

CN01 Series

Commercial 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. VS20644 | VS20609 | VS20610 | VS20647
P/N: CN4301-1N/1C | CN5501-1N/1C | CN6501-1N/1C | CN7501-1N/1C

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.

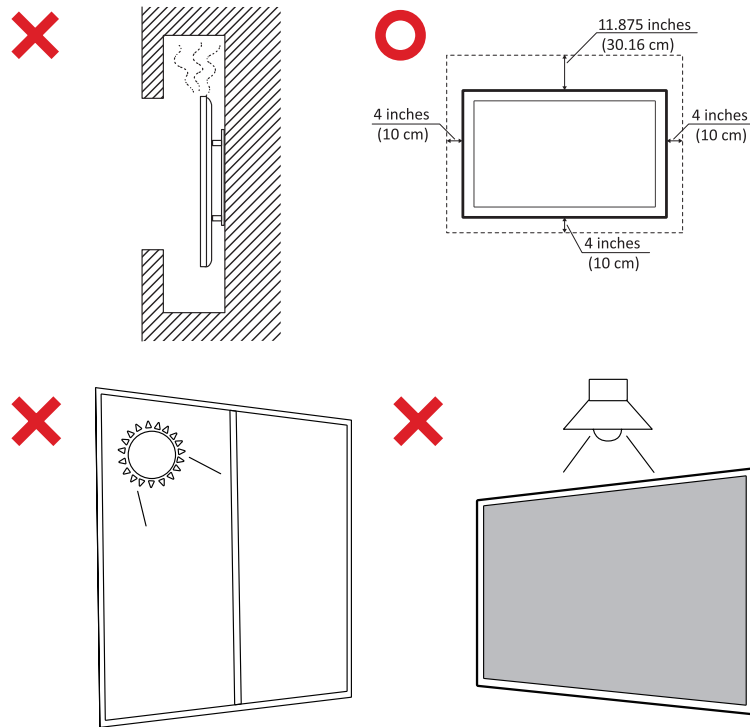
Once again, thank you for choosing ViewSonic®!

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.
- Do not use the device near water. To reduce the risk of fire or electric shock, do not expose the device to moisture.
- Never remove the rear cover. This display contains high-voltage parts. You may be seriously injured if you touch them.
- 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.
- Use a soft, dry cloth to clean the external housing. For more information, refer to the "Maintenance" section.
- 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.
- 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.
- The device is a monitor with an LED backlight intended for general office use.
- 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 place anything on the device that prevents heat dissipation. Also, avoid any direct lighting.



IMPORTANT

To ensure the optimal performance and longevity of your display, it is essential to follow the recommended handling, mounting, and storage procedures. Placing the display in a horizontal position can lead to a range of potential issues, including:

- Excessive stress on the display's structural components, resulting in the formation of cracks or distortions along the edges.
- Uneven weight distribution, which can cause the screen to warp, sustain internal damage, or crack over time.
- Thermal-related damage, as the internal components may not be able to dissipate heat as intended, leading to potential failure or permanent damage.

Furthermore, altering the display's form can also compromise the integrity of its internal components, including the sensitive LCD cells, which can result in a permanent degradation of the display's quality.

To prevent such issues and maintain the display's optimal condition, it is recommended to always mount, handle, transport, and store it in a vertical position. Failure to do so may void the warranty and compromise the display's performance and lifespan.

Note: Any damage resulting from the misuse or improper handling of the display is not covered under warranty

CAUTION:

Immediately unplug your device from the wall outlet and refer servicing to a qualified service personnel under the following conditions:

- When the power supply cord or plug is damaged.
- If liquid has been spilled onto or objects have fallen into the unit.
- If the unit has been exposed to moisture.
- If the unit does not operate normally or has been dropped.

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

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

If the existing device is going to be retained and relocated, the same considerations as above should be applied.

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Introduction

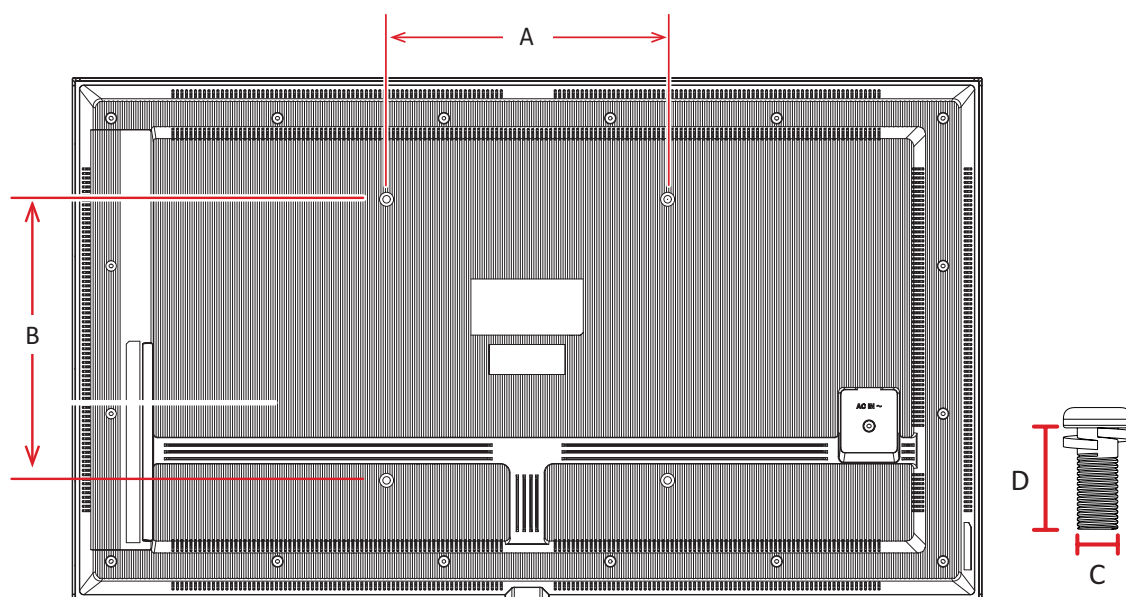
Package Contents

- Commercial Display
- Remote Control
- 2 x Batteries
- Power Cable (2 m)
- Wall Mount
- 4 x Mounting Screws (M6 x 18 mm)
- Quick Start Guide
- Compliance Statement

Note: The cables included in your package may vary depending on your country. Please contact your local reseller for more information.

Wall Mounting Specifications (VESA)

Note: Please follow the instructions in the wall mount installation guide to install your wall mount. If attaching to other building materials, please contact your local reseller.

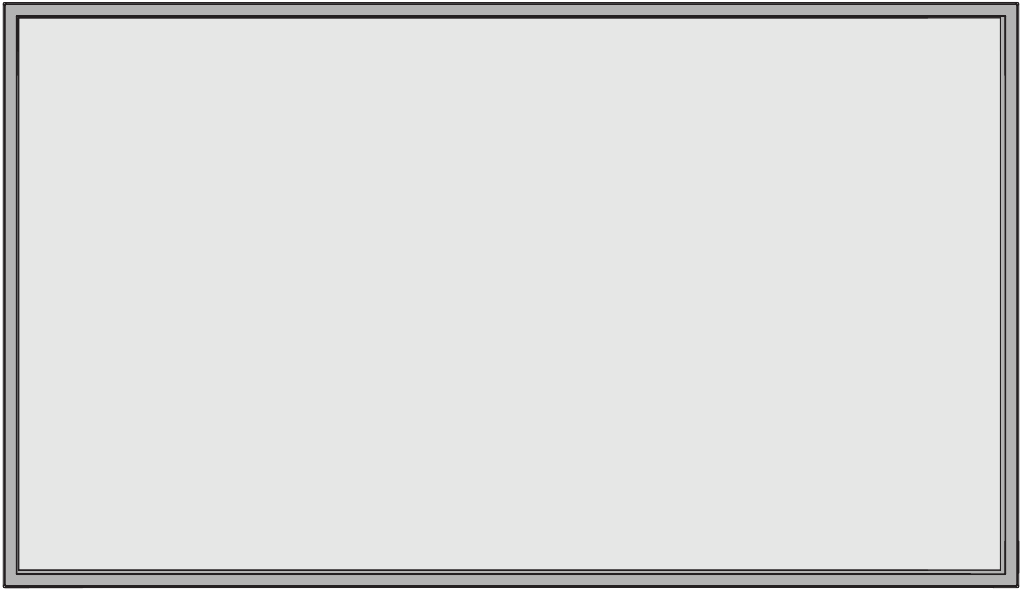


Model	VESA Spec. (A x B)	Standard Screw (C x D)	Screw Quantity
CN4301-1N/1C	300 x 300 mm	M6 x 18 mm	4
CN5501-1N/1C	400 x 400 mm	M6 x 18 mm	4
CN6501-1N/1C	500 x 500 mm	M6 x 18 mm	4
CN7501-1N/1C	500 x 500 mm	M6 x 18 mm	4

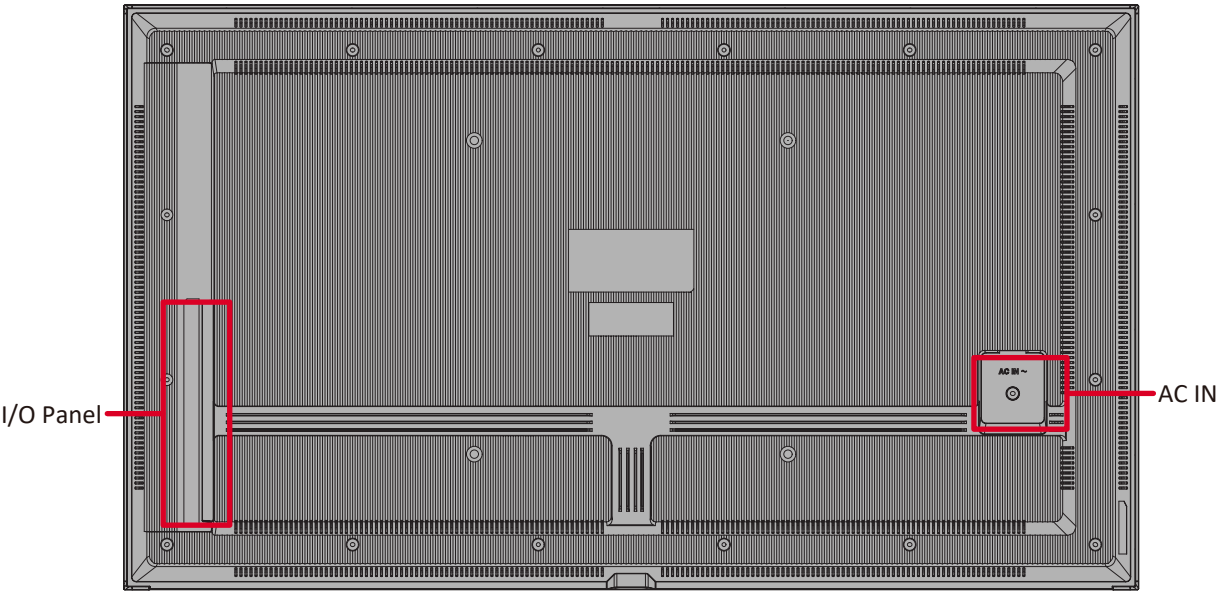
Note: Do not use screws that are longer than the standard dimension, as they may cause damage to the inside of the display.

Product Overview

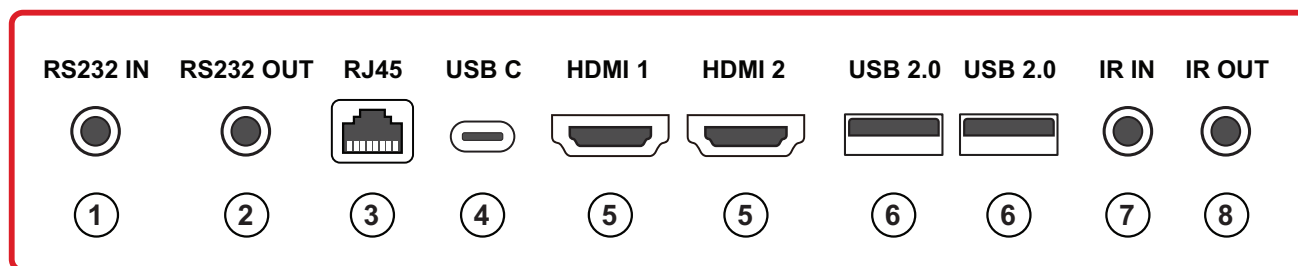
Front View



Rear Panel



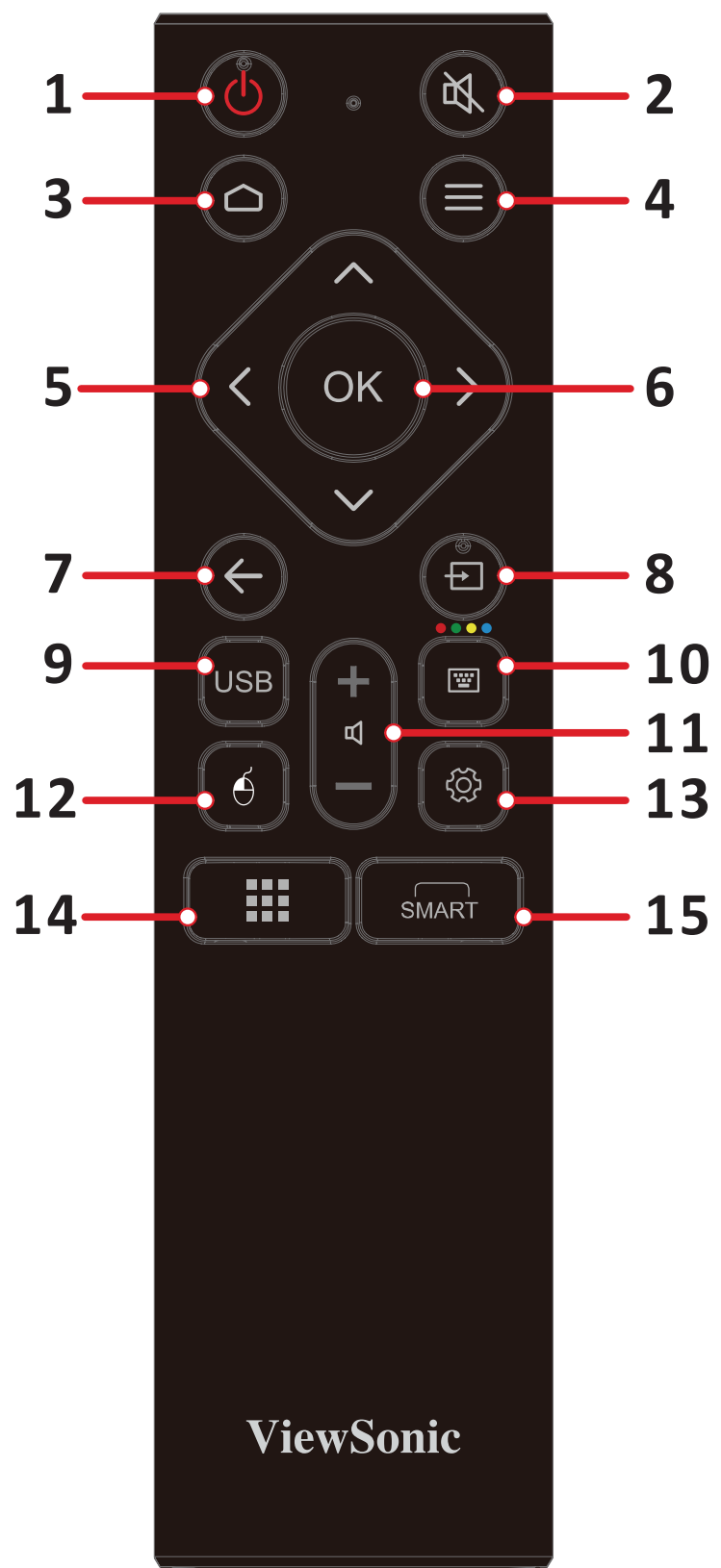
I/O Panel



Number	Port	Description
1	RS232 IN	Serial interface used for mutual transfer of data between devices.
2	RS232 OUT	Daisy chain displays for RS-232 connection.
3	RJ45	Standard RJ45 (10M/100M) internet.
4	USB C	• USB Type C. • DisplayPort v. 1.2. • USB 2.0 standard. • Power delivery (15W, 5V/3A).
5	HDMI 1/HDMI 2	• HDMI input. • Connect to a computer with HDMI output, set-top box, or other video device. • Supports 4K display; HDMI 2.1 (HDCP 2.2).
6	USB 2.0	• USB Type A. • USB 2.0 standard. • Connect USB devices such as hard disks, keyboard, mouse, etc.
7	IR IN	Extend the IR receiver.
8	IR OUT	Daisy chain the IR receiver.

Remote Control

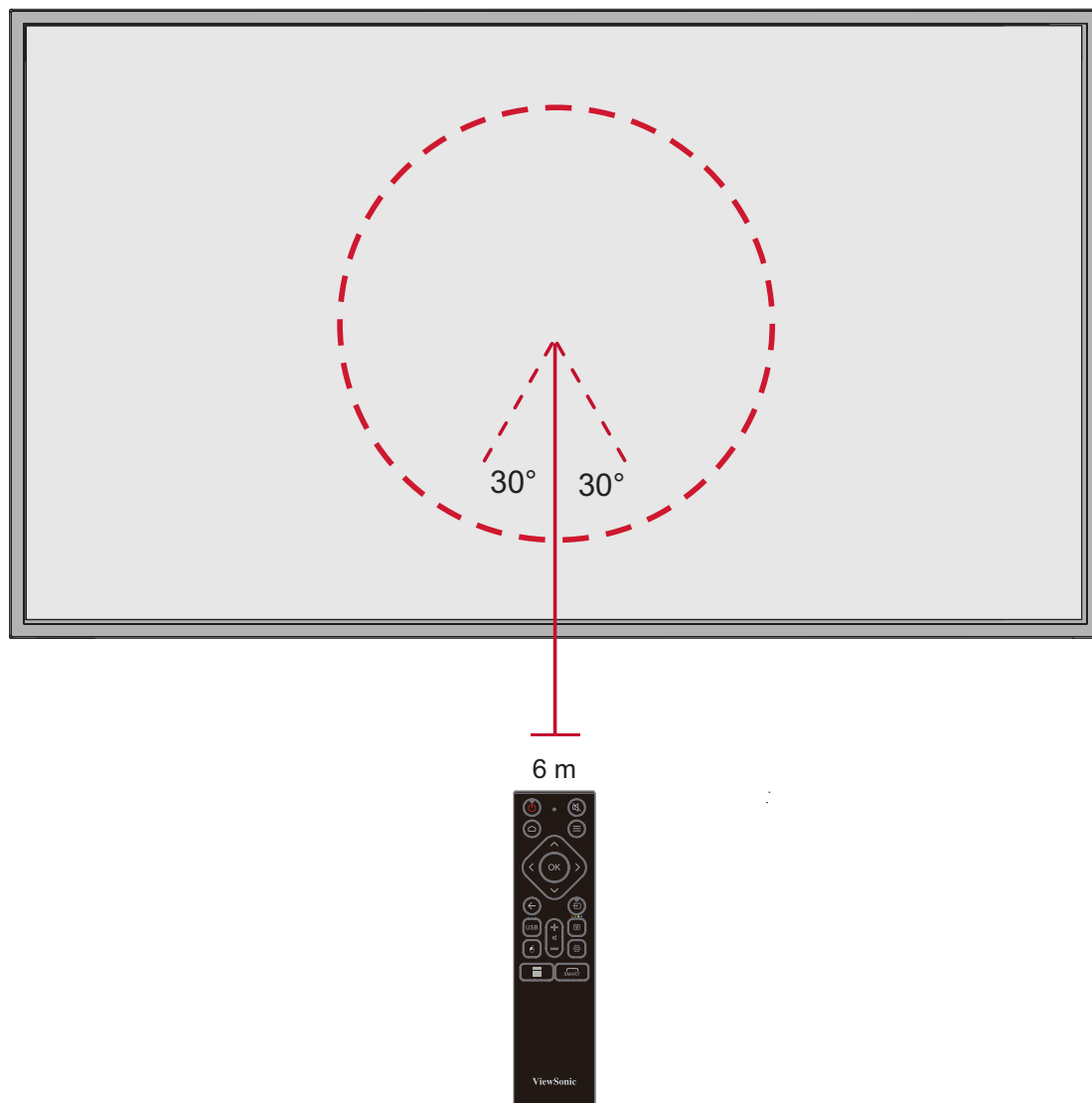
Overview



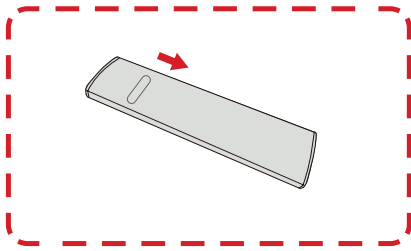
Button			Description
1		Power	Turns the display on or off.
2		Mute	Stops audio output.
3		Home	Returns to the Home screen.
4		Menu	Opens the system menu.
5		Navigation	Selects an item or adjusts the value in the menu.
6	OK	OK	Confirms the selected item.
7		Return	Returns to the previous screen.
8		Source	Opens the input source menu.
9	USB	USB	Opens the file manager.
10			<i>This button is unsupported.</i>
11		Volume	Increases or decreases the volume level.
12			<i>This button is unsupported.</i>
13		Settings	Opens the On-Screen Display Menu.
14			Opens the Application list.
15			Locks the buttons after being pressed and held for three seconds.

Receiver Range

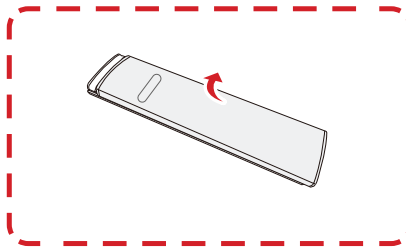
For optimal performance, aim the remote control directly at the IR receiver. The maximum operation range is 6 m (19.69 ft) with a horizontal and vertical field of view of ± 30 degrees.



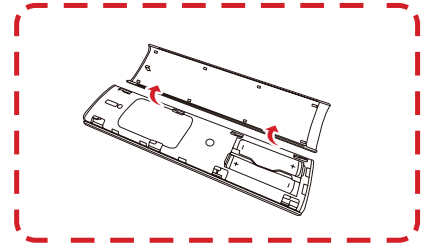
Installing the Batteries



(1)



(2)



(3)

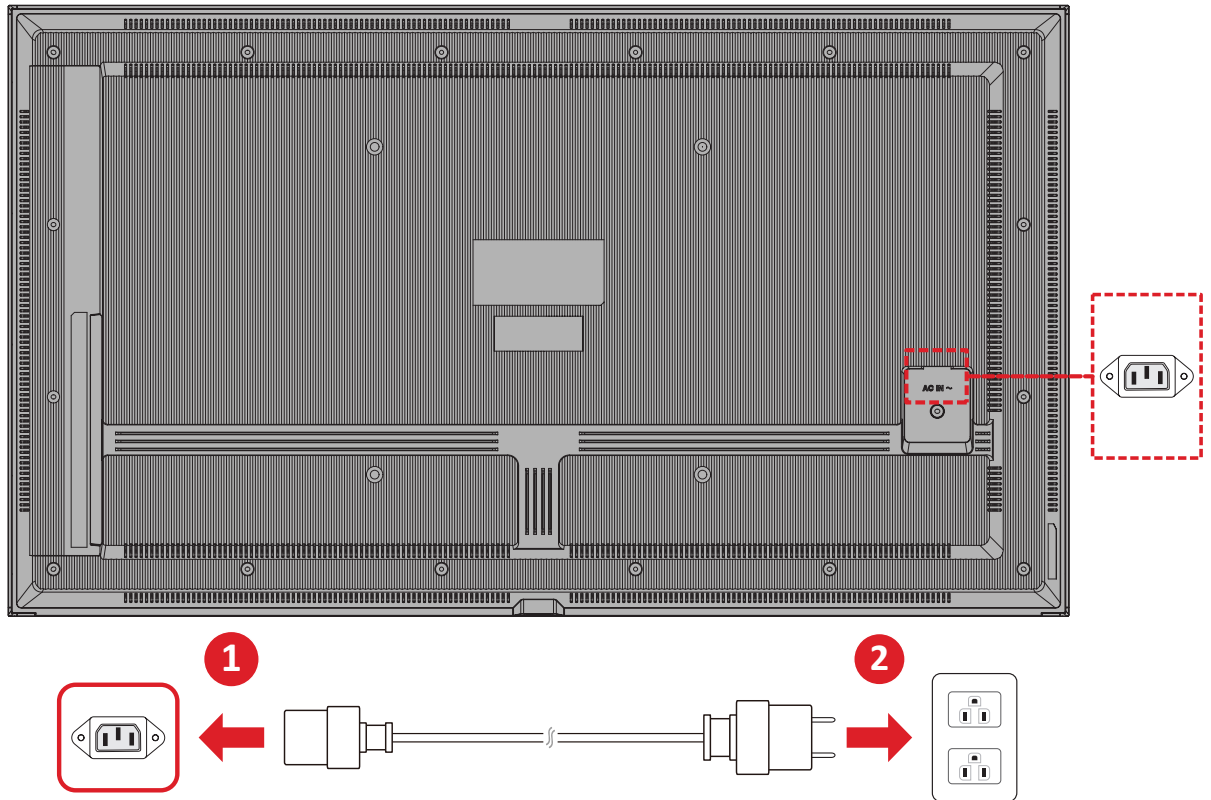
1. Open the battery compartment by removing the battery cover.
2. Insert two AAA batteries, ensuring correct polarity.
3. Replace the battery cover until it clicks into place.

Note:

- Store the remote control and batteries away from heat and humidity.
- Use only recommended battery types.
- Remove batteries when not in use for extended periods.
- Dispose of old batteries following the manufacturer's instructions and local regulations.

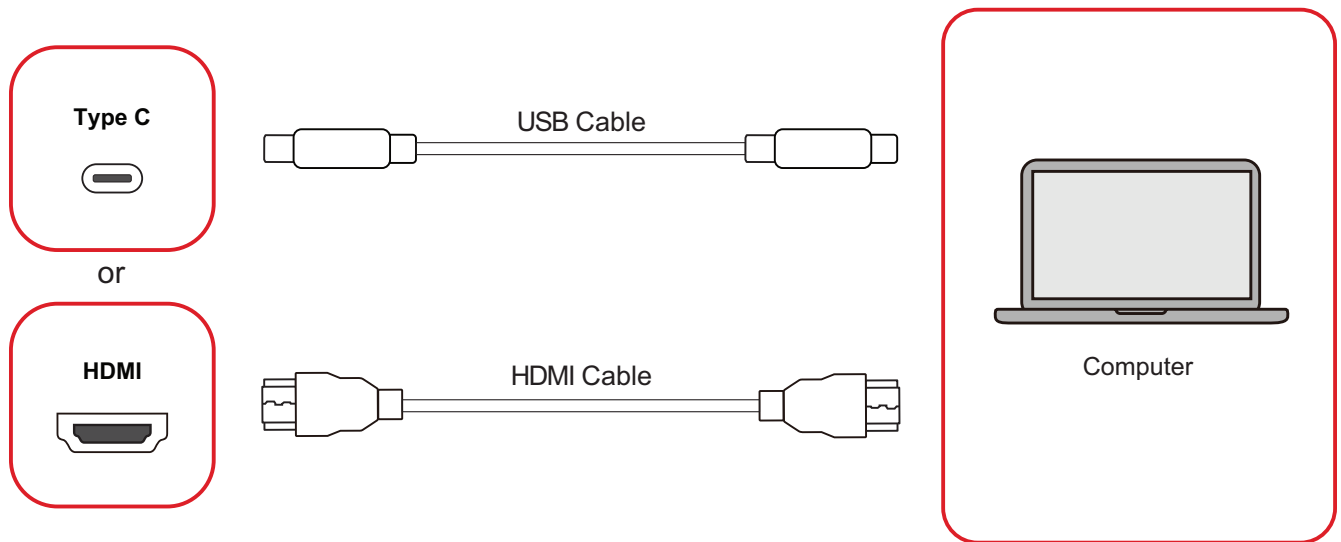
Making Connections

Connecting to Power



1. Connect the power cord to the **AC IN** jack at the rear of the display.
2. Plug the power cord plug into a power outlet.

Connecting to External Devices



Your external device(s) can be connected in any of the following configurations:

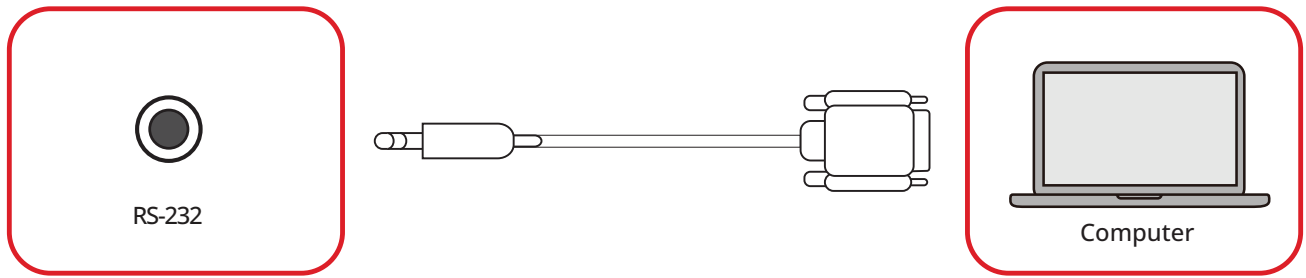
USB Type C Connection

Connect a USB Type C cable from your external device to the **Type C** port on the display.

HDMI Connection

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

RS-232 Connection

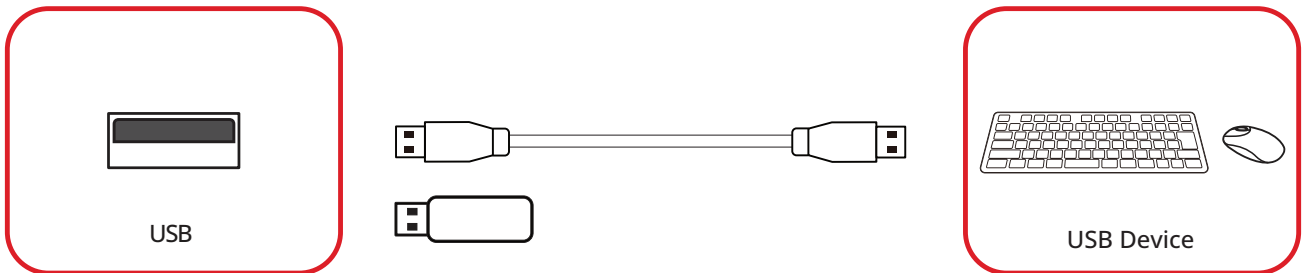


When you use a RS-232 serial cable to connect the display to an external computer or control system, certain functions can be controlled remotely such as: power on and off, volume adjustment, input select, brightness, and more.

USB Connection

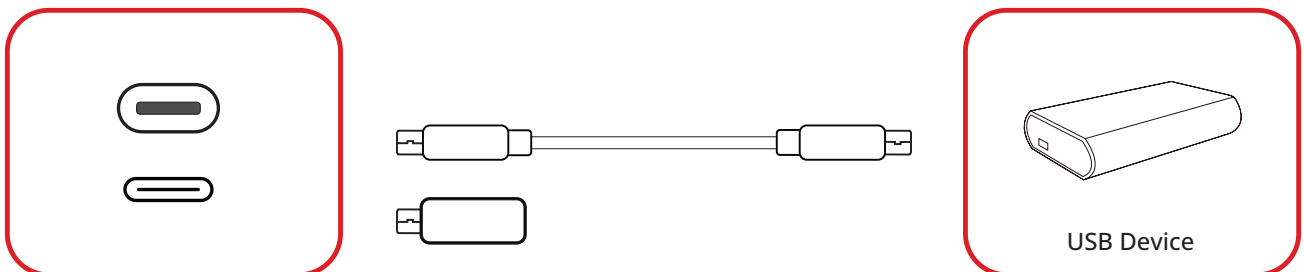
Just like any PC, it is easy to connect various USB devices and other peripherals to the display.

USB Type A



Plug the USB device or storage drive into a USB Type A port of the display.

USB Type C



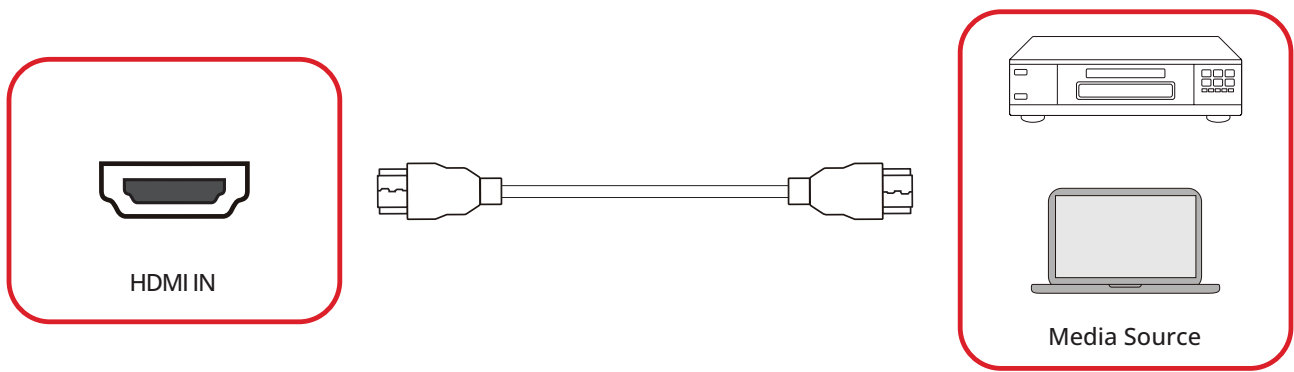
Plug the USB device or storage drive into a USB Type C port of the display.

Network Connection



To connect to a local network, connect an Ethernet cable to your network, then connect the other end to a **LAN** port of the display.

Media Connection

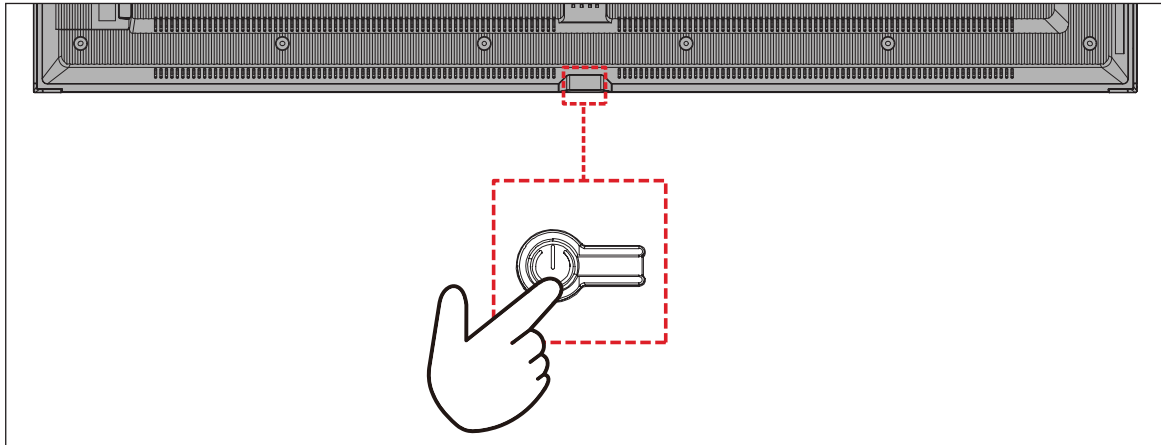


To connect to a media source:

1. Connect an HDMI cable to an **HDMI** port on the display and peripheral device.
2. Press the **Source** button on the remote control and switch to the HDMI input source.

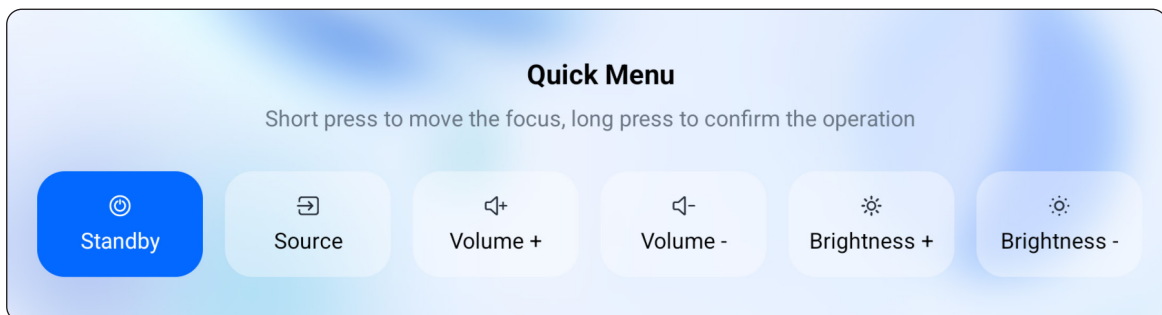
Using the Display

Turning the Display On/Off



1. Make sure the power cord is connected and plugged into a power outlet.
2. Press the **Power** button to turn on the display.
3. To turn the display off, press and hold the **Power** button.

Quick Menu

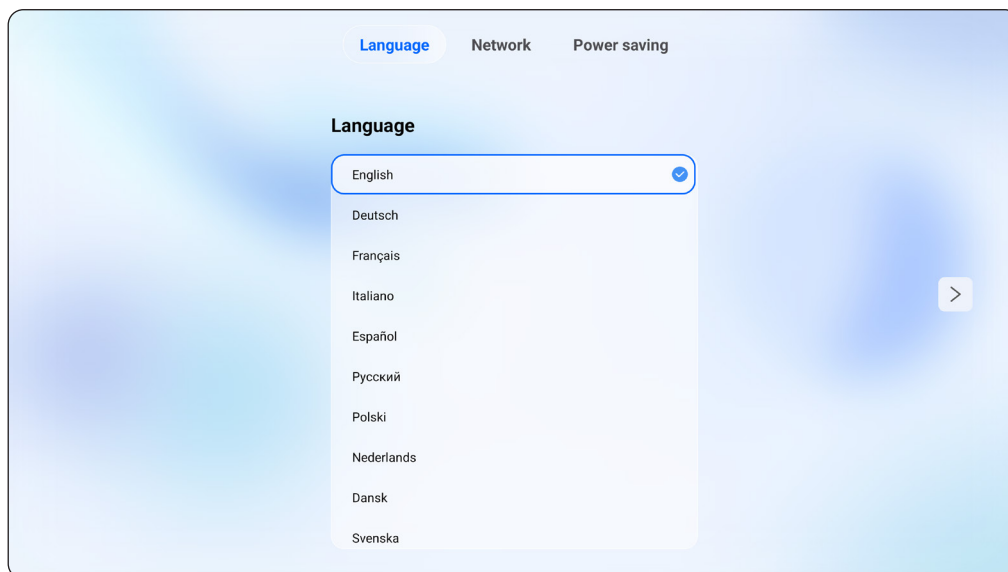


1. Press the **Power** button once to open the Quick Menu.
2. Press the **Power** button once to move the selection.
3. Press and hold the **Power** button for 3–5 seconds to confirm the operation.

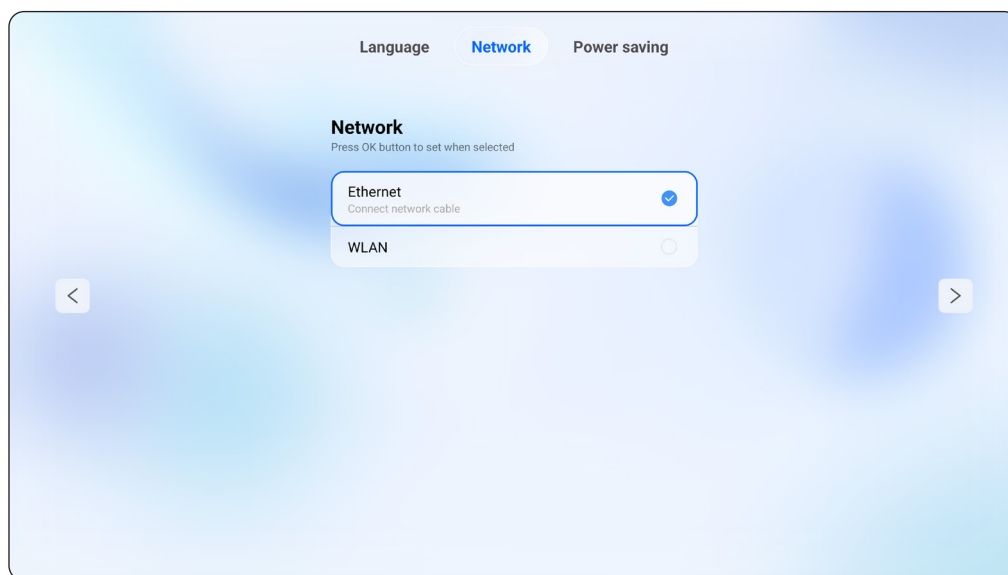
Initial Launch Setup

When you first turn on your display, an initial setup wizard will launch.

1. Select your language.



2. Select your network.



3. Setup your power saving settings.

Language

Network

Power saving

Power saving

Setting up your energy saving strategy

Auto power off

180mins

WOL

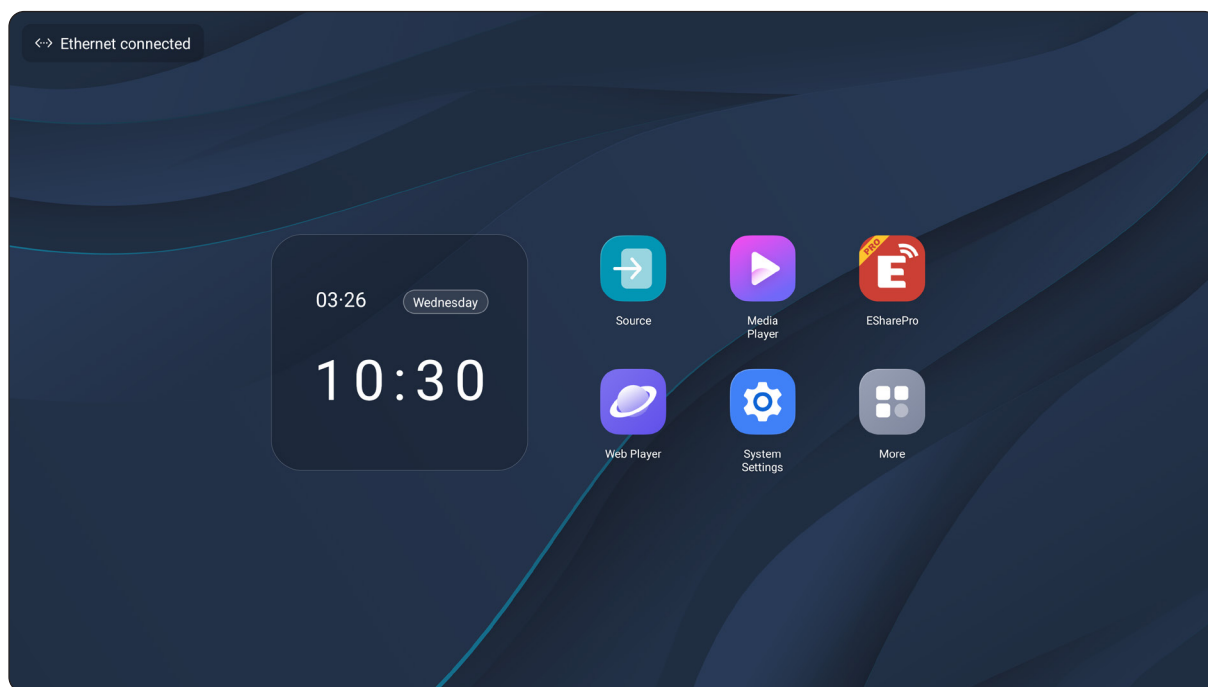
off

Source input wake up on

off

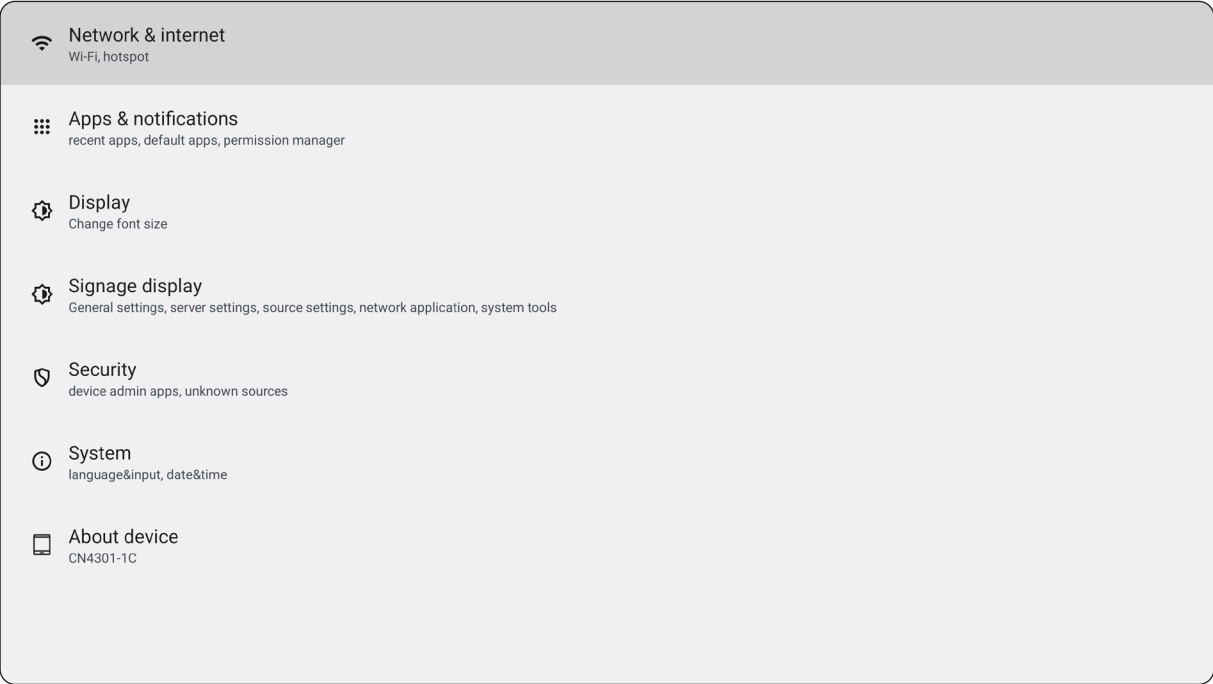
Home Screen

From the **Home Screen** all the installed applications can be accessed.



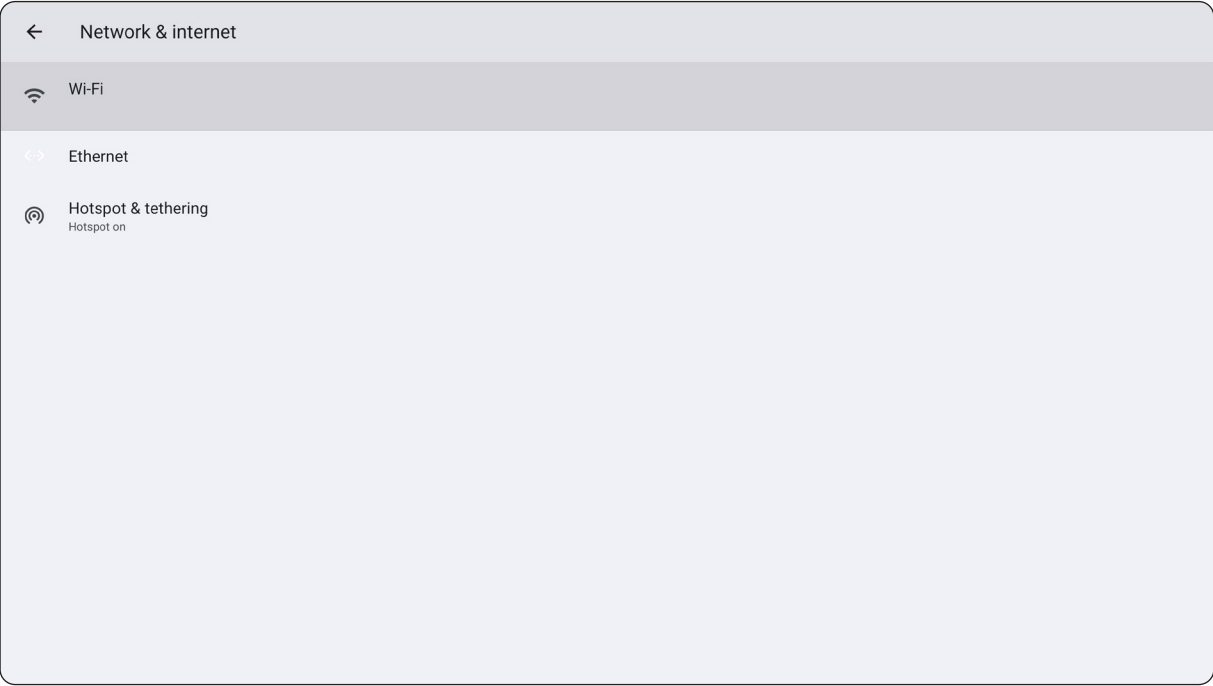
Note: Press the **Home** button on the remote control at any time to return to the **Home Screen**.

Android Settings



Setting	Description
Network & internet	Set up and manage Wi-Fi, Ethernet, and hotspot connections.
Apps & notifications	View installed applications, set defaults, and manage permissions.
Display	Adjust display-related settings.
Signage display	Set up and manage general, server, source, network and system settings.
Security	Set up and manage the display’s security settings.
System	Adjust the language, date, and time.
About device	View information about the display.

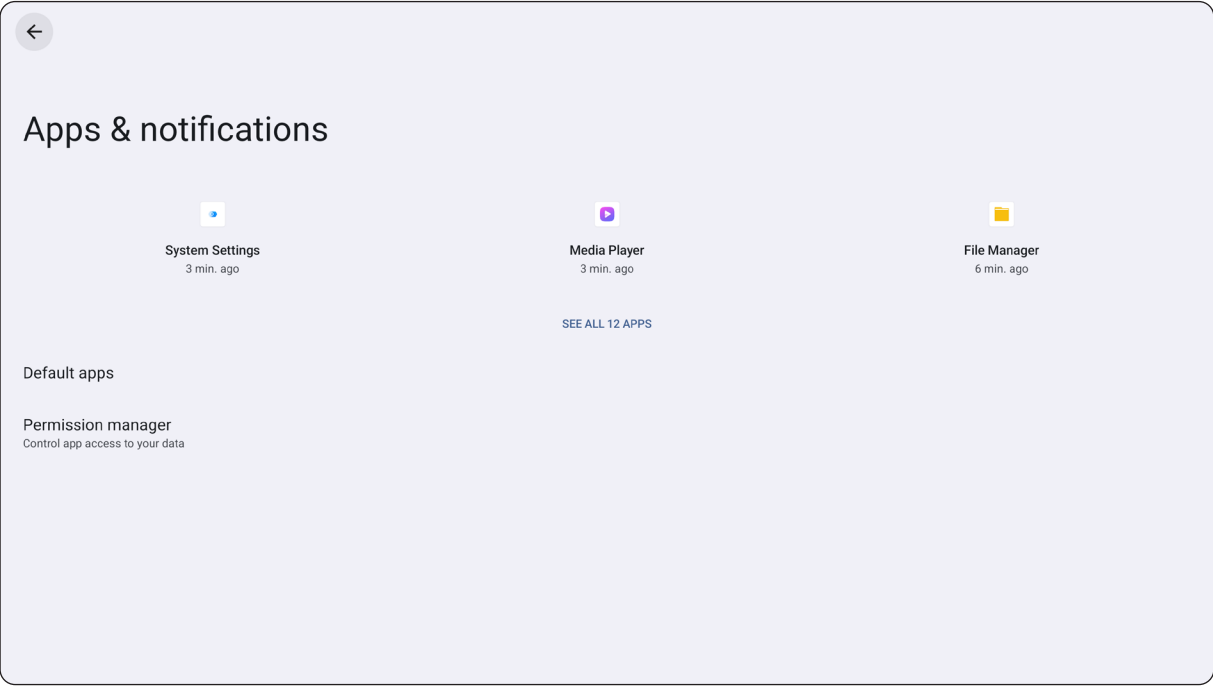
Network & Internet



Setting	Description
Wi-Fi	Set up and manage wireless network connections.
Ethernet	Set up and manage wired network connections.

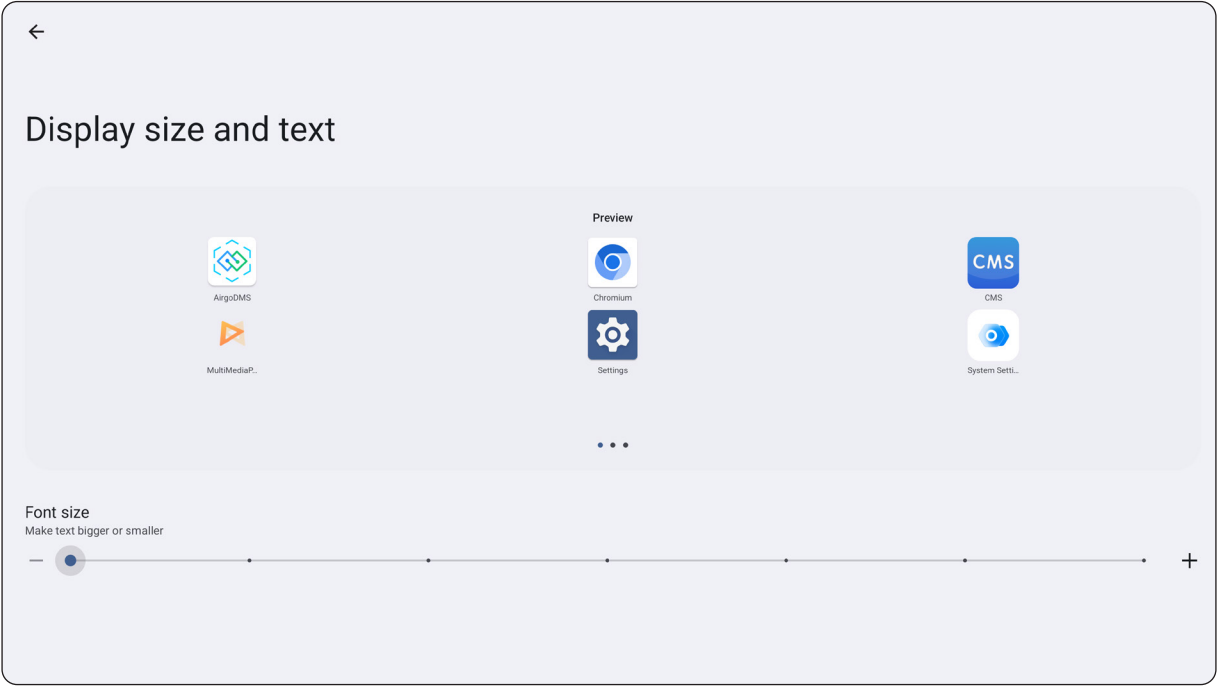
Setting	Description
Hotspot & tethering	Set up and manage hotspot connections. ← Wi-Fi hotspot Use Wi-Fi hotspot ON Hotspot name CH4301-1C ⓘ Security WPA2-Personal Hotspot password ***** Turn off hotspot automatically When no devices are connected OFF Extend compatibility Helps other devices find this hotspot. Reduces hotspot connection speed. ON

Apps & Notifications



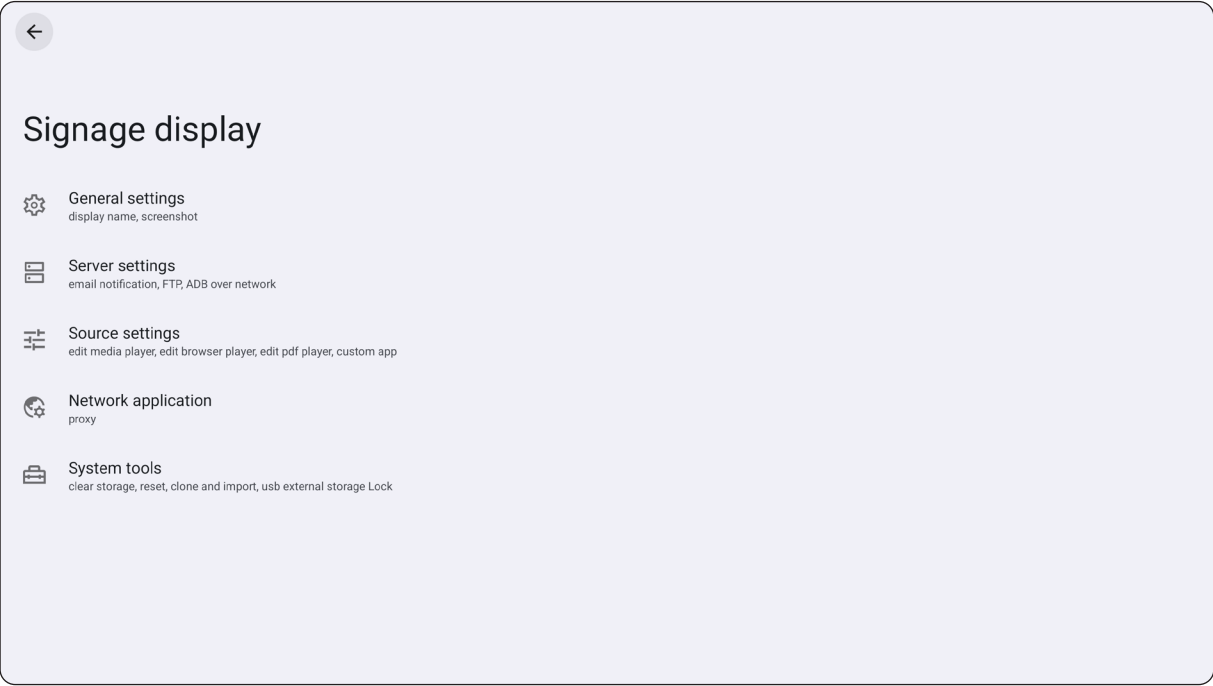
Setting	Description
See All Apps	View all installed applications.
Default apps	Set default applications for certain uses (e.g., default web browser application).
Permission manager	Control application access to the display.

Display



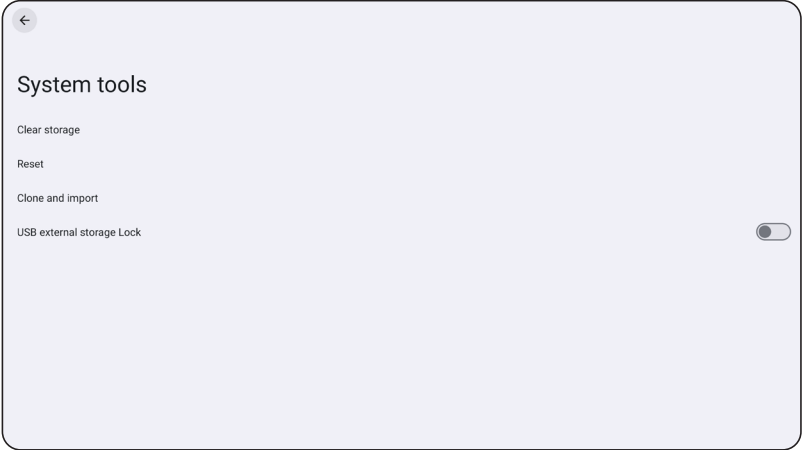
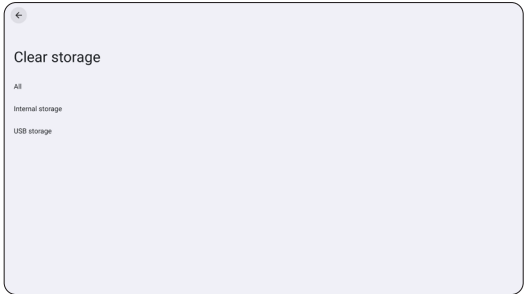
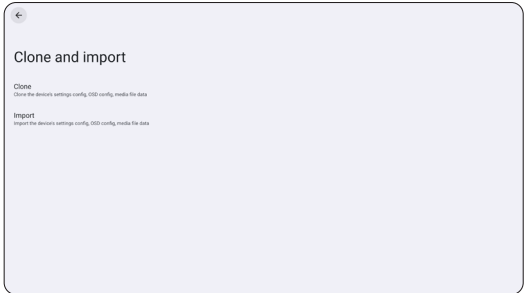
Setting	Description
Font size	Adjust the size of the text.

Signage Display

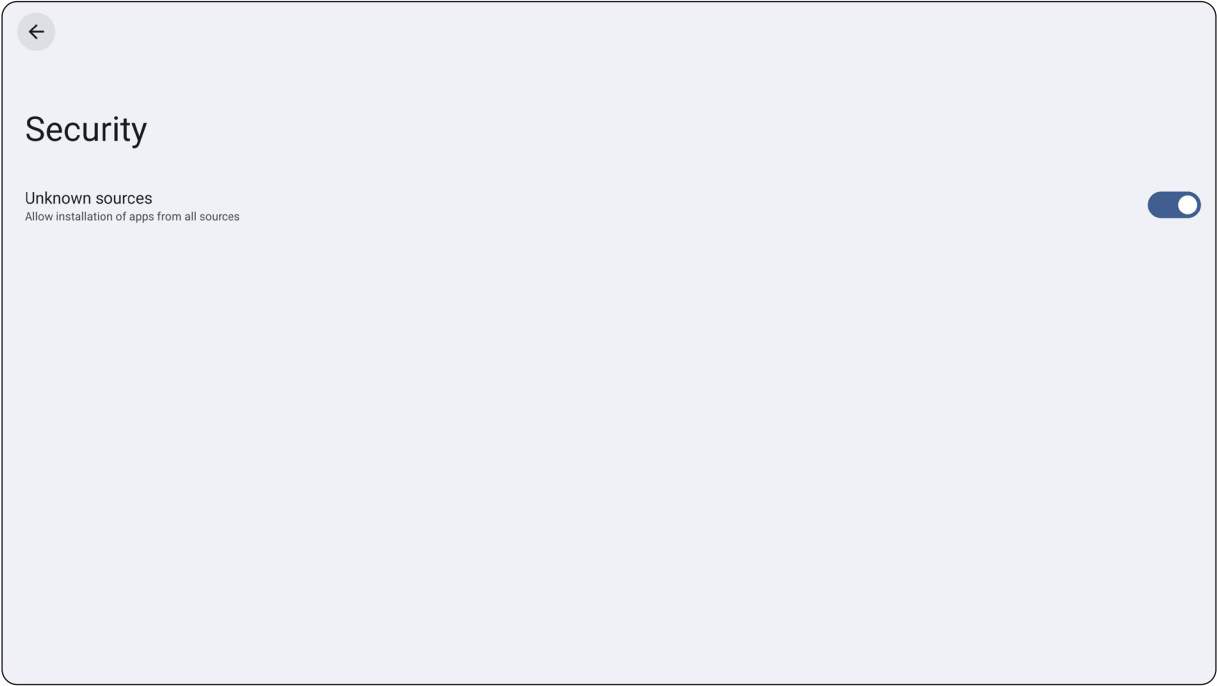


Setting	Description
General settings	Manage screenshot settings. 

Setting	Description
Server settings	Set up Email notifications and FTP.
Source settings	Edit the media, browser, and PDF player. Also setup the storage path and a custom .apk application for a custom input source.
Network application	Set up a network proxy.

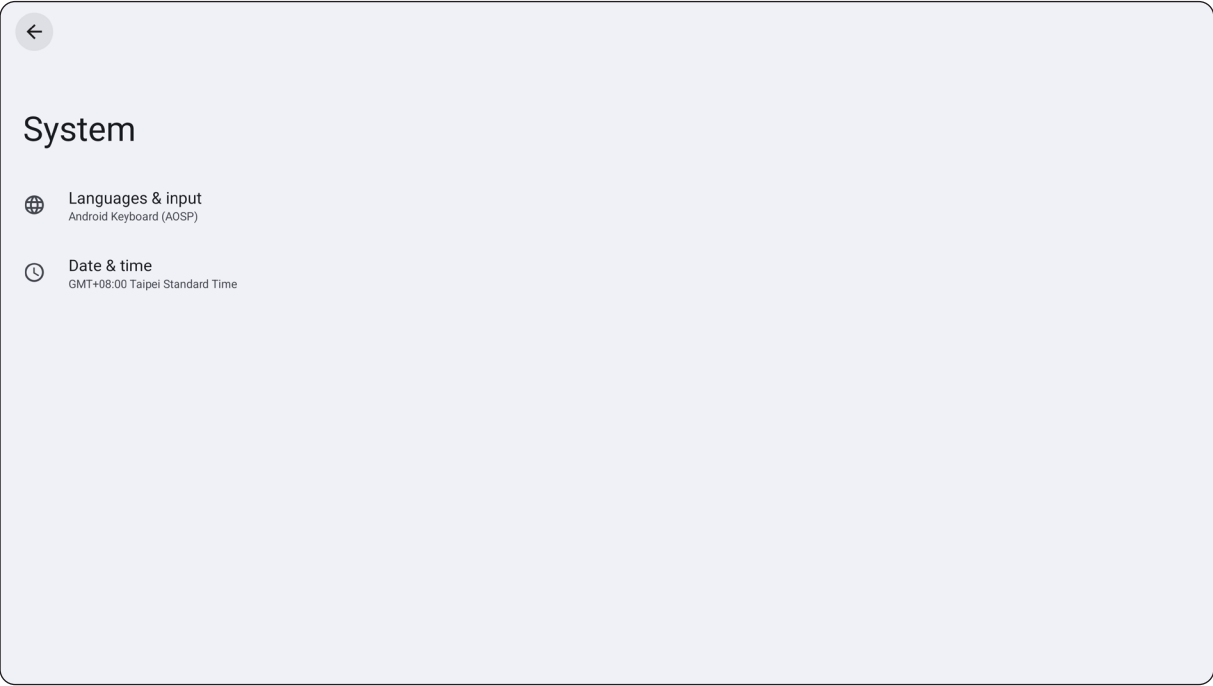
Setting	Description	
System tools		
	Clear Storage	Clear all, internal, or USB storage. 
	Reset	Return to factory default settings.
	Clone and import	Copy or import the display's settings, On-Screen Display configuration, and media files. 
	USB external storage Lock	Allow or disallow external USB storage device support.

Security



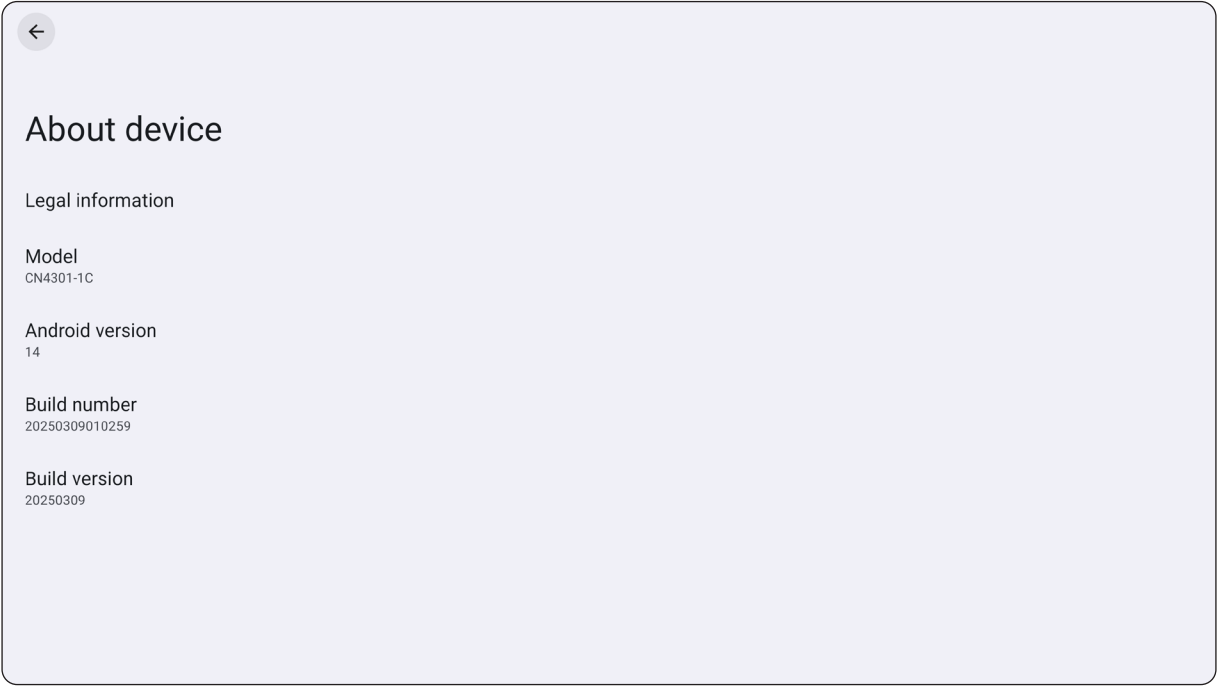
Setting	Description
Unknown sources	Allow the installation of applications from all sources.

System



Setting	Description
Languages & input	Choose the preferred language and input method.
Date & time	Set the date and time.

About Device



Setting	Description
Legal information	View relevant legal information.
Model	View the model name of the display.
Android version	View the installed version of Android.
Build number	View the version number of the current software.
Build version	View the build version of the current software.

Android Settings Menu Tree

Main Menu	Sub-menu	Menu Option		
Network & internet	Wi-Fi	Wi-Fi list		
		Add network	Network name	
			Security	
			Advanced options	
		Wi-Fi preferences	Turn on Wi-Fi automatically	
			Notify for public networks	
			Advanced options	
	Ethernet	IP address		
		Netmask		
		Gateway		
		DNS1		
		DNS2		
		Ethernet IP mode	DHCP	
		Static		
	Hotspot	Wi-Fi hotspot	Hotspot name	
			Security	
			Hotspot password	
			AP band	
			Turn off hotspot automatically	
		Ethernet tethering		
Apps & notifications	See All Apps			
	Default apps	Browser app		
		Home app		
		Opening links		
	Permission manager	App permissions		

Main Menu	Sub-menu	Menu Option		
Display	Font size	Small		
		Default		
		Large		
		Largest		
Signage display	Screenshot	Interval	30 minutes	
			60 minutes	
		Start time	HH:MM	
		End time	HH:MM	
		Repeat	Sunday	
			Monday	
			Tuesday	
			Wednesday	
			Thursday	
			Friday	
			Saturday	
		Save to		
		Purge screenshots	Every Day	
			Every Week	
		Send screenshots via email		
	Server setting	Email notification	SMTP	Settings
			Manager Email	Settings
			Test	Send test email
		FTP	FTP	Account
				Password
				Storage path
				Port
		ADB over network		

Main Menu	Sub-menu	Menu Option		
Signage display	Source setting	Edit Media player		
		Edit PDF player		
		Edit Browser		
		Storage path	Internal storage	
			USB storage	
		Custom app	Select app	
		Custom source name		
	Network application	Proxy	Proxy settings	Proxy hostname
				Proxy port
				Type
			Authentication	Authentication
				Username
				Password
	System tools	Clear storage	All	
			Internal storage	
			USB storage	
		Reset	Factory Reset	
		Clone and import	Import	Internal storage
				External storage
			Clone	Clone source
				Content
				Target location
				Clone
	USB external storage Lock			
Security	Unknown sources			

Main Menu	Sub-menu	Menu Option		
System	Language & input	list		
		On-screen keyboard	list	
			Manage on-screen keyboards	
		Physical keyboard		
	Date & time	Time zone	Region	
			Time zone	
About device	Legal information	Third-party licenses		
		System webview licenses		
	Model	Model		
		Serial number		
		Hardware version		
	Android version	Android version		
		Android security update		
		Kernel version		
		Build number		
	Build number			
	Build version			

On-Screen Display Menu

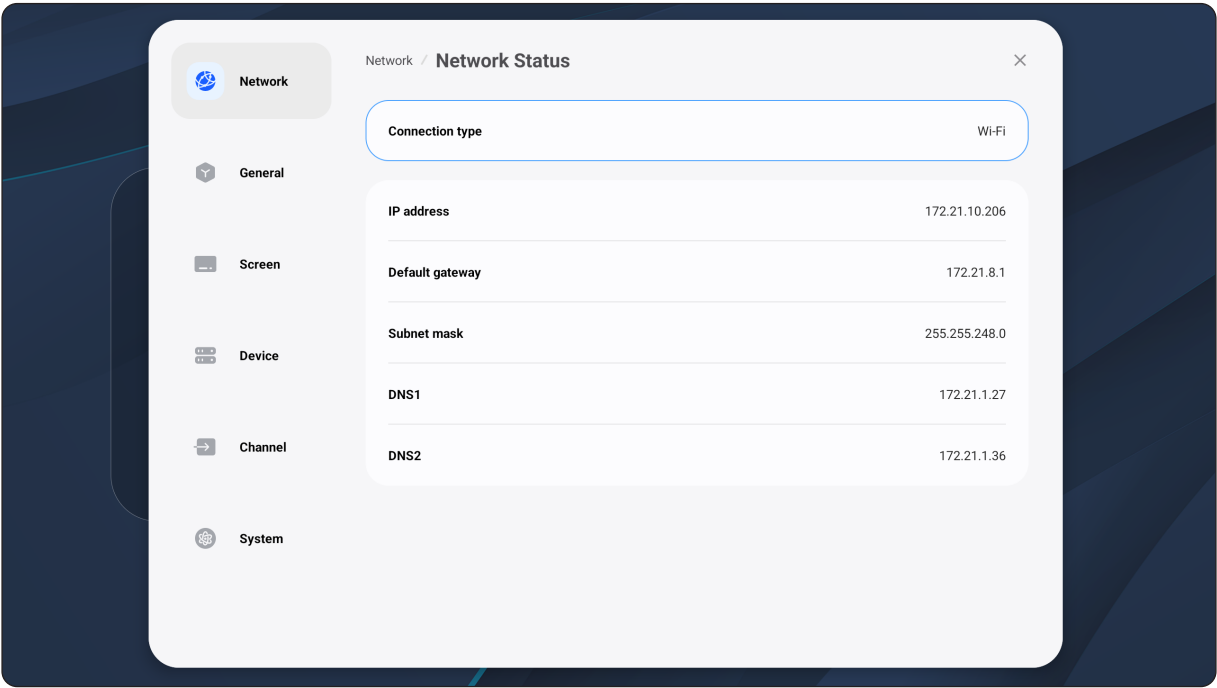
Access network, general, screen, device, channel, and system settings.

Navigating the OSD Menu using the Remote Control



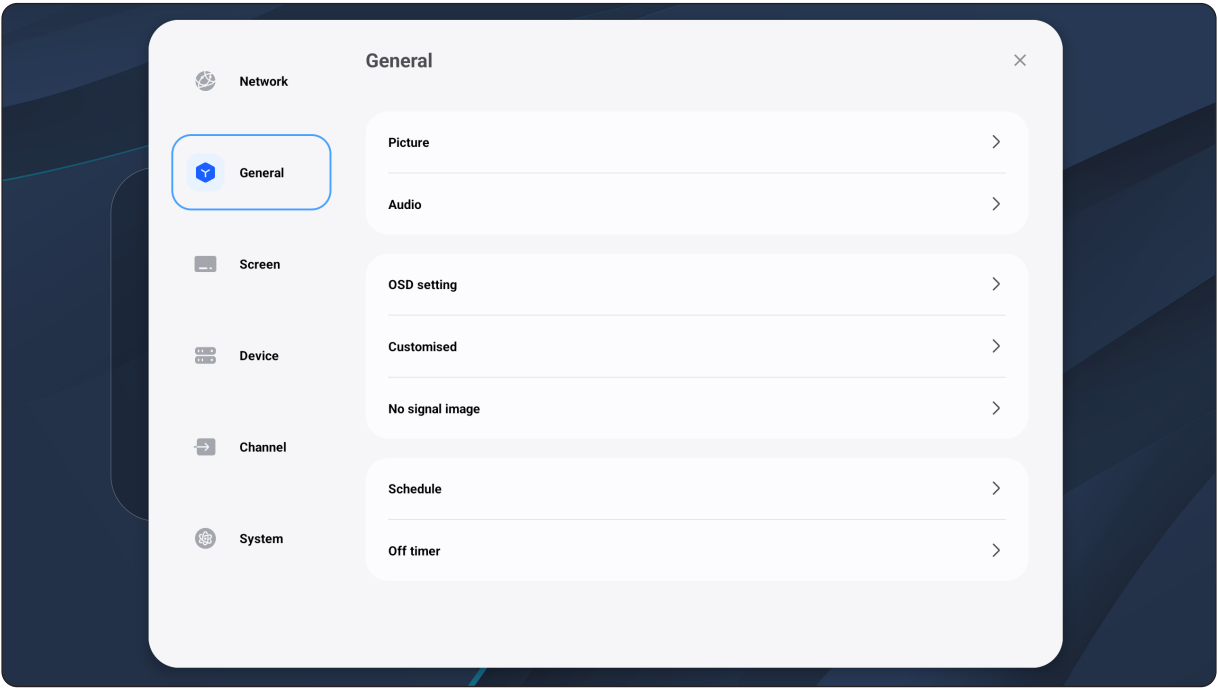
1. On the remote control, press the **Settings** button to display the On-Screen Display Menu.
2. Press the **Navigation** ($\uparrow/\downarrow/\leftarrow/\rightarrow$) buttons to select menu items and adjust values.
3. Press the **Back** button to go back to the previous menu.
4. Press the **Settings** button again to exit.

Network



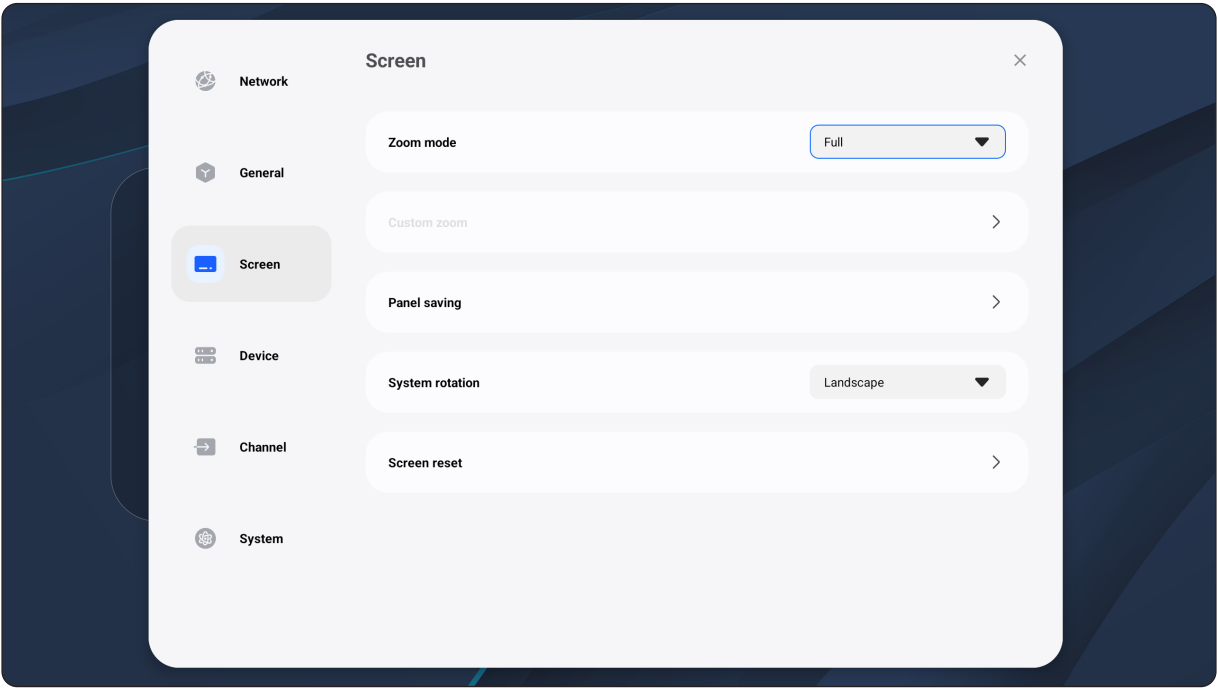
Setting	Description
Network Status	View the current network information.
Wi-Fi	Set and adjust various wireless network settings.
Ethernet	Set and adjust various wired network settings.
Hotspot	Set and adjust various hotspot settings.

General



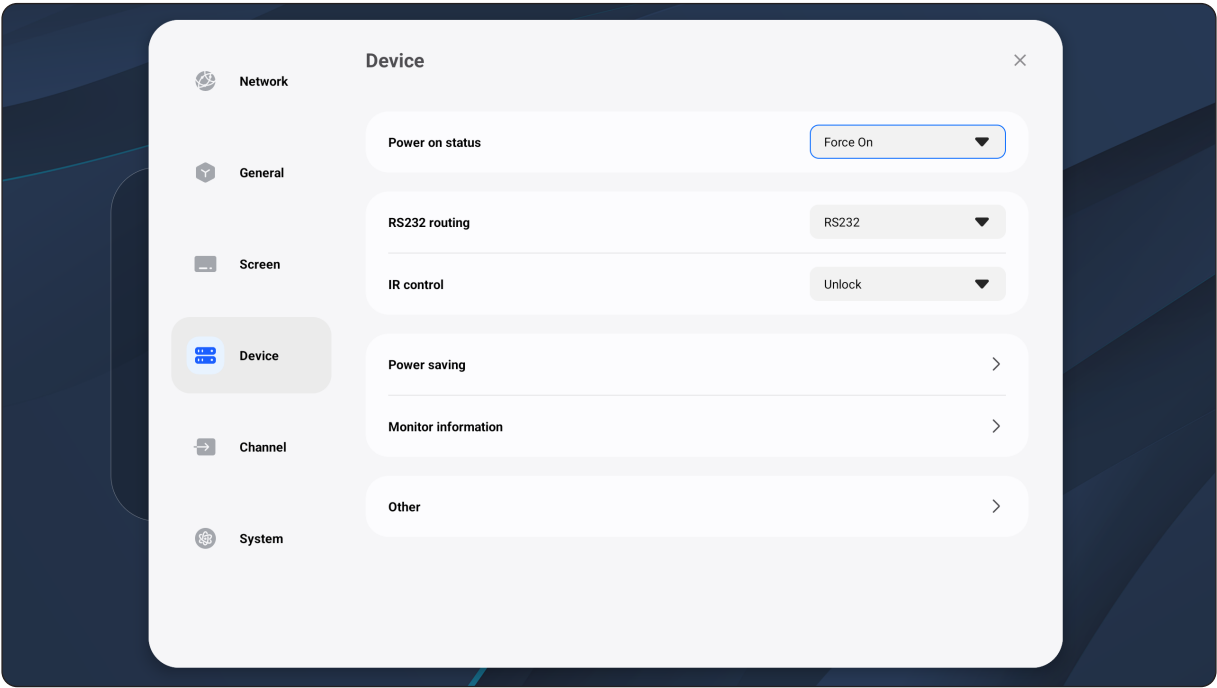
Setting	Description
Picture	Set and adjust various picture-related settings (e.g., brightness, contrast, sharpness, etc.).
Audio	Set and adjust various audio-related settings (e.g., balance, treble, bass, etc.).
OSD settings	Set and adjust various settings, (e.g., position, timeout, transparency, etc.), for the On-Screen Display Menu.
Customised	Set up a custom boot logo, animation, and wallpaper.
No Signal Image	Select an image to show on the display when there is no input source detected.
Schedule	Set up different time intervals for the display to be active.
Off timer	Set the auto power off time.

Screen



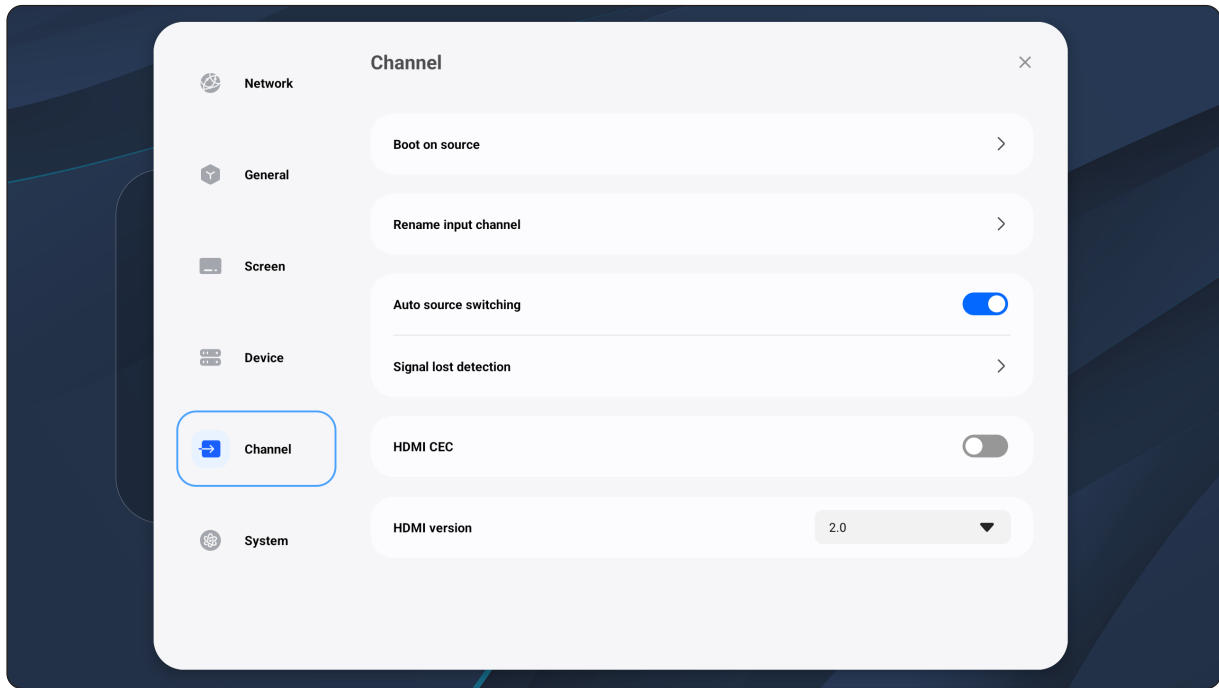
Setting	Description
Zoom mode	Select a predefined zoom setting.
Custom zoom	Set up a customized zoom setting.
Panel saving	Reduce the risk of image burn-in when turned on.
System rotation	Select the screen orientation. Choose from landscape and portrait.
Screen reset	Reset the Screen settings to their default values.

Device



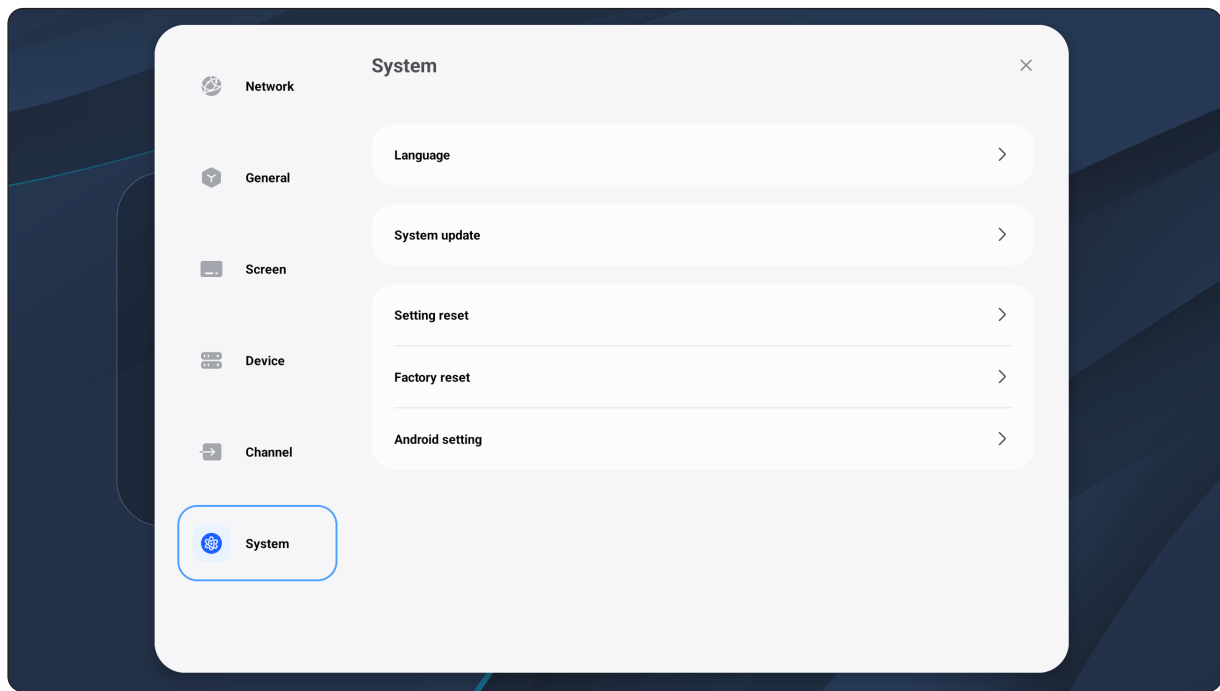
Setting	Description
Power on status	Select the display status for the next time the power cord is connected to a power outlet. Choose from Power Off, Force On, and Last Status.
RS232 routing	Select the routing method for RS-232.
IR control	Lock or unlock IR control.
Power saving	Turn on or off Wake-on-LAN (WoL) and set source input wake up and auto power off preferences.
Monitor information	Show the Model Name, SN, Operation hours and SW version.
Other	Turn on or off the power led indicator and assign a monitor ID to remote control the display.

Channel



Setting	Description
Boot on source	Select the input source after boot up.
Rename input channel	Change the input source channel name.
Auto source switching	Let the display detect and display available input sources automatically.
Signal lost detection	Automatically change the input source when no input source is detected.
HDMI CEC	Enable or disable CEC (Consumer Electronics Control). CEC synchronizes power on/off operation via HDMI connection. That is, if a device that also supports CEC is connected to the HDMI input of the display, when the display's power is turned off, the power of the connected device will also be turned off automatically. When the power of the connected device is turned on, the display's power will be turned on automatically.
HDMI version	Select the HDMI version.

System



Setting	Description
Language	Select the On-Screen Display menu's language.
System update	Check for system updates
Setting reset	Reset the settings to their default values.
Factory reset	Reset the display to factory default settings.
Android setting	Configure basic Network, Device, and System settings.

On-Screen Display Menu Tree

Main Menu	Sub-menu	Menu Option	
Network	Network Status		
	Wi-Fi	Wi-Fi List	
		Connect Wi-Fi	
		Disconnect Wi-Fi	
		Refresh Wi-Fi List	
		Forget Wi-Fi	
		Set up automatic/ manual proxies	
	Ethernet	Acquire IP address	Obtaining IP address
			Manually enter the IP address, default gateway, subnet mask, DNS1, and DNS2
	Hotspot	Hotspot Name	
		Encrymode	
		Hotspot password	
		Devices connected	
		Blacklist	
		AP frequency band	
General	Picture	Brightness	
		Contrast	
		Sharpness	
		Black level	
		Tint	
		Color	
		Noise reduction	
		Gamma selection	

Main Menu	Sub-menu	Menu Option	
General	Picture	Color temperature	
		Color control	User-R (0~255)/1 USER1
			User-G (0~255)/1 USER1
			User-B (0~255)/1 USER1
		Picture reset	
	Audio	Balance	
		Treble	
		Bass	
		Volume	
		Audio out (line out)	
		Maximum volume	
		Minimum volume	
		Mute	
		Speaker setting	
		Audio reset	
	OSD setting	OSD timeout	
		Timeout	
		OSD H position	
		OSD V position	
		OSD transparency	
		Information OSD	
		Numerical selection	
	Customised	Logo and animation	
		Wallpaper	
	No Signal Image	Image	
		Office meeting guide	Title
			Room
			Date & Time
			Duration
			Text color
			Show current time

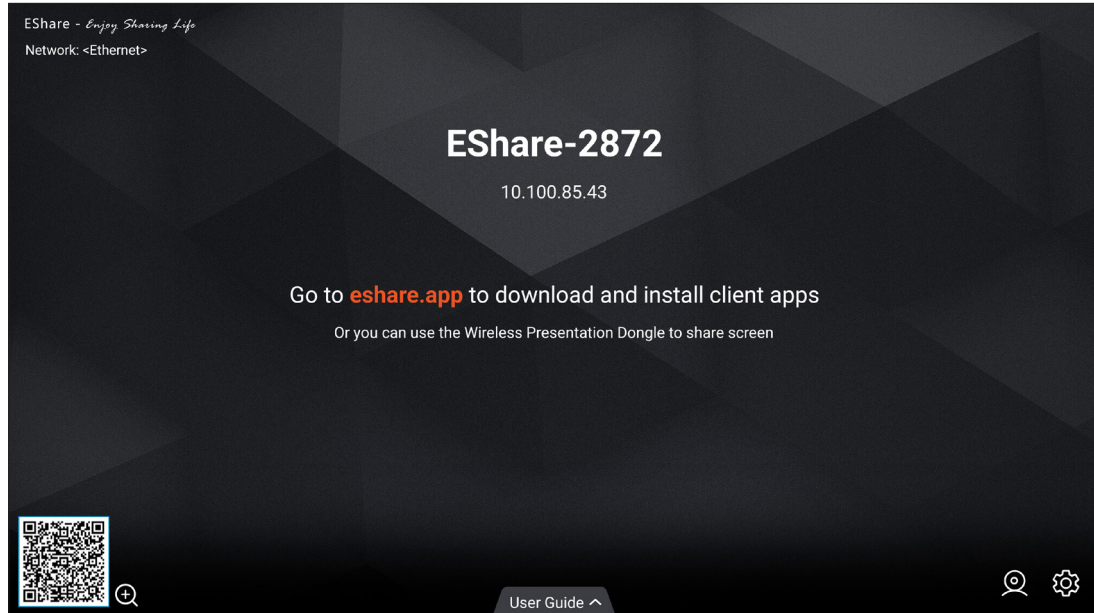
Main Menu	Sub-menu	Menu Option	
General	Schedule	Schedule list	
		Start time	
		End time	
		Input	
		Playlist	
		Days of the week	
		Only execute for one week	
		Enable/Disable	
	Off timer	Time selection	
Screen	Zoom mode		
	Custom zoom	Zoom	(0~100)/1
		H Zoom	(0~100)/1
		V Zoom	(0~100)/1
		H position	(0~100)/1
		V position	(0~100)/1
	Panel saving	Brightness	
	System rotation	Landscape	
		Portrait	
	Screen reset		
Device	Power on status		
	RS232 routing		
	IR control		
	Power saving	WOL	
		Source input wake up	
		Auto power off	Time selection
	Monitor information		
	Other	Monitor ID	
		Power LED light	

Main Menu	Sub-menu	Menu Option	
Channel	Boot on source	Last input	Input
			Playlist
	Rename input channel	HDMI 1	
		HDMI 2	
		USB C	
	Auto source switching		
	Signal lost detection	Switch when signal lost	Signal lost
		Source ranking	
	HDMI CEC		
	HDMI version		
System	Language		
	System update	OTA	
		Local update	
	Setting reset		
	Factory reset		
	Android setting		

Pre-installed Applications and Settings

Eshare

Eshare will allow the display to receive laptop screens (Windows/Mac/Chrome) and mobile (iOS/Android) users' screens, photos, videos, and annotations.



RS-232 Protocol

This document describes the hardware interface spec and software protocols of the RS-232 interface communication between the display and a PC or other control units with RS-232 protocol.

Abbreviations and Acronyms

Abbreviation/Acronym	Description
PBS	Professional Business Solutions
RC	Remote Control
ACK	Acknowledge
NACK	Not Acknowledge
NAV	Not Available
ID	Identification
0xXX	Hexadecimal notation

Command Packet Format

Physical Specifications

Baud Rate: 9600

Data Bits: 8

Parity: None

Stop Bit: 1

Flow Control: None

Communication Procedure

Control commands can be sent from a host controller via the RS-232 connection. A new command should not be sent until the previous command is acknowledged. However, if a response is not received within 500 milliseconds a retry may be triggered. Every valid command receives an ACK. A command that is valid but not supported in the current implementation will be responded to with a NAV (Not Available). If the command buffer is corrupt (transmission errors) the command will be responded to with a NACK. The display operates according to the received command. If the command is a valid “Get” command, the display responds with the requested info. If the command is a valid “Set” command allowed, the display performs the requested operation.

Note: For LAN control, the port number is 5000.

Command Format

RS-232 packet format

Field Number	Field Name	Description
Byte 1	Header	Header = 0x6F
Byte 2	Monitor ID	Monitor ID Range : 1–255 Signal mode: Display Address range from 1 to 255 Broadcast mode: Display Address is 0 which indicates no ACK or Report is expected.
Byte 3	Category	Category = 0x00 (fixed)
Byte 4	Code0 (Page)	Page = 0x00 (fixed)
Byte 5	Code1 (Function)	
Byte 6	Length	Length has to be calculated in the following way: Length = N + 3
Byte 7	Data Control	Data Control = 0x01 (fixed)
Byte 8–Byte 44	Data[0]–Data[N]	This field can also be empty. If not empty then the range of Data Size, N = 0 to 36.
Last Byte	Checksum	Checksum. Range = 0 to 255 (0xFF). Algorithm: The EXCLUSIVE-OR (XOR) of all bytes in the message except the checksum itself. Checksum = [Header] XOR [Monitor ID] XOR ... DATA[0] ... XOR DATA[N]

Messages - System

Communication Control

This defines the feedback command from monitor to host controller when it receives the display command from the host controller, depending on the commands availability, the command reported back to host controller can be one of the ACK, NACK or NAV.

Note: There is no reply message when the wrong ID address is being used.

Field Number	Field Name	Description
Byte 1	Header	Header = 0x70
Byte 2	Monitor ID	Monitor ID Range : 1–255
Byte 3	Category	Category = 0x00 (fixed)
Byte 4	Code0 (Page)	Page = 0x00 (fixed)
Byte 5	Length	Length = 0x04
Byte 6	Data Control	Data Control = 0x01 (fixed)
Byte 7	Command	0x00(Communication Control)
Byte 8	Status	0x00: Completed Normal response. 0x01: Limit Over The packets were received normally, but the data value was over the upper limit. 0x02: Limit Over The packets were received normally, but the data value was over the lower limit. 0x03: Command canceled The packet is received normally but either the value of data is incorrect or request is not permitted for the current host value. 0x04: Parse Error Received not defined format data or check sum Error.
Byte 9	Checksum	Check Sum The total from Byte 1 to Byte 8 calculated by XOR

Platform and Version Labels, Model Number, FW Version, Build Date

Platform and Version Labels

This command provides the display Software version to the host controller.

Message-Report

Bytes	Bytes Description	Bits	Description
DATA[0]	0xA2 = Platform and Version Label - Report		Request the internal Hardware version.
DATA[1] to DATA[N]	Character[0] to Character[N-1]		36 (0x24) characters maximum. No. of characters, N = 1 to 36 (0x24). The actual size determines the value of the message size byte.

Message-Get (Model Number, FW Version, Build Date)

Bytes	Bytes Description	Bits	Description
DATA[0]	0xA1 = Get Model Number & FW version of device with Date		Request the Model Number and FW version of the device.
DATA[1] to DATA[N]	Codes to request		0x00 = Model Number 0x01 = FW version 0x02 = Build Date

Message-Report (Model Number, FW Version, Build Date)

Bytes	Bytes Description	Bits	Description
DATA[0]	0xA1 = Report - Model Number & FW version of device with Date		Request the Model number, FW version, FW build date.
DATA[1] to DATA[N]	Character[0] to Character[N-1]		36 (0x24) characters maximum. No. of characters, N = 1 to 36 (0x24). The actual size determines the value of the message size byte.

Messages-General

Power State

This command is used to set/get the power state as it is defined as below.

Message-Get

Bytes	Bytes Description	Bits	Description
DATA[0]	0x19 = Power state -Get		Command requests the display to report its current power state.

Example: (Display address 01)

Header	Monitor ID	Category	Code0	Code1	Length	Data Control	Data[0]	Checksum
0x6F	0x01	0x00	0x00	0x00	0x03	0x01	0x19	0xBC

Message-Report

Bytes	Bytes Description	Bits	Description
DATA[0]	0x19 = Power State -Report		Command reports Power state.
DATA[1]	Power State		0x01 = Power Off 0x02 = On

Example: Power State On (Display address 01)

Header	Monitor ID	Category	Code0	Code1	Length	Data Control	Data[0]	Checksum
0x21	0x01	0x00	0x00	0x04	0x01	0x19	0x02	0x3E

Message-Set

Bytes	Bytes Description	Bits	Description
DATA[0]	0x18 = Power state -Set		Command to change the Power state of the display.
DATA[1]	Power State		0x01 = Power Off 0x02 = On

Example: Power State Deep Sleep (Display address 01)

Header	Monitor ID	Category	Code0	Code1	Length	Data Control	Data[0]	Data[1]	Checksum
0x6F	0x01	0x00	0x00	0x00	0x04	0x01	0x18	0x01	0xBB

Lock Functions for IR-Remote Control

The following commands separately are used to lock/unlock the Remote Control and Keypad.

Message-Get

Bytes	Bytes Description	Bits	Description
DATA[0]	0x1D = Get - Lock Status - IR - Remote Control		Get unlock all/lock all/lock all but power/lock all but volume/lock all except power & volume.

Example: (Display address 01)

Header	Monitor ID	Category	Code0	Code1	Length	Data Control	Data[0]	Checksum
0x6F	0x01	0x00	0x00	0x00	0x03	0x01	0x1D	0xB8

Message-Report (IR-Remote Control)

Bytes	Bytes Description	Bits	Description
DATA[0]	0x1D = Report - Lock Status - IR - Remote Control		Report unlock all/lock all/lock all but power/lock all but volume/Primary/Secondary status.
DATA[1]	Status indicator byte for Remote Control		0x01 = Unlock all 0x02 = Lock all 0x03 = Lock all but Power 0x04 = Lock all but Volume 0x07 = Lock all except Power & Volume

Example: Lock Keyboard and unlocked Remote Control (Display address 01)

Header	Monitor ID	Category	Page	Length	Data Control	Data[0]	Data[1]	Checksum
0x21	0x01	0x00	0x00	0x04	0x01	0x1D	0x01	0x39

Message-Set (IR-Remote Control)

Bytes	Bytes Description	Bits	Description
DATA[0]	0x1C = Set - Lock State - IR - Remote Control		Set unlock all/lock all/lock all but power/lock all but volume.
DATA[1]	Status indicator byte for Remote Control		0x01 = Unlock all 0x02 = Lock all 0x03 = Lock all but Power 0x04 = Lock all but Volume 0x07 = Lock all except Power & Volume

Example: Unlock local remote control (Display address 01)

Header	Monitor ID	Category	Code0	Code1	Length	Data Control	Data[0]	Data[1]	Checksum
0x6F	0x01	0x00	0x00	0x00	0x04	0x01	0x1C	0x01	0xBF

Message-Get (Keypad)

Bytes	Bytes Description	Bits	Description
DATA[0]	0x1B = Get - Keypad Lock Status		Set unlock all/lock all/lock all but power/lock all but volume.

Example: (Display address 01)

Header	Monitor ID	Category	Code0	Code1	Length	Data Control	Data[0]	Checksum
0x6F	0x01	0x00	0x00	0x00	0x03	0x01	0x1B	0xBE

Message-Report (Keypad)

Bytes	Bytes Description	Bits	Description
DATA[0]	0x1B = Report - Keypad Status		Report unlock all/lock all/lock all but power/lock all but volume.
DATA[1]	Status indicator byte for Keypad		0x01 = Unlock all 0x02 = Lock all 0x03 = Lock all but Power 0x04 = Lock all but Volume 0x07 = Lock all except Power & Volume

Example: Reporting status of Keypad indicating Lock all for (Display address 01)

Header	Monitor ID	Category	Page	Length	Data Control	Data[0]	Data[1]	Checksum
0x21	0x01	0x00	0x00	0x04	0x01	0x1B	0x02	0x3C

Message-Set (Keypad)

Bytes	Bytes Description	Bits	Description
DATA[0]	0x1A = Set - Keypad Lock Status		Report unlock all/lock all/lock all but power/lock all but volume.
DATA[1]	Status indicator byte for Keypad		0x01 = Unlock all 0x02 = Lock all 0x03 = Lock all but Power 0x04 = Lock all but Volume 0x07 = Lock all except Power & Volume

Example: Set Lock all on Keypad for (Display address 01)

Header	Monitor ID	Category	Code0	Code1	Length	Data Control	Data[0]	Data[1]	Checksum
0x6F	0x01	0x00	0x00	0x00	0x04	0x01	0x1A	0x01	0xB9

Power State at Cold Start

Command is used to set the cold start power state, the cold start power state are updated and stored by this command.

Message-Get

Bytes	Bytes Description	Bits	Description
DATA[0]	0xA4 = Power at Cold Start - Get		Get Power state at Cold Start state.

Example: (Display address 01)

Header	Monitor ID	Category	Code0	Code1	Length	Data Control	Data[0]	Checksum
0x6F	0x01	0x00	0x00	0x00	0x03	0x01	0xA4	0x01

Message-Report

Bytes	Bytes Description	Bits	Description
DATA[0]	0xA4 = Power at Cold Start - Report		Report from Power state at Cold Start state.
DATA[1]	Power at Cold Start		0x00 = Power Off 0x01 = Forced On 0x02 = Last Status

Example: Report status of Forced On for power at cold start. (Display address 01)

Header	Monitor ID	Category	Page	Length	Data Control	Data[0]	Data[1]	Checksum
0x21	0x01	0x00	0x00	0x04	0x01	0xA4	0x01	0x80

Message-Set

Bytes	Bytes Description	Bits	Description
DATA[0]	0xA3 = Power at Cold Start - Set		Set Power state at Cold Start.
DATA[1]	Power state at Cold Start		0x00 = Power Off 0x01 = Forced On 0x02 = Last Status

The value is stored and it is applied only when the display starts up from cold start power state the next time:

Power Off: The monitor will be automatically switched to Power Off mode (even if the last status was on) whenever the mains power is turned on or resumed after the power interruption.

Forced On: The monitor will be automatically switched to ON mode whenever the mains power is turned on or resumed after the power interruption.

Last Status: The monitor will be automatically switched to the last status (either Power Off or On) whenever the mains power is turned on or resumed after the power interruption.

Example: Set Power state at cold start to last status (Display address 01)

Header	Monitor ID	Category	Code0	Code1	Length	Data Control	Data[0]	Data[1]	Checksum
0x6F	0x01	0x00	0x00	0x00	0x04	0x01	0xA3	0x02	0x03

Messages - Input Sources

Input Source

This command is used to change the current input source.

Note: Only valid for ports available on the display.

Message-Set

Bytes	Bytes Description	Bits	Description
DATA[0]	0xAC = Input Source - Set		Command requests the display to set the current input source.
DATA[1]	Input Source Type		0x01 = VIDEO 0x02 = S-VIDEO 0x03 = COMPONENT 0x04 = CVI 2 (not applicable) 0x05 = VGA 0x06 = HDMI 2 0x07 = Display Port 2 0x08 = USB 2 0x09 = Card DVI-D 0x0A = Display Port 1 0x0B = Card OPS 0x0C = USB 1 0x0D = HDMI 0x0E = DVI-D 0x0F = HDMI3 0x10 = BROWSER 0x11 = SMARTCMS 0x12 = DMS (Digital Media Server) 0x13 = INTERNAL STORAGE 0x14 = Reserved 0x15 = Reserved 0x16 = Media Player 0x17 = PDF Player 0x18 = Custom 0x19 = HDMI 4
DATA[2]	Reserved		(Reserved, value is 0)
DATA[3]	Reserved		(Reserved, value is 0)
DATA[4]	Reserved		(Reserved, value is 0)

Example: Set on DVI-D (Display address 01)

Header	Monitor ID	Category	Code0	Code1	Length	Data Control	Data[0]	Data[1]
0x6F	0x01	0x00	0x00	0x00	0x07	0x01	0xAC	0x0E
Data[2]	Data[3]	Data[4]	Checksum					
0x00	0x00	0x00	0x03					

Current Source

Message-Get

Bytes	Bytes Description	Bits	Description
DATA[0]	0xAD = Current Source - Get		Command requests the display to report the current input source in use.

Example: (Display address 01)

Header	Monitor ID	Category	Code0	Code1	Length	Data Control	Data[0]	Checksum
0x6F	0x01	0x00	0x00	0x00	0x03	0x01	0xAD	0x08

Message-Report

Bytes	Bytes Description	Bits	Description
DATA[0]	0xAD = Current Source - Report		Command reports to the host controller the current input source in use by the display.
DATA[1]	Input Source Type/Number		0x01 = VIDEO 0x02 = S-VIDEO 0x03 = COMPONENT 0x04 = CVI 2 (not applicable) 0x05 = VGA 0x06 = HDMI 2 0x07 = Display Port 2 0x08 = USB 2 0x09 = Card DVI-D 0x0A = Display Port 1 0x0B= Card OPS 0x0C = USB 1 0x0D= HDMI 0x0E= DVI-D 0x0F = HDMI3 0x10= BROWSER 0x11= SMARTCMS 0x12= DMS (Digital Media Server) 0x13= INTERNAL STORAGE 0x14= Reserved 0x15= Reserved 0x16= Media Player 0x17= PDF Player 0x18= Custom 0x19=HDMI 4
DATA[2]	Reserved		(Reserved, value is 0)
DATA[3]	Reserved		(Reserved, value is 1)
DATA[4]	Reserved		(Reserved, value is 0)

Example: Current Input Source: DVI-D (Display address 01)

Header	Monitor ID	Category	Page	Length	Data Control	Data[0]	Data[1]	Data[2]
0x21	0x01	0x00	0x00	0x07	0x01	0xAD	0x0E	0x00
Data[3]	Data[4]	Checksum						
0x01	0x00	0x84						

Messages - Video

Video Parameters

The following commands are used to get/set video parameters as it is defined below.

Message-Get

Bytes	Bytes Description	Bits	Description
DATA[0]	0x33 = Video Parameters - Get		Command requests the display to report its current video parameters.

Example: (Display address 01)

Header	Monitor ID	Category	Code0	Code1	Length	Data Control	Data[0]	Checksum
0x6F	0x01	0x00	0x00	0x00	0x03	0x01	0x33	0x96

Message-Report

Bytes	Bytes Description	Bits	Description
DATA[0]	0x33 = Video Parameters - Report		Command reports to the host controller the current video parameters of the display.
DATA[1]	Brightness		0 to 100 (%) of the user selectable range of the display.
DATA[2]	Color		0 to 100 (%) of the user selectable range of the display.
DATA[3]	Contrast		0 to 100 (%) of the user selectable range of the display.
DATA[4]	Sharpness		0 to 100 (%) of the user selectable range of the display.
DATA[5]	Tint (Hue)		0 to 100 (%) of the user selectable range of the display.
DATA[6]	Black Level		0 to 100 (%) of the user selectable range of the display.
DATA[7]	Gamma Selection		0x01= Native, 0x02 = S gamma, 0x03 = 2.2, 0x04 = 2.4, 0x05 = D-image(DICOM gamma)

Example: All video parameters are set to 55 % (0x37) and Gamma Curve is set to 2.2 (Display address 01)

Header	Monitor ID	Category	Page	Length	Data Control	Data[0]	Data[1]	Data[2]
0x21	0x01	0x00	0x00	0x0A	0x01	0x33	0x37	0x37
Data[3]	Data[4]	Data[5]	Data[6]	Data[7]	Checksum			
0x37	0x37	0x37	0x37	0x03	0x1B			

Message-Set

Bytes	Bytes Description	Bits	Description
DATA[0]	0x32 = Video Parameters - Set		Command to change the current video parameters.
DATA[1]	Brightness		0 to 100 (%) of the user selectable range of the display.
DATA[2]	Color		0 to 100 (%) of the user selectable range of the display.
DATA[3]	Contrast		0 to 100 (%) of the user selectable range of the display.
DATA[4]	Sharpness		0 to 100 (%) of the user selectable range of the display.
DATA[5]	Tint (Hue)		0 to 100 (%) of the user selectable range of the display.
DATA[6]	Black Level		0 to 100 (%) of the user selectable range of the display.
DATA[7]	Gamma Selection		0x01= Native, 0x02 = S gamma, 0x03 = 2.2, 0x04 = 2.4, 0x05 = D-image(DICOM gamma)

Example: Set all video parameters to 0x37 (55 %) (Display address 01)

Header	Monitor ID	Category	Code0	Code1	Length	Data Control	Data[0]	Data[1]
0x6F	0x01	0x00	0x00	0x00	0x0A	0x01	0x32	0x37
Data[2]	Data[3]	Data[4]	Data[5]	Data[6]	Data[7]	Checksum		
0x37	0x37	0x37	0x37	0x37	0x03	0xAC		

Message-Get

Bytes	Bytes Description	Bits	Description
DATA[0]	0x35 = Color Temperature - Get		Command requests the display to report its current color temperature.

Example: (Display address 01)

Header	Monitor ID	Category	Code0	Code1	Length	Data Control	Data[0]	Checksum
0x6F	0x01	0x00	0x00	0x00	0x03	0x01	0x35	0x90

Message-Report

Bytes	Bytes Description	Bits	Description
DATA[0]	0x35 = Color Temperature - Report		Command reports to the host controller the current color temperature of the display.
DATA[1]	Color temperature		0x00 = User 1 0x01 = Standard 0x02 = Cool 0x03 = Warm

Example: The current color temperature is set to Nature (Display address 01)

Header	Monitor ID	Category	Page	Length	Data Control	Data[0]	Data[1]	Checksum
0x21	0x01	0x00	0x00	0x04	0x01	0x35	0x01	0x10

Message-Set

Bytes	Bytes Description	Bits	Description
DATA[0]	0x34 = Color Temperature - Set		Set color temperature of the display.
DATA[1]	Color temperature		0x00 = User 1 0x01 = Standard 0x02 = Cool 0x03 = Warm

Example: The current color temperature is set to Nature (Display address 01)

Header	Monitor ID	Category	Code0	Code1	Length	Data Control	Data[0]	Data[1]	Checksum
0x6F	0x01	0x00	0x00	0x00	0x04	0x01	0x34	0x01	0x097

Message-Get

Bytes	Bytes Description	Bits	Description
DATA[0]	0x37 = Color Parameters - Report		Command reports to the host controller the current video parameters of the display.
DATA[1]	Red color gain value		0 to 255 of the user selectable range of the display.
DATA[2]	Green color gain value		0 to 255 of the user selectable range of the display.
DATA[3]	Blue color gain value		0 to 255 of the user selectable range of the display.
DATA[4]	Red color offset value		Reply 0
DATA[5]	Green color offset value		Reply 0
DATA[6]	Blue color offset value		Reply 0

Example: All color parameters are set to 255 (0xFF) (Display address 01)

Header	Monitor ID	Category	Page	Length	Data Control	Data[0]	Data[1]	Data[2]
0x21	0x01	0x00	0x00	0x09	0x01	0x37	0xFF	0xFF
Data[3]	Data[4]	Data[5]	Data[6]	Checksum				
0xFF	0xFF	0xFF	0xFF	0x1F				

Message-Set

Bytes	Bytes Description	Bits	Description
DATA[0]	0x36 = Color Parameters - Report		Sets the current video parameters of the display.
DATA[1]	Red color gain value		0 to 255 of the user selectable range of the display.
DATA[2]	Green color gain value		0 to 255 of the user selectable range of the display.
DATA[3]	Blue color gain value		0 to 255 of the user selectable range of the display.
DATA[4]	Red color offset value		0 to 255 of the user selectable range of the display.
DATA[5]	Green color offset value		0 to 255 of the user selectable range of the display.
DATA[6]	Blue color offset value		0 to 255 of the user selectable range of the display.

Example: All color parameters are set to 255 (0xFF) (Display address 01)

Header	Monitor ID	Category	Code0	Code1	Length	Data Control	Data[0]	Data[1]
0x6F	0x01	0x00	0x00	0x00	0x09	0x01	0x36	0xFF
Data[2]	Data[3]	Data[4]	Data[5]	Checksum				
0xFF	0xFF	0xFF	0xFF	0x99				

Picture Format

This command is used to control the display screen format.

Message-Get

Bytes	Bytes Description	Bits	Description
DATA[0]	0x3B = Picture Format - Get		Command requests the display to report its current picture format.

Example: (Display address 01)

Header	Monitor ID	Category	Code0	Code1	Length	Data Control	Data[0]	Checksum
0x6F	0x01	0x00	0x00	0x00	0x03	0x01	0x3B	0x9E

Message-Report

Bytes	Bytes Description	Bits	Description
DATA[0]	0x3B = Picture Format - Report		Command requests the display to report its current picture format.
DATA[1]	Picture format	Bit 7..4	Not used.
		Bit 3..0	Picture Format. 0x00 = Normal (4:3) 0x01 = Custom 0x02 = Real (1:1) 0x03 = Full 0x04 = 21:9

Example: Current Picture Format is Widescreen on Full Display (Display address 01)

Header	Monitor ID	Category	Page	Length	Data Control	Data[0]	Data[1]	Checksum
0x21	0x01	0x00	0x00	0x04	0x01	0x3B	0x03	0x1D

Message-Set

Bytes	Bytes Description	Bits	Description
DATA[0]	0x3A = Picture Format - Report		Command requests the display to set the specified picture format.
DATA[1]	Picture format	Bit 7..4	Not used.
		Bit 3..0	Picture Format. 0x00 = Normal (4:3) 0x01 = Custom 0x02 = Real (1:1) 0x03 = Full 0x04 = 21:9

Example: Set Picture Format to Widescreen on Full Display (Display address 01)

Header	Monitor ID	Category	Code0	Code1	Length	Data Control	Data[0]	Data[1]	Checksum
0x6F	0x01	0x00	0x00	0x00	0x04	0x01	0x3A	0x03	0x9B

Messages - Audio

Volume

This command is used to set/get the Volume as it is defined as below.

Message-Get

Bytes	Bytes Description	Bits	Description
DATA[0]	0x45 = Volume - Get		Command requests the display to report its current Volume level.

The interface to set Software must be such that they also modify the variables representing these current parameters.

To mute the display, send Volume = 0. This command does not overwrite the system mute status of the display.

Example: (Display address 01)

Header	Monitor ID	Category	Code0	Code1	Length	Data Control	Data[0]	Checksum
0x6F	0x01	0x00	0x00	0x00	0x03	0x01	0x45	0xE0

Message-Report

Bytes	Bytes Description	Bits	Description
DATA[0]	0x45 = Volume - Report		Command reports current Volume level.
DATA[1]	Volume.		0 to 100 (%) of the user selectable range of the display.
DATA[2]	Audio Out Volume level		0 to 100 (%) of the user selectable range of the display.

Example: Current Display settings: Volume:77% (0x4D), Audio Out:77%(0x4D)
(Display address 01)

Header	Monitor ID	Category	Page	Length	Data Control	Data[0]	Data[1]	Data[2]	Checksum
0x21	0x01	0x00	0x00	0x05	0x01	0x45	0x4D	0x4D	0x1D

Message-Set

This command can set volume level for speaker & audio out individually.

Bytes	Bytes Description	Bits	Description
DATA[0]	0x44 = Volume - Set		
DATA[1]	Volume.		0 to 100 (%) of the user selectable range of the display.
DATA[2]	Audio Out Volume level		0 to 100 (%) of the user selectable range of the display.

Example: Set the Display Volume to 77% (0x4D) (Display address 01)

Header	Monitor ID	Category	Code0	Code1	Length	Data Control	Data[0]	Data[1]	Data[2]	Checksum
0x6F	0x01	0x00	0x00	0x00	0x05	0x01	0x44	0x4D	0x4D	0xE7

Volume Limits

This command is used to set the volume limit (minimum, maximum and switch on volume).

Message-Set

Bytes	Bytes Description	Bits	Description
DATA[0]	0xB8 = Volume Limits- Set		The 3 values must conform to the rule : Min <= Switch On <= Max
DATA[1]	Minimum Volume		0 to 100 (%) of the user selectable range of the display.
DATA[2]	Maximum Volume		0 to 100 (%) of the user selectable range of the display.
DATA[3]	Switch On Volume		0 to 100 (%) of the user selectable range of the display.

Audio Parameters

This command is used to set/get the audio parameters as it is defined as below.

Message-Get

Bytes	Bytes Description	Bits	Description
DATA[0]	0x43 = Audio Parameters - Get		Command requests the display to report its current audio parameters.

Example: (Display address 01)

Header	Monitor ID	Category	Code0	Code1	Length	Data Control	Data[0]	Checksum
0x6F	0x01	0x00	0x00	0x00	0x03	0x01	0x43	0xE6

Message-Report

Bytes	Bytes Description	Bits	Description
DATA[0]	0x43 = Audio Parameters - Report		Command reports Audio Parameters.
DATA[1]	Treble.		0 to 10 of the user selectable range of the display.
DATA[2]	Bass.		0 to 10 of the user selectable range of the display.

Example: Current Display settings: Treble:5 (0x5) , Bass:10 (0x10) (Display address 01)

Header	Monitor ID	Category	Page	Length	Data Control	Data[0]	Data[1]	Data[2]	Checksum
0x21	0x01	0x00	0x00	0x05	0x01	0x43	0x05	0x10	0x72

Message-Set

Bytes	Bytes Description	Bits	Description
DATA[0]	0x42 = Audio Parameters -Set		Command to change the Audio Parameters of the display.
DATA[1]	Treble.		0 to 10 of the user selectable range of the display.
DATA[2]	Bass.		0 to 10 of the user selectable range of the display.

The interface to set Software must be such that they modify the variables representing these current parameters.

Example: Set the Display to the following: Treble:5 (0x05) , Bass:10 (0x10) (Display address 01)

Header	Monitor ID	Category	Code0	Code1	Length	Data Control	Data[0]	Data[1]	Data[2]	Checksum
0x6F	0x01	0x00	0x00	0x00	0x05	0x01	0x42	0x05	0x10	0xF4

Miscellaneous

Operating Hours

The command is used to record the working hours of the display.

Message-Get

Bytes	Bytes Description	Bits	Description
DATA[0]	0x0F = Misc Info - Get		Command requests the display to report from miscellaneous information parameters.
DATA[1]	Item		0x02 = Operating Hours (All other values are reserved)

Example: (Display address 01)

Header	Monitor ID	Category	Code0	Code1	Length	Data Control	Data[0]	Data[1]	Checksum
0x6F	0x01	0x00	0x00	0x00	0x04	0x01	0x0F	0x02	0xAF

Message-Report

Bytes	Bytes Description	Bits	Description
DATA[0]	0x0F = Misc Info - Report		Command reports current Operating Hours.
DATA[1]	Operating Hours		DATA[1] and DATA[2] form the MSByte and LSByte, respectively, of the 16-bit-wide Operational Hours value.

Example: Current Display Operation Hours counter value (Display address 01)

Header	Monitor ID	Category	Page	Length	Data Control	Data[0]	Data[1]	Data[2]	Checksum
0x21	0x01	0x00	0x00	0x05	0x01	0x0F	0x4D	0x00	0x66

Auto Adjust

This command works for VGA (host controller) video auto adjust.

Note: Models without VGA channel do not support this command.

Message-Set

Bytes	Bytes Description	Bits	Description
DATA[0]	0x70 = Video Alignment - Set		Command requests the display to make auto adjustment on VGA Input source.
DATA[1]	Item		0x40 = Auto Adjust (* All other values are reserved *)
DATA[2]			(Reserved, default 0)

Example: (Display address 01)

Header	Monitor ID	Category	Code0	Code1	Length	Data Control	Data[0]	Data[1]	Data[2]	Checksum
0x6F	0x01	0x00	0x00	0x00	0x05	0x01	0x70	0x40	0x00	0x93

Serial Code

Message-Get

Bytes	Bytes Description	Bits	Description
DATA[0]	0x15 = Serial Code Get		Command requests the display to report its Serial Code Number (Production code) 14 digits.

Example: (Display address 01)

Header	Monitor ID	Category	Code0	Code1	Length	Data Control	Data[0]	Checksum
0x6F	0x01	0x00	0x00	0x00	0x03	0x01	0x15	0xB0

Message-Report

Bytes	Bytes Description	Bits	Description
DATA[0]	0x15 = Serial Code - Report		Command reports Serial Code
DATA[1]	1 st Character		Character acc. ASCII character map (HEX)
DATA[2]	2 nd Character		
DATA[3]	3 rd Character		
DATA[14]	14 th Character		Character acc. ASCII character map (HEX)

Scheduling

Scheduling Parameters

The following commands are used to get/set scheduling parameters as it is defined below.

Message-Get

Bytes	Bytes Description	Bits	Description
DATA[0]	0x5B = Scheduling Parameters - Get		Command requests the display to report its current Scheduling parameters.
DATA[1]	Page		1 to 7 of the scheduling pages.

Example: (Display address 01)

Header	Monitor ID	Category	Code0	Code1	Length	Data Control	Data[0]	Data[1]	Checksum
0x6F	0x01	0x00	0x00	0x00	0x04	0x01	0x5B	0x01	0xF8

Message-Report

Bytes	Bytes Description	Bits	Description
DATA[0]	0x5B = Scheduling Parameters - Report		Command reports to the host controller the current Scheduling parameters of the display.
DATA[1]	Page		0: Page disable 1: Page enable
DATA[2]	Start time hour		0 to 23 of the start time hour 24: NULL
DATA[3]	Start time minute		0 to 59 of the start time minute 60: NULL
DATA[4]	End time hour		0 to 23 of the end time hour 24: NULL
DATA[5]	End time minute		0 to 59 of the end time minute 60: NULL

Bytes	Bytes Description	Bits	Description
DATA[6]	Video source		0 to 100 (%) of the user selectable range of the display. For video source: 0x00 = NULL 0x01 = VIDEO 0x02 = S-VIDEO 0x03 = COMPONENT 0x04 = CVI 2 (not applicable) 0x05 = VGA 0x06 = HDMI 2 0x07 = Display Port 2 0x08 = USB 2 0x09 = Card DVI-D 0x0A = Display Port 0x0B= Card OPS 0x0C = USB 0x0D= HDMI 0x0E= DVI-D 0x0F = HDMI3 0x10= BROWSER 0x11= SMARTCMS 0x12= DMS (Digital Media Server) 0x13= INTERNAL STORAGE 0x14= Reserved 0x15= Reserved 0x16=Media Player 0x17=PDF Player 0x18=Custom
DATA[7]	Working day(s)		To set the scheduling working days. Bit0 = 1: every week Bit1 = Monday Bit2 = Tuesday Bit3 = Wednesday Bit4 = Thursday Bit5 = Friday Bit6 = Saturday Bit7 = Sunday

Bytes	Bytes Description	Bits	Description
DATA[8]	Bookmark/Playlist/File Tag(s)		To set the set Tag from 1 through 7. 0x00 = none 0x01 = Tag 1 0x02 = Tag 2 0x03 = Tag 3 0x04 = Tag 4 0x05 = Tag 5 0x06 = Tag 6 0x07 = Tag 7

Example: Report page1 with DisplayPort starts at 06:30 and ends at 22:00 every day.

Header	Monitor ID	Category	Page	Length	Data Control	Data[0]	Data[1]	Data[2]
0x21	0x01	0x00	0x00	0x0B	0x01	0x5B	0x00	0x06
Data[3]	Data[4]	Data[5]	Data[6]	Data[7]	Data[8]	Checksum		
0x1E	0x16	0x00	0x0A	0xFF	0x00	0x8A		

Message-Set

Bytes	Bytes Description	Bits	Description
DATA[0]	0x5A = Scheduling Parameters - Set		Command to change the current Scheduling parameters
DATA[1]	Page		BIT 7-BIT4: 1 to 7 of the scheduling pages BIT 3-BIT0: 0: Page disable 1: Page enable
DATA[2]	Start time hour		0 to 23 of the start time hour 24: NULL
DATA[3]	Start time minute		0 to 59 of the start time minute 60: NULL
DATA[4]	End time hour		0 to 23 of the end time hour 24: NULL
DATA[5]	End time minute		0 to 59 of the end time minute 60: NULL

Bytes	Bytes Description	Bits	Description
DATA[6]	Video source		0 to 100 (%) of the user selectable range of the display. For video source: 0x00 = NULL 0x01 = VIDEO 0x02 = S-VIDEO 0x03 = COMPONENT 0x04 = CVI 2 (not applicable) 0x05 = VGA 0x06 = HDMI 2 0x07 = Display Port 2 0x08 = USB 2 0x09 = Card DVI-D 0x0A = Display Port 0x0B= Card OPS 0x0C = USB 0x0D= HDMI 0x0E= DVI-D 0x0F = HDMI3 0x10= BROWSER 0x11= SMARTCMS 0x12= DMS (Digital Media Server) 0x13= INTERNAL STORAGE 0x14= Reserved 0x15= Reserved 0x16=Media Player 0x17=PDF Player 0x18=Custom
DATA[7]	Working day(s)		To set the scheduling working days. Bit0 = 1: every week Bit1 = Monday Bit2 = Tuesday Bit3 = Wednesday Bit4 = Thursday Bit5 = Friday Bit6 = Saturday Bit7 = Sunday

Bytes	Bytes Description	Bits	Description
DATA[8]	Bookmark/Playlist/File Tag(s)		To set the set Tag from 1 through 7. For Video sources, Media Player, Browser and PDF, only 1~7 are valid and 0 will get error ACK. For the reset of video sources like HDMI, DVI and so on, the byte is useless. 0x00 = none 0x01 = Tag 1 0x02 = Tag 2 0x03 = Tag 3 0x04 = Tag 4 0x05 = Tag 5 0x06 = Tag 6 0x07 = Tag 7

Example: Set page1 with DisplayPort starts at 06:30 and ends at 22:00 every day.

Header	Monitor ID	Category	Code0	Code1	Length	Data Control	Data[0]	Data[1]
0x6F	0x01	0x00	0x00	0x00	0x0B	0x01	0x5A	0x10
Data[2]	Data[3]	Data[4]	Data[5]	Data[6]	Data[7]	Data[8]	Checksum	
0x06	0x1E	0x16	0x00	0x0A	0xFF	0x00	0x1C	

Language

Language Parameters

The following commands are used to get/set scheduling parameters as it is defined below.

Message-Get

Bytes	Bytes Description	Bits	Description
DATA[0]	0xC0 = Language - Get		Command requests the display to report its current Language.

Example: (Display address 01)

Header	Monitor ID	Category	Code0	Code1	Length	Data Control	Data[0]	Checksum
0x6F	0x01	0x00	0x00	0x00	0x03	0x01	0xC0	0x65

Message-Report

Bytes	Bytes Description	Bits	Description
DATA[0]	0xC0 = Language - Report		Command report to the host controller the current language of the display.
DATA[1]	Language		0x00 = ENGLISH 0x01 = GERMAN 0x02 = SIMPLIFIED_CHINESE 0x03 = FRENCH 0x04 = ITALIAN 0x05 = SPANISH 0x06 = RUSSIAN 0x07 = POLSKI 0x08 = TURKISH 0x09 = TRADITIONAL_CHINESE 0x0A = JAPANESE 0x0B= PORTUGUESE 0x0C = ARABIC 0x0D= DANISH 0x0E= SWEDISH 0x0F = FINNISH 0x10= NORWEGIAN 0x11= DUTCH

Example: Current Language is SIMPLIFIED_CHINESE (Display address 01)

Header	Monitor ID	Category	Page	Length	Data Control	Data[0]	Data[1]	Checksum
0x21	0x01	0x00	0x00	0x04	0x01	0xC0	0x02	0xE7

Message-Set

Bytes	Bytes Description	Bits	Description
DATA[0]	0xC1 = Language - Set		Command requests the display to set the specified language.
DATA[1]	Language		0x00 = ENGLISH 0x01 = GERMAN 0x02 = SIMPLIFIED_CHINESE 0x03 = FRENCH 0x04 = ITALIAN 0x05 = SPANISH 0x06 = RUSSIAN 0x07 = POLSKI 0x08 = TURKISH 0x09 = TRADITIONAL_CHINESE 0x0A = JAPANESE 0x0B= PORTUGUESE 0x0C = ARABIC 0x0D= DANISH 0x0E= SWEDISH 0x0F = FINNISH 0x10= NORWEGIAN 0x11= DUTCH

Example: Set Language to ENGLISH (Display address 01)

Header	Monitor ID	Category	Code0	Code1	Length	Data Control	Data[0]	Data[1]
0x6F	0x01	0x00	0x00	0x00	0x04	0x01	0xC1	0x00
Checksum								
0x63								

Appendix

Supported Media Formats

Media Type	Codec	Container	Resolution/Sample Rate	Bit Rate
Photo		JPEG, PNG, BMP, GIF, WebP, HEIF(HEIC), AVIF		
Video	VP8	MKV, 3GPP, MP4, AVI, OGM	1920 x 1080 @ 60 FPS	40
	VP9	MKV, WebM	3840 x 2160 @ 60 FPS	100
			1920 x 1080 @ 120 FPS	
	AV1	MP4, 3GPP, MKV, WebM	3840 x 2160 @ 60 FPS	100
			1920 x 1080 @ 120 FPS	
	H.263	MP4, 3GPP, AVI, ASF, WMV	1408 x 1152 @ 60 FPS	60
	AVC/H.264	FLV, MP4, 3GPP, MKV, ASF, WMV, AVI, OGM, H264	3840 x 2160 @ 60 FPS	135
			1920 x 1080 @ 120 FPS	
	HEVC/H.265	MP4, 3GPP, MKV, FLV, AVI, H265	3840 x 2160 @ 60 FPS	100
			1920 x 1080 @ 120 FPS	
	VVC/H.266	MP4, 3GPP	3840 x 2160 @ 60 FPS	100
			1920 x 1080 @ 120 FPS	
	MPEG1/2	MP4, 3GPP, AVI, MKV, ASF, WMV, OGM	MPEG1: 720 x 576 @ 30 FPS MPEG2: 3840 x 2160 @ 30 FPS 1920 x 1080 @ 120 FPS	60
	MPEG4	MP4, 3GPP, AVI, MKV, ASF, WMV, OGM	1920 x 1080 @ 60 FPS	60
	Motion JPEG	AVI, 3GPP, MP4, MKV, OGM, ASF, WMV	1920 x 1080 @ 60 FPS	80
	AVS	AVS	1920 x 1080 @ 60 FPS	60
	AVS+	AVS	1920 x 1080 @ 60 FPS	60
	AVS2	AVS2	3840 x 2160 @ 60 FPS	100
			1920 x 1080 @ 120 FPS	
	AVS3	/		

Media Type	Codec	Container	Resolution/Sample Rate	Bit Rate
Video	WMV3	ASF, AVI, MKV, WMV, 3GPP, MP4, OGM	1920 x 1080 @ 60 FPS	60
	VC1	ASF, WMV, AVI, MKV, 3GPP, MP4, VC1	1920 x 1080 @ 60 FPS	60
	RealVideo 8/9/10	RM, MKV	1920 x 1080 @ 60 FPS	60
Audio	MPEG1/2 Layer1	MP3, AVI, ASF, WMV, MKV, 3GPP, MP4, FLV, OGM	16 kHz ~ 48 kHz	
	MPEG1/2 Layer2	MP3, AVI, ASF, WMV, MKV, 3GPP, MP4, FLV, OGM	16 kHz ~ 48 kHz	
	MPEG1/2/2.5 Layer3	MP3, AVI, ASF, WMV, MKV, 3GPP, MP4, FLV, OGM	8 kHz ~ 48 kHz	
	AC3(DD)	AC3, AVI, MKV, 3GPP, MP4, WMV, ASF, OGM	32 kHz, 44.1 kHz, 48 kHz	
	EAC3(DDP)	EAC3, AVI, MKV, 3GPP, MP4, WMV, ASF, OGM	32 kHz, 44.1 kHz, 48 kHz	
	AAC-LC, HEAAC	AAC, AVI, MKV, 3GPP, MP4, FLV, RM, WAV, WMV, ASF, OGM	8 kHz ~ 48 kHz	
	WMA	ASF, WMV, AVI, MKV	8 kHz ~ 48 kHz	
	WMA 10 Pro M0	ASF, WMV, AVI	8 kHz ~ 48 kHz	
	WMA 10 Pro M1	ASF, WMV, AVI	8 kHz ~ 48 kHz	
	WMA 10 Pro M2	ASF, WMV, AVI	8 kHz ~ 96 kHz	
	VORBIS	MKV, WEBM, 3GPP, MP4, OGG, WMV, ASF, AVI	up to 48 kHz	

Timing Table

HDMI/Type C

Resolution	Refresh Rate
640 x 480	60, 75 Hz
720 x 400	70 Hz
800 x 600	60, 75 Hz
1024 x 768	60 Hz
1280 x 1024	60 Hz
1360 x 768	60 Hz
1600 x 900	60 Hz
1680 x 1050	60 Hz
480p	60 Hz
576p	50 Hz
720p	24, 25, 30, 50, 60 Hz
1080p	24, 25, 30, 50, 60 Hz
4K	24, 25, 30, 50, 60 Hz

Troubleshooting

This section describes some common problems that you may experience when using the display.

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 batteries 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 and see if the problem is with the signal and control system.

PC Mode

Problem or Issue	Possible Solutions
No PC signal	1. Check the display settings. 2. Check the display resolution. 3. Adjust the Hs & Vs (synchronization) settings using the OSD menu.
Background streaking	1. Choose auto adjust. 2. Adjust clock and phase.
False color	1. Check the connection. 2. Adjust the chroma, brightness, and contrast settings.
Unsupported format	1. Choose auto adjust. 2. Adjust clock and phase settings.

Video Not Working Properly

Problem or Issue	Possible Solutions
No picture/ No sound	1. Check the Power status. 2. Check the signal cable. 3. Check that the internal PC is installed correctly.
Picture is unclear or cuts in and out	1. Check the signal cable. 2. Check if other electronics are interrupting the signal.
Poor picture	1. Adjust chroma, brightness, and contrast settings in the menu. 2. Check the signal cable.

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.
One speaker only	1. Adjust the sound balance in the menu. 2. Check the sound control panel settings of the computer. 3. Check the audio cable.

Maintenance

General Precautions

- Make sure the device is turned off and the power cable is unplugged from the power outlet.
- Never spray or pour any liquid directly onto the screen or case.
- Handle the device with care, as a darker-colored device, if scuffed, may show marks more clearly than a lighter-colored device.
- Do not use the system continuously for long periods of time.

Cleaning the Screen

- Wipe the screen with a clean, soft, lint-free cloth. This removes dust and other particles.
- If the screen is still not clean, apply a small amount of non-ammonia, non-alcohol based glass cleaner onto a clean, soft, lint-free cloth; then wipe the screen.

Cleaning the Case

- Use a soft, dry cloth.
- If the case is still not clean, apply a small amount of non-ammonia, non-alcohol based, mild non-abrasive detergent onto a clean, soft, lint-free cloth, then wipe the surface.

Disclaimer

- ViewSonic® does not recommend the use of any ammonia or alcohol-based cleaners on the display screen or case. Some chemical cleaners have been reported to damage the screen and/or case of the device.
- ViewSonic® will not be liable for damage resulting from use of any ammonia or alcohol-based cleaners.

Note: If condensation appears between the glass and the panel, keep the display turned on until the moisture disappears.

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.

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

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

FCC/ IC Radiation Exposure Statement

This equipment complies with FCC and IC 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.

Cet appareil contient des émetteurs / récepteurs exemptés de licence conformes aux RSS (RSS) d'Innovation, Sciences et Développement économique Canada. 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 radio électrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement."

FCC/ IC Déclaration d 'exposition aux rayonnements

Cet appareil est conforme à FCC et IC l'exposition aux rayonnements limites fixées pour un environnement non contrôlé. Cet appareil doit être installé et utilisé avec une distance minimale de 20 cm entre le radiateur et votre corps. Cet transmetteur ne doit pas être co-situé ou opérant en liaison avec toute autre antenne ou transmetteur.

CE Conformity for European Countries



The device complies with the relevant section of the EMC Directive 2014/30/EU, Low Voltage Directive 2014/35/EC, Eco-Design Directive 2009/125/EC, RoHS Directive 2011/65/EU, and Radio Equipment Directive 2014/53/EU.

The full declaration of conformity can be found at the following website:

- https://www.viewsonicglobal.com/public/products_download/safety_compliance/cd/VS20644_CE_DOC.pdf
- https://www.viewsonicglobal.com/public/products_download/safety_compliance/cd/VS20609_CE_DOC.pdf
- https://www.viewsonicglobal.com/public/products_download/safety_compliance/cd/VS20610_CE_DOC.pdf
- https://www.viewsonicglobal.com/public/products_download/safety_compliance/cd/VS20647_CE_DOC.pdf

Warning: This equipment should be installed and operated with a minimum distance of 20 cm from the radiator of your body.

This device and its antenna(s) must not be co-located or operated in conjunction with any other antenna or transmitter.

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 (Cr ⁶⁺)	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.

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.

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



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1101 BR Amsterdam
Netherlands



+31 (0) 650608655



EPREL@viewsoniceurope.com



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

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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® 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).

How long the warranty is effective:

ViewSonic® displays are warranted for between 1 and 3 years, depending on your country of purchase, for all parts including the light source and for all labor from the date of the first consumer purchase.

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® 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.

How long the warranty is effective:

ViewSonic® LCD displays are warranted for between 1 and 3 years, depending on your country of purchase, for all parts including the light source and for all labour from the date of the first consumer purchase.

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. Bugambilias 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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