency	3840 Hz
	Contrast Ratio	6500:1 (Typical)
	Brightness	100-600 cd/m2 (100 levels of adjustment)
	LED Lifespan	100,000 hours
Input Signal		2 x HDMI (v. 1.3; HDCP 1.4)
		2 x USB Type A (2.0)
		1 x RS-232 (for control)
		1 x RJ45 (for LAN control)
Output Signal		1 x HDMI Out
		2 x Audio Out ¹
		1 x SPDIF
		2 x USB Type A (Shared) [5V/0.5A]
Speaker Output		2 x 18W
RS-232		RS-232 Serial Control
Power	Voltage	100-120V/30A ~ 50/60Hz
		220-240V/15A ~ 50Hz (will vary by country)
Operating Conditions	Altitude	≤ 5,000 m
		≤ 16,404 ft
	Relative Humidity	10%~80% non-condensing
	Temperature	0° C to 40° C
		32° F to 104° F

¹ – One of the **Audio Out** ports is already pre-connected to the internal speakers.

Item	Category	Specifications
Storage Conditions	Altitude	≤ 5,000 m
		≤ 16,404 ft
	Relative Humidity	10%~85% non-condensing
	Temperature	-10° C to 60° C
		14° F to 140° F
Physical Dimensions (W x H x D)	Without Wall Mount	3,612 x 2,111 x 90.5 mm
		142.2" x 83.1" x 3.6"
	With Wall Mount	3,612 x 2,111 x 90.5 mm
		142.2" x 83.1" x 3.6"
Weight	Without Wall Mount	190 kg
		418.9 lb
	With Wall Mount	212 kg
		467.4 lb
Power Consumption	On	786W (Normal) 2359W (Maximum)
	Off	< 0.5W

Note: Product specifications are subject to change without notice.

Timing Chart

HDMI (PC)

Resolution	Refresh Rate
800 x 600	60 Hz
1024 x 768	60 Hz
1280 x 768	60 Hz
1280 x 800	60 Hz
1280 x 960	60 Hz
1280 x 1024	60 Hz
1360 x 768	60 Hz
1366 x 768	60 Hz
1400 x 1050	60 Hz
1440 x 900	60 Hz
1600 x 1200	60 Hz
1680 x 1050	60 Hz
1920 x 1080	60 Hz

HDMI (Video)

Video	Resolution	Refresh Rate
800 x 600	800 x 600	60 Hz
1024 x 768	1024 x 768	60 Hz
720p	1280 x 720	60 Hz
1080p	1920 x 1080	60 Hz

Note:

- The computer text quality is optimal in HD 1080 mode (1920 x 1080, 60 Hz).
- Your computer display screen might appear different depending on the manufacturer and your operating system.
- Consult your computer's instructional manual on how to connect to an external display.
- If a vertical and horizontal frequency-select mode exists, select 60 Hz (vertical) and 67.5 kHz (horizontal). In some cases, abnormal signals (such as stripes) might appear on the screen when the computer power is turned off (or if the computer is disconnected). If this is the case, press the [INPUT SOURCE] button to enter the video mode and supply an active signal.
- The display timings conform to VESA and CTA standards.
- For 4:3 content, the screen will display them in the center of the screen and maintain a 4:3 aspect ratio.
- The optimal vertical frequency for each mode is 60Hz.

Supported File Formats

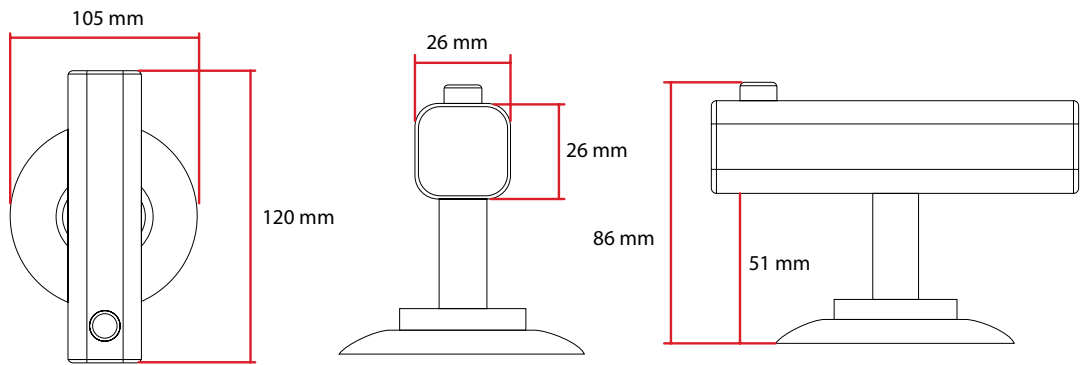
	File Formats	Remark
Images	.jpg	
	.bmp	
	.png	
Videos	.avi	
	.mpg	
	.vob	
	.mov	
	.mkv	
	.rmvb	
	.mp4	
	.ts	
	.flv	
Documents	.doc/.docx	Able to open and read documents in doc/docx
	.xls/.xlsx	Able to open and read documents in xls/xlsx
	.ppt/.pptx	Able to open and read documents in ppt/pptx
	.pdf	Able to open and read documents in pdf

Note: Only support FAT32 and NTFS file systems.

Maintenance Tools

LED Module Removal Tool

Dimensions



Specifications

Item	Description
Product Dimension	120 x 86 x 105 mm
	4.7" x 3.4"x 4.1"
Weight	0.2 kg
	0.4 lb

Troubleshooting

General

Problem or Issue	Possible Solutions
Remote Control is not working	1. Check whether something is obstructing the display's remote control receiver. 2. Check whether the battery polarities in the remote control are installed correctly. 3. Check whether the batteries need to be replaced.
The unit turns off unexpectedly	1. Check whether Sleep mode is enabled. 2. Check if there is a power outage in your area. 3. Turn on the display, provide an active signal, and see if the problem is with the signal or external control system. 4. Check whether the Ethernet cables inside the cabinets are connected properly.
The power indicator is off, and there is no response	1. Ensure the power cable is connected and not loose. 2. Check that the power outlet is functioning properly and meets the required electrical requirement.
The display does not recognize the USB storage device	1. Ensure the drive is either formatted for FAT32 or NTFS. 2. If the USB storage device needs external power, connect its power adapter to an electrical outlet.

Video Not Working Properly

Problem or Issue	Possible Solutions
No picture/No sound	1. Check the Power status. 2. Check the signal cable. 3. Use the remote control to ensure the input source setting is the same as the connected device.
Picture is unclear or cuts in and out	1. Check the signal cable. 2. Check if other electronics or different signal types are interrupting the signal. 3. An optional active video cable or optional video extender is required for a long distance source.
Poor picture	1. Adjust chroma and/or brightness settings in the menu. 2. Check the signal cable. 3. Use the display's native resolution for the source.

Audio Not Working Properly

Problem or Issue	Possible Solutions
No sound	1. Press the Mute/Unmute button. 2. Adjust the volume. 3. Check the audio cable connection (if used). 4. If using a computer digital video with embedded audio, ensure the computer speakers are set to external speakers.
One speaker only	1. Adjust the sound balance in the menu. 2. Check the left and right sound control panel settings of the computer or media player source. 3. Check the audio cable connection (if used). 4. Ensure the content has two audio channels and not mono.

Maintenance

General Precautions

- The LED lights used in the modules are susceptible to ESD (Electrostatic discharge). To prevent damage to the LED lights, do not touch them with bare hands or with conductive materials when handling.
- Wear anti-static gloves and wrist strap when installing and servicing the display.
- It is recommended to regularly inspect all installed components.
- Do not bring objects close to the ventilation holes of the display. Burns or personal injuries may occur if any body parts are brought too close.
- Be sure to power off and disconnect all cables before moving the display. Moving the display with its cables attached may damage the cables and thus cause fire or electric shock.
- Power off and disconnect the power plug from the wall outlet as a safety precaution before performing any type of cleaning or maintenance.

Initial Operation

- If a new screen has been stowed for less than three months, it can be used at normal brightness during its first use.
- If a new screen has been stowed for more than three months, the brightness should be set at 30% for its first use and allowed to operate for two hours continuously. After two hours of use, power off for 30 minutes. The new screen is now ready for normal brightness usage.

Front Panel Cleaning Instructions

- Use cool, compressed air to remove dust when the power is off. If the dust cannot be removed, the LED module should be replaced.
- Do not scratch and do not put pressure on the panel surface with fingers or any abrasive object.
- Do not use volatile substances such as sprays, solvents, or thinners.

Cabinet Cleaning Instructions

- Do not allow water or detergent to come into contact with the surface of the display. If water or moisture gets inside the unit, a system malfunction or electrical shock may occur.
- Do not scratch and do not put pressure on the cabinet with any abrasive objects of any kind.
- Do not use volatile substances such as sprays, solvents, or thinners on the cabinet.
- Do not place anything made from rubber or PVC near the cabinet for any extended periods of time.

Regular Use

- It is recommended to turn on the display at least once a month for more than eight hours. During a wet and rainy season, it is recommended to turn on the display at least once a week.
- Avoid using full white, full red, full blue, or full green content for an extended period to avoid excessive power usage thus affecting the LED lifespan.

RS-232 Protocol

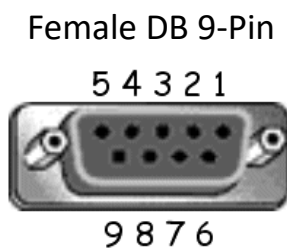
This document describes the hardware interface and software protocols of RS-232 interface communication between the ViewSonic LED Display and computers or other control units with RS-232 protocol.

Description

RS-232 Hardware Specification

ViewSonic RS-232 serial port on the lower left side:

1. Connector type: DB 9-Pin Female.
2. Use of straight-through parallel cable for connection
3. Pin Assignment:



Pin #	Signal	Remark
1	NC	
2	RXD	Input to Display
3	TXD	Output from Display
4	NC	
5	GND	GND
6	NC	
7	NC	
8	NC	
9	NC	
frame	GND	

RS-232 Communication Setting

- Baud Rate 115200bps (fixed)
 Select:
- Data bits: 8 bits (fixed)
- Parity: None (fixed)
- Stop Bits: 1 (fixed)

Command Table

Note: TCP port number : 5210

Function	Command	HEX
Remote	Home	55 AA 00 01 FC 00 07 00 00 00 01 00 01 00 00 00 01 00 00 5C 56
	Return	55 AA 00 01 FC 00 07 00 00 00 01 00 02 00 00 00 01 00 00 5D 56
	Setting	55 AA 00 01 FC 00 07 00 00 00 01 00 03 00 00 00 01 00 00 5E 56
	Power on/off	55 AA 00 01 FC 00 07 00 00 00 01 00 04 00 00 00 01 00 00 5F 56
	Increase volume	55 AA 00 01 FC 00 07 00 00 00 01 00 06 00 00 00 01 00 00 61 56
	Decrease volume	55 AA 00 01 FC 00 07 00 00 00 01 00 07 00 00 00 01 00 00 62 56
	Up	55 AA 00 01 FC 00 07 00 00 00 01 00 08 00 00 00 01 00 00 63 56
	Down	55 AA 00 01 FC 00 07 00 00 00 01 00 09 00 00 00 01 00 00 64 56
	Left	55 AA 00 01 FC 00 07 00 00 00 01 00 0A 00 00 00 01 00 00 65 56
	Right	55 AA 00 01 FC 00 07 00 00 00 01 00 0B 00 00 00 01 00 00 66 56
	OK	55 AA 00 01 FC 00 07 00 00 00 01 00 0C 00 00 00 01 00 00 67 56
Mute		55 AA 00 01 FC 00 08 00 00 00 01 00 05 00 00 00 01 00 01 5E 56
Unmute		55 AA 00 01 FC 00 08 00 00 00 01 00 05 00 00 00 01 00 00 5E 56

Regulatory and Service Information

Compliance Information

This section addresses all connected requirements and statements regarding regulations. Confirmed corresponding applications shall refer to nameplate labels and relevant markings on the unit.

FCC Compliance Statement

This device complies with part 15 of 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. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.

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

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

The antenna(s) used for this transmitter must not be collocated or operating in conjunction with any other antenna or transmitter.

The device was tested and complies to measurement standards and procedures specified in FCC CFR Title 47 Part 15 Subpart C.

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

The users manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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

IC Warning Statement

This device complies with Industry Canada license- exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Country Code Statement

For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channels is not possible.

Pour les produits disponibles aux États-Unis/Canada du marché, seul le canal 1 à 11 peuvent être exploités. Sélection d'autres canaux n'est pas possible.

IC Radiation Exposure Statement

This equipment complied with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body. The device for the band 5150-5825 MHz is only for indoor usage to reduce potential for harmful interference to co-channel mobile satellite systems.

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20cm de distance entre la source de rayonnement et votre corps. Les dispositifs fonctionnant dans la bande 5150-5825 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux.

CE Conformity for European Countries



The device complies with the EMC Directive 2014/30/EU, Low Voltage Directive 2014/35/EU.

The following information is only for EU-member states:

The mark shown to the right is in compliance with the Waste Electrical and Electronic Equipment Directive 2012/19/EU (WEEE). The mark indicates the requirement NOT to dispose of the equipment as unsorted municipal waste, but use the return and collection systems according to local law.



Declaration of RoHS2 Compliance

This product has been designed and manufactured in compliance with Directive 2011/65/EU of the European Parliament and the Council on restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS2 Directive) and is deemed to comply with the maximum concentration values issued by the European Technical Adaptation Committee (TAC) as shown below:

Substance	Proposed Maximum Concentration	Actual Concentration
Lead (Pb)	0.1%	< 0.1%
Mercury (Hg)	0.1%	< 0.1%
Cadmium (Cd)	0.01%	< 0.01%
Hexavalent Chromium (Cr6 ⁺)	0.1%	< 0.1%
Polybrominated biphenyls (PBB)	0.1%	< 0.1%
Polybrominated diphenyl ethers (PBDE)	0.1%	< 0.1%
Bis (2-ethylhexyl) phthalate (DEHP)	0.1%	< 0.1%
Butyl benzyl phthalate (BBP)	0.1%	< 0.1%
Dibutyl phthalate (DBP)	0.1%	< 0.1%
Diisobutyl phthalate (DIBP)	0.1%	< 0.1%

Certain components of products as stated above are exempted under the Annex III of the RoHS2 Directives as noted below. Examples of exempted components are:

- Copper alloy containing up to 4% lead by weight.
- Lead in high melting temperature type solders (i.e. lead-based alloys containing 85% by weight or more lead).
- Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound.
- Lead in dielectric ceramic in capacitors for a rated voltage of 125V AC or 250V DC or higher.

European Union Regulatory Conformance

The equipment complies with the RF Exposure Requirement 2014/53/EU, Council Recommendation of 16 April 2014 on the limitation of exposure of the general public to electromagnetic fields (0-300 GHz). This equipment meets the following conformance standards: EN301489-1, EN301489-17, EN62368-1, EN300328.

We, hereby, declare that this Wi-Fi radio is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU.

Indian Restriction of Hazardous Substances

Restriction on Hazardous Substances statement (India). This product complies with the “India E-waste Rule 2011” and prohibits use of lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers in concentrations exceeding 0.1 weight % and 0.01 weight % for cadmium, except for the exemptions set in Schedule 2 of the Rule.

Product Disposal at End of Product Life

ViewSonic® respects the environment and is committed to working and living green. Thank you for being part of Smarter, Greener Computing. Please visit the ViewSonic® website to learn more.

USA & Canada:

<https://www.viewsonic.com/us/go-green-with-viewsonic>

Europe:

<https://www.viewsonic.com/eu/environmental-social-governance/recycle>

Taiwan:

<https://recycle.moenv.gov.tw/>

For EU users, please contact us for any safety/accident issue experienced with this product:

ViewSonic Europe Limited



Haaksbergweg 75
1101 BR Amsterdam
Netherlands



+31 (0) 650608655



EPREL@viewsoniceurope.com



<https://www.viewsonic.com/eu/>

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Disclaimer: ViewSonic® Corporation shall not be liable for technical or editorial errors or omissions contained herein; nor for incidental or consequential damages resulting from furnishing this material, or the performance or use of this product.

In the interest of continuing product improvement, ViewSonic® Corporation reserves the right to change product specifications without notice. Information in this document may change without notice.

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Customer Service

For technical support or product service, see the table below or contact your reseller.

Note: You will need the product's serial number.

Country/ Region	Website	Country/ Region	Website
Asia Pacific & Africa			
Australia	www.viewsonic.com/au/	Bangladesh	www.viewsonic.com/bd/
中国 (China)	www.viewsonic.com.cn	香港 (繁體中文)	www.viewsonic.com/hk/
Hong Kong (English)	www.viewsonic.com/hk-en/	India	www.viewsonic.com/in/
Indonesia	www.viewsonic.com/id/	Israel	www.viewsonic.com/il/
日本 (Japan)	www.viewsonic.com/jp/	Korea	www.viewsonic.com/kr/
Malaysia	www.viewsonic.com/my/	Middle East	www.viewsonic.com/me/
Myanmar	www.viewsonic.com/mm/	Nepal	www.viewsonic.com/np/
New Zealand	www.viewsonic.com/nz/	Pakistan	www.viewsonic.com/pk/
Philippines	www.viewsonic.com/ph/	Singapore	www.viewsonic.com/sg/
臺灣 (Taiwan)	www.viewsonic.com/tw/	ประเทศไทย	www.viewsonic.com/th/
Việt Nam	www.viewsonic.com/vn/	South Africa & Mauritius	www.viewsonic.com/za/
Americas			
United States	www.viewsonic.com/us	Canada	www.viewsonic.com/us
Latin America	www.viewsonic.com/la		
Europe			
Europe	www.viewsonic.com/eu/	France	www.viewsonic.com/fr/
Deutschland	www.viewsonic.com/de/	Қазақстан	www.viewsonic.com/kz/
Россия	www.viewsonic.com/ru/	España	www.viewsonic.com/es/
Türkiye	www.viewsonic.com/tr/	Україна	www.viewsonic.com/ua/
United Kingdom	www.viewsonic.com/uk/		

Limited Warranty

ViewSonic® Commercial Display

What the warranty covers:

ViewSonic® warrants its products to be free from defects in material and workmanship during the warranty period. If a product proves to be defective in material or workmanship during the warranty period, ViewSonic® will, at its sole option, and as your sole remedy, repair or replace the product with a similar product. Replacement Product or parts may include remanufactured or refurbished parts or components. The repair or replacement unit or parts or components will be covered by the balance of the time remaining on the customer's original limited warranty and the warranty period will not be extended. ViewSonic® provides no warranty for any third-party software whether included with the product or installed by the customer, installation of any unauthorized hardware parts or components (e.g. Projector Lamps). (Please refer to: "What the warranty excludes and does not cover" section).

Who the warranty protects:

This warranty is valid only for the first consumer purchaser.

What the warranty excludes and does not cover:

- Any product on which the serial number has been defaced, modified, or removed.
- Damage, deterioration, or malfunction resulting from:
 - » Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
 - » Repair or attempted repair by anyone not authorized by ViewSonic®.
 - » Damage to or loss of any programs, data, or removable storage media.
 - » Normal wear and tear.
 - » Removal or installation of the product.
- Software or data loss occurring during repair or replacement.
- Any damage of the product due to shipment.
- Causes external to the product, such as electric power fluctuations or failure.
- Use of supplies or parts not meeting ViewSonic's specifications.
- Failure of owner to perform periodic product maintenance as stated in the User Guide.

- Any other cause which does not relate to a product defect.
- Damage caused by static (non-moving) images displayed for lengthy periods of time (also referred to as image burn-in).
- Software - Any third-party software included with the product or installed by the customer.
- Hardware/Accessories/Parts/Components – Installation of any unauthorized hardware, accessories, consumable parts or components (e.g. Projector Lamps).
- Damage to, or abuse of, the coating on the surface of the display through inappropriate cleaning as described in the product User Guide.
- Removal, installation, and set-up service charges, including wall-mounting of the product.

How to get service:

- For information about receiving service under warranty, contact ViewSonic® Customer Support (Please refer to the “Customer Service” page). You will need to provide your product’s serial number.
- To obtain warranty service, you will be required to provide: (a) the original dated sales slip, (b) your name, (c) your address, (d) a description of the problem, and (e) the serial number of the product.
- Take or ship the product, freight prepaid, in the original container to an authorized ViewSonic® service center or ViewSonic®.
- For additional information or the name of the nearest ViewSonic® service center, contact ViewSonic®.

Limitation of implied warranties:

There are no warranties, express or implied, which extend beyond the description contained herein including the implied warranty of merchantability and fitness for a particular purpose.

Exclusion of damages:

ViewSonic's liability is limited to the cost of repair or replacement of the product. ViewSonic® shall not be liable for:

- Damage to other property caused by any defects in the product, damages based upon inconvenience, loss of use of the product, loss of time, loss of profits, loss of business opportunity, loss of goodwill, interference with business relationships, or other commercial loss, even if advised of the possibility of such damages.
- Any other damages, whether incidental, consequential or otherwise.
- Any claim against the customer by any other party.
- Repair or attempted repair by anyone not authorized by ViewSonic®.

Effect of state law:

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow limitations on implied warranties and/or do not allow the exclusion of incidental or consequential damages, so the above limitations and exclusions may not apply to you.

Sales outside the U.S.A. and Canada:

For warranty information and service on ViewSonic® products sold outside of the U.S.A. and Canada, contact ViewSonic® or your local ViewSonic® dealer.

The warranty period for this product in mainland China (Hong Kong, Macao, and Taiwan Excluded) is subject to the terms and conditions of the Maintenance Guarantee Card.

For users in Europe and Russia, full details of warranty provided can be found at: <http://www.viewsonic.com/eu/> under "Support/Warranty Information".

Mexico Limited Warranty

ViewSonic® Commercial Display

What the warranty covers:

ViewSonic® warrants its products to be free from defects in material and workmanship, under normal use, during the warranty period. If a product proves to be defective in material or workmanship during the warranty period, ViewSonic® will, at its sole option, repair or replace the product with a like product. Replacement product or parts may include remanufactured or refurbished parts or components & accessories.

Who the warranty protects:

This warranty is valid only for the first consumer purchaser.

What the warranty excludes and does not cover:

- Any product on which the serial number has been defaced, modified or removed.
- Damage, deterioration, or malfunction resulting from:
 - » Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, unauthorized attempted repair, or failure to follow instructions supplied with the product.
 - » Causes external to the product, such as electrical power fluctuations or failure.
 - » Use of supplies or parts not meeting ViewSonic®'s specifications.
 - » Normal wear and tear.
 - » Any other cause which does not relate to a product defect.
- Any product exhibiting a condition commonly known as "image burn-in" which results when a static image is displayed on the product for an extended period of time.
- Removal, installation, insurance, and set-up service charges.

How to get service:

For information about receiving service under warranty, contact ViewSonic® Customer Support (Please refer to the attached “Customer Service” page). You will need to provide your product’s serial number, so please record the product information in the space provided below on your purchase for your future use. Please retain your receipt of proof of purchase to support your warranty claim.

For Your Records

Product Name: _____ Model Number: _____
Document Number: _____ Serial Number: _____
Purchase Date: _____ Extended Warranty Purchase? _____(Y/N)
If so, what date does warranty expire? _____

- To obtain warranty service, you will be required to provide (a) the original dated sales slip, (b) your name, (c) your address, (d) a description of the problem, and (e) the serial number of the product.
- Take or ship the product, in the original container packaging, to an authorized ViewSonic® service center.
- Round trip transportation costs for in-warranty products will be paid by ViewSonic®.

Limitation of implied warranties:

There are no warranties, express or implied, which extend beyond the description contained herein including the implied warranty of merchantability and fitness for a particular purpose.

Exclusion of damages:

ViewSonic®’s liability is limited to the cost of repair or replacement of the product. ViewSonic® shall not be liable for:

- Damage to other property caused by any defects in the product, damages based upon inconvenience, loss of use of the product, loss of time, loss of profits, loss of business opportunity, loss of goodwill, interference with business relationships, or other commercial loss, even if advised of the possibility of such damages.
- Any other damages, whether incidental, consequential or otherwise.
- Any claim against the customer by any other party.
- Repair or attempted repair by anyone not authorized by ViewSonic®.

Contact Information for Sales & Authorized Service (Centro Autorizado de Servicio) within Mexico:	
Name, address, of manufacturer and importers: México, Av. de la Palma #8 Piso 2 Despacho 203, Corporativo Interpalmas, Col. San Fernando Huixquilucan, Estado de México Tel: (55) 3605-1099 http://www.viewsonic.com/la/soporte/index.htm	
NÚMERO GRATIS DE ASISTENCIA TÉCNICA PARA TODO MÉXICO: 001.866.823.2004	
Hermosillo: Distribuciones y Servicios Computacionales SA de CV. Calle Juárez 284 local 2 Col. Bugambillas C.P: 83140 Tel: 01-66-22-14-9005 E-Mail: disc2@hmo.megared.net.mx	Villahermosa: Compumantenimientos Garantizados, S.A. de C.V. AV. GREGORIO MENDEZ #1504 COL, FLORIDA C.P. 86040 Tel: 01 (993) 3 52 00 47 / 3522074 / 3 52 20 09 E-Mail: compumantenimientos@prodigy.net.mx
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