ViewSonic®

IFP34 Series

Commercial Touch 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. VS20436 | VS20437 | VS20438
P/N: IFP6534 | IFP7534 | IFP8634

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.

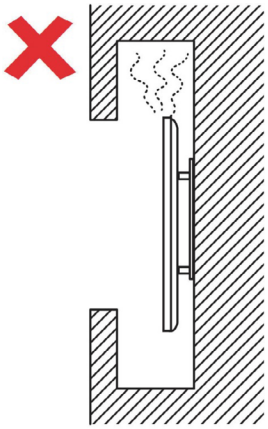
Once again, thank you for choosing ViewSonic®!

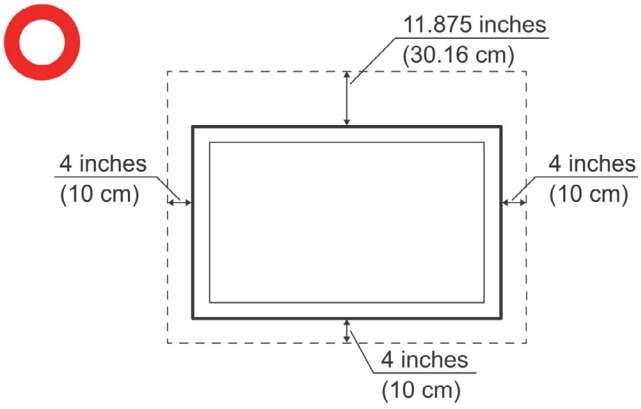
Safety Precautions

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.





- 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

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.

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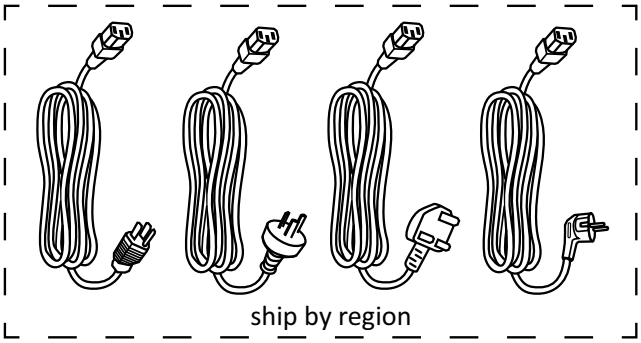
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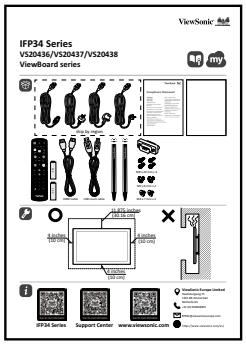
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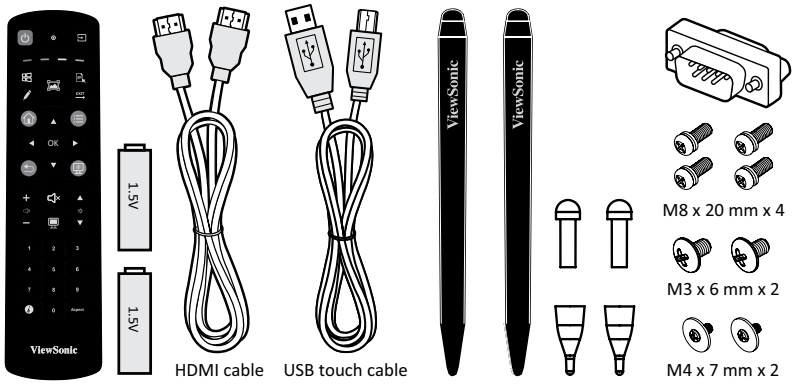
Introduction

Package Contents









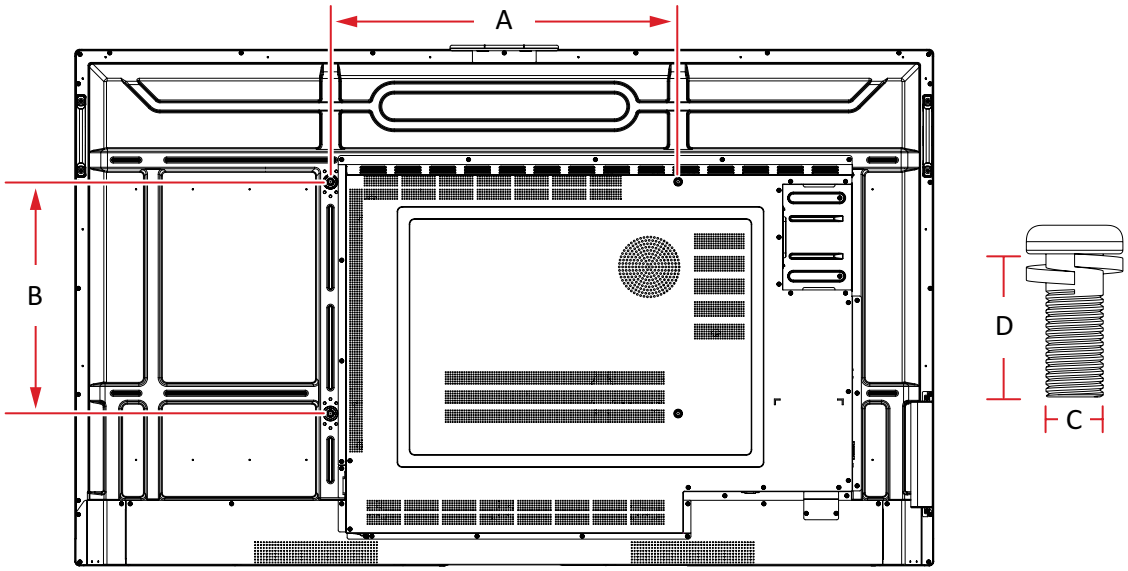
- AAA Batteries
- Compliance Statement
- HDMI Cable (3 m)
- Power Cord (3 m)
- USB Touch Cable (3 m)
- Quick Start Guide
- Remote Control
- RS-232 Adapter
- 8 x Screws
- 2 x Touch Pens

NOTE:

- The cables included in your package may vary depending on your country. Please contact your local reseller for more information.
- If there is an installation requirement for the UMB202 or VB-CAM-201, you may purchase the VB-WMK-002 mounting accessory and contact the after-sales service team to confirm the installation method.

Wall Mount Kit Specifications (VESA)

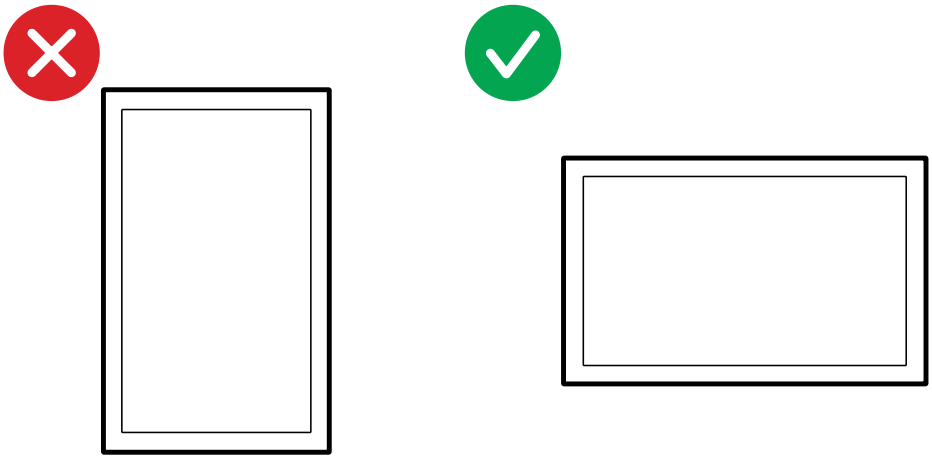
NOTE: The following illustration is for instructional purpose only. For details, please refer to the actual product and follow the instructions in the wall mount installation guide to install your wall mount. If attaching to other building materials, please contact your nearest dealer.



Model	VESA Spec. (A x B)	Standard Screw (C x D)	Quantity
IFP6534	600 x 400 mm	M8 x 25 mm	4 Pieces
IFP7534	800 x 400 mm		
IFP8634	800 x 600 mm		

NOTE:

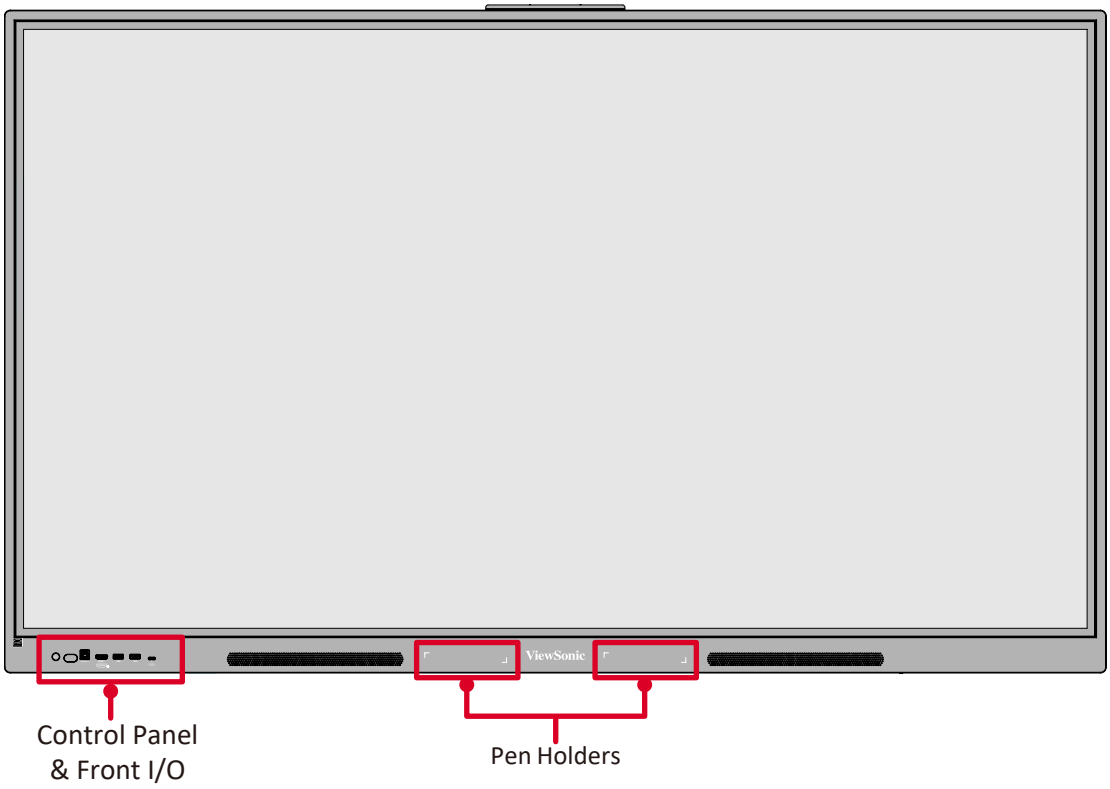
- Do not use screws that are longer than the standard dimension, as they may cause damage to the inside of the display.
- Only mount the display in landscape orientation. Never mount in a portrait orientation.



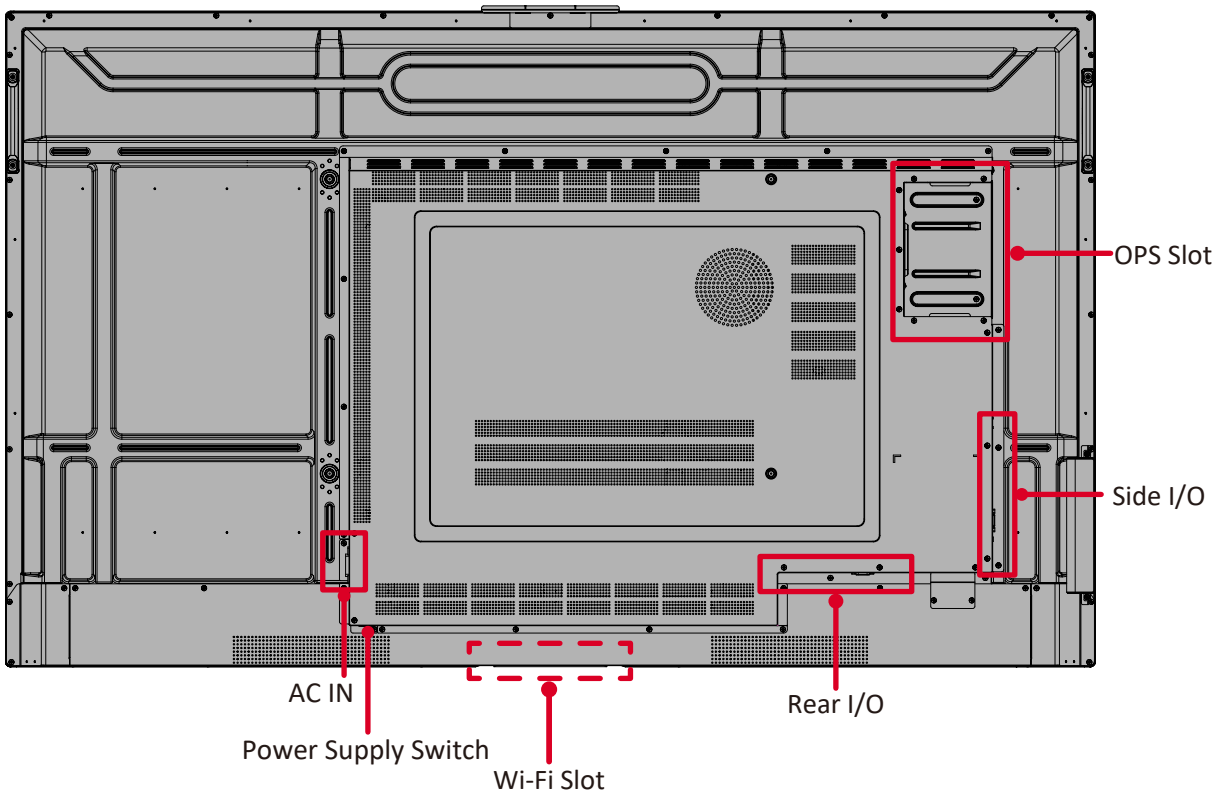
Product Overview

IFP6534

Front Panel

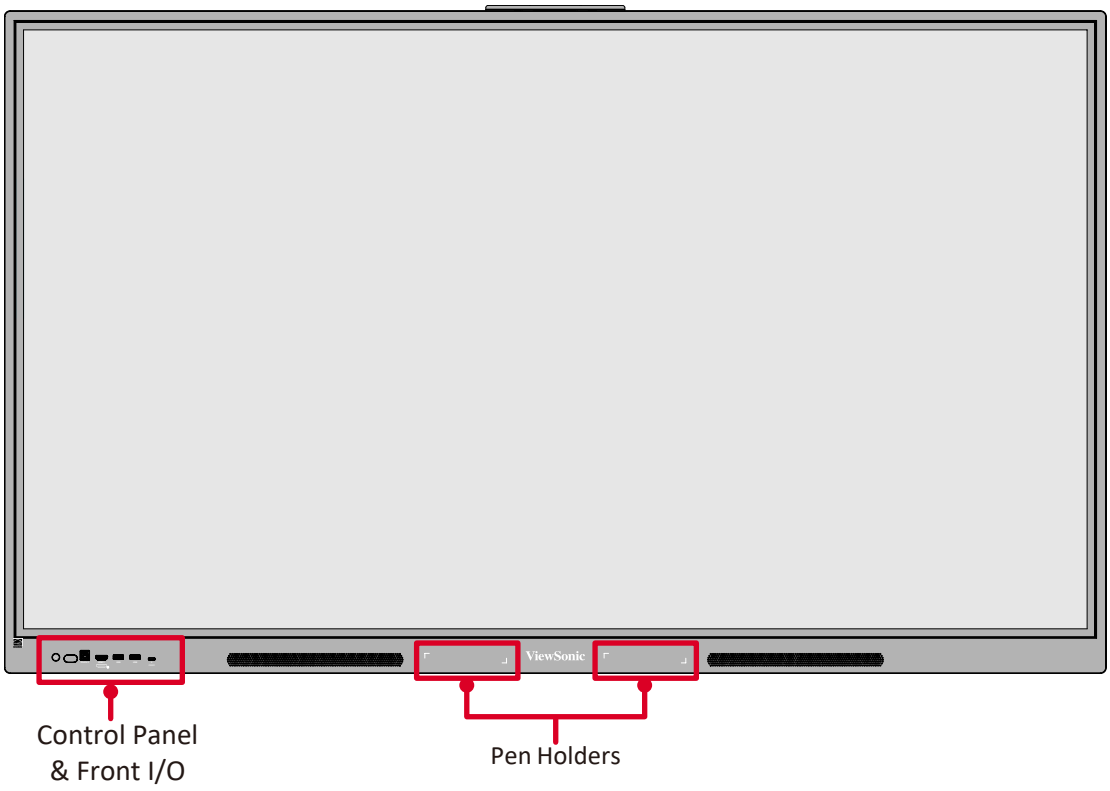


Rear Panel

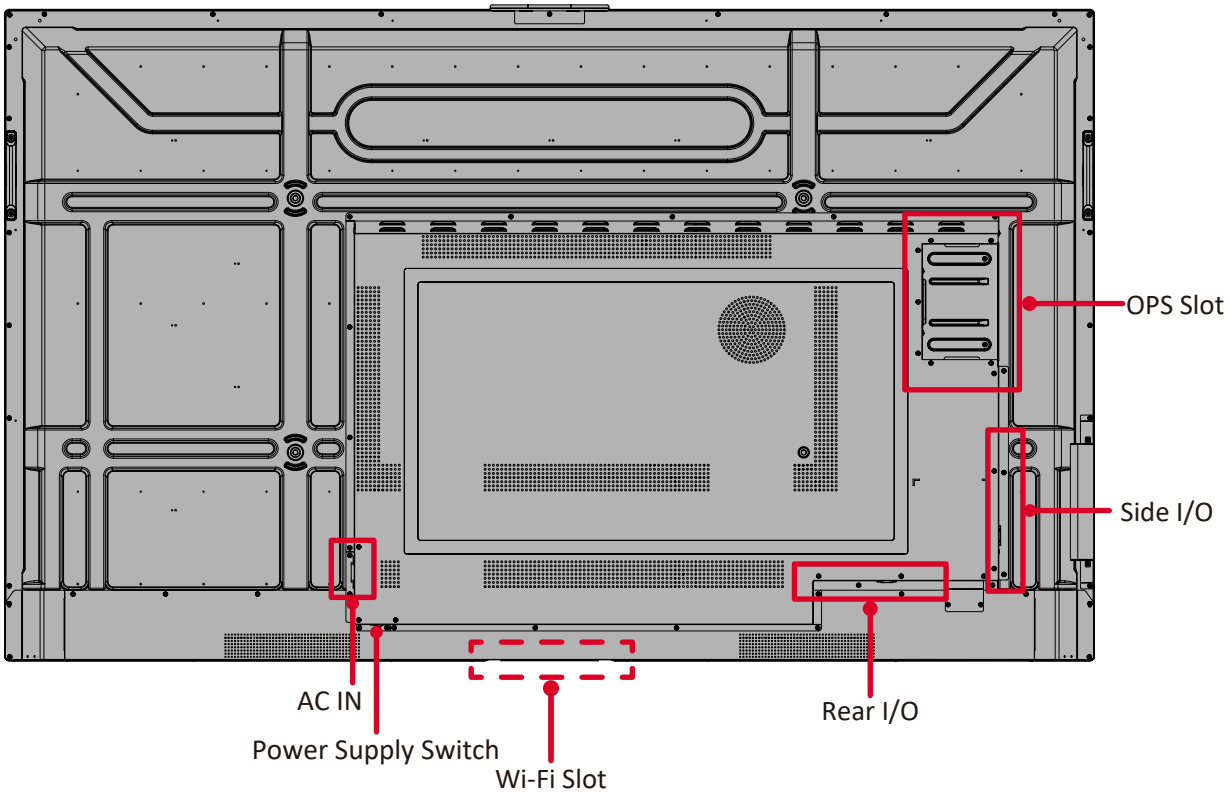


IFP7534

Front Panel

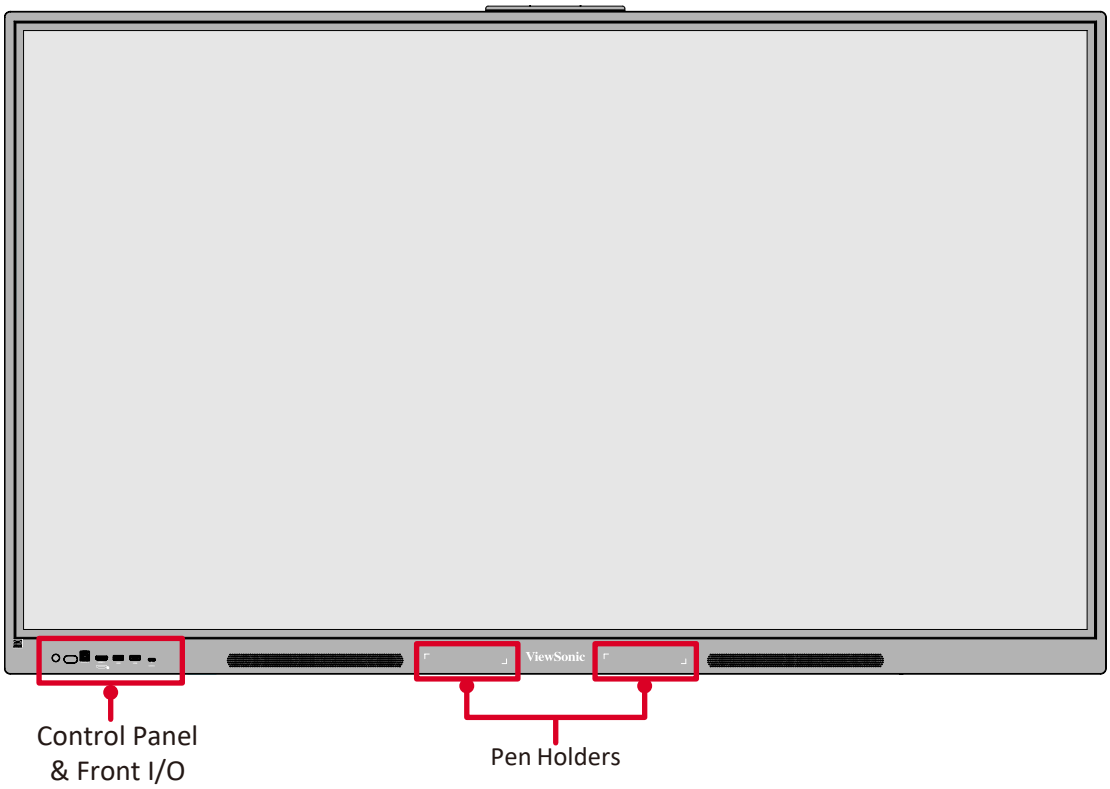


Rear Panel

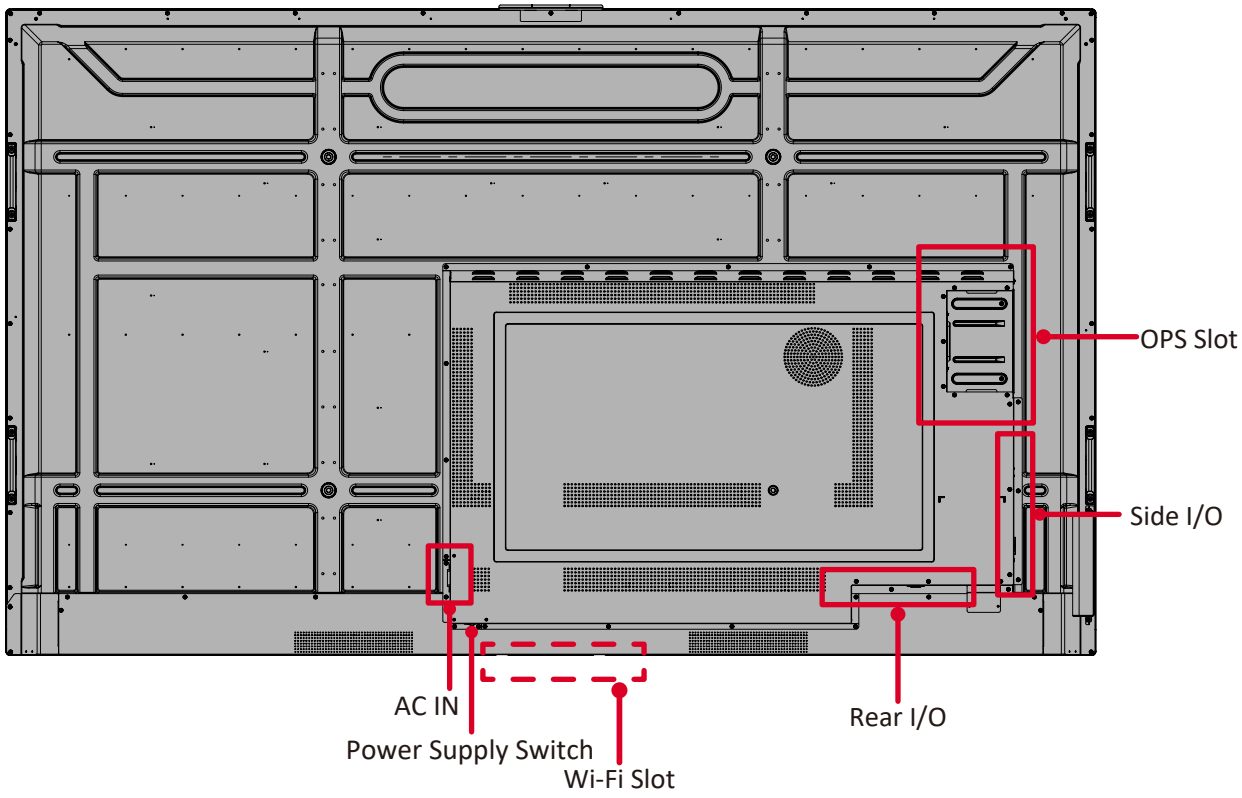


IFP8634

Front Panel

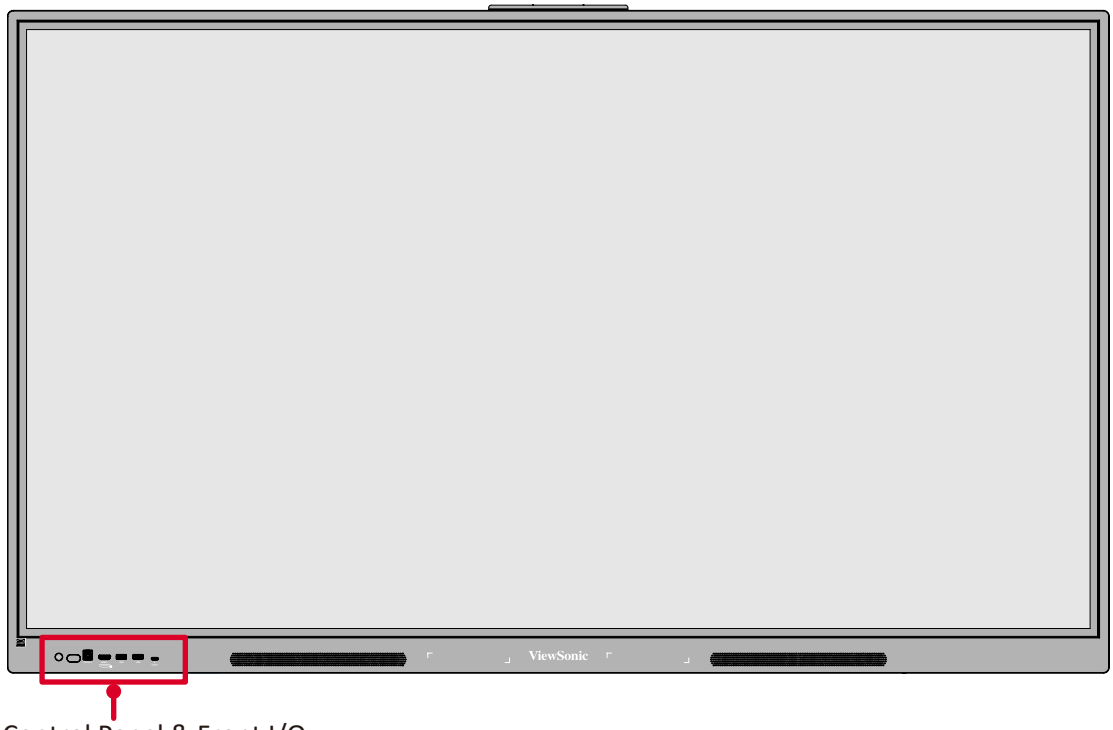


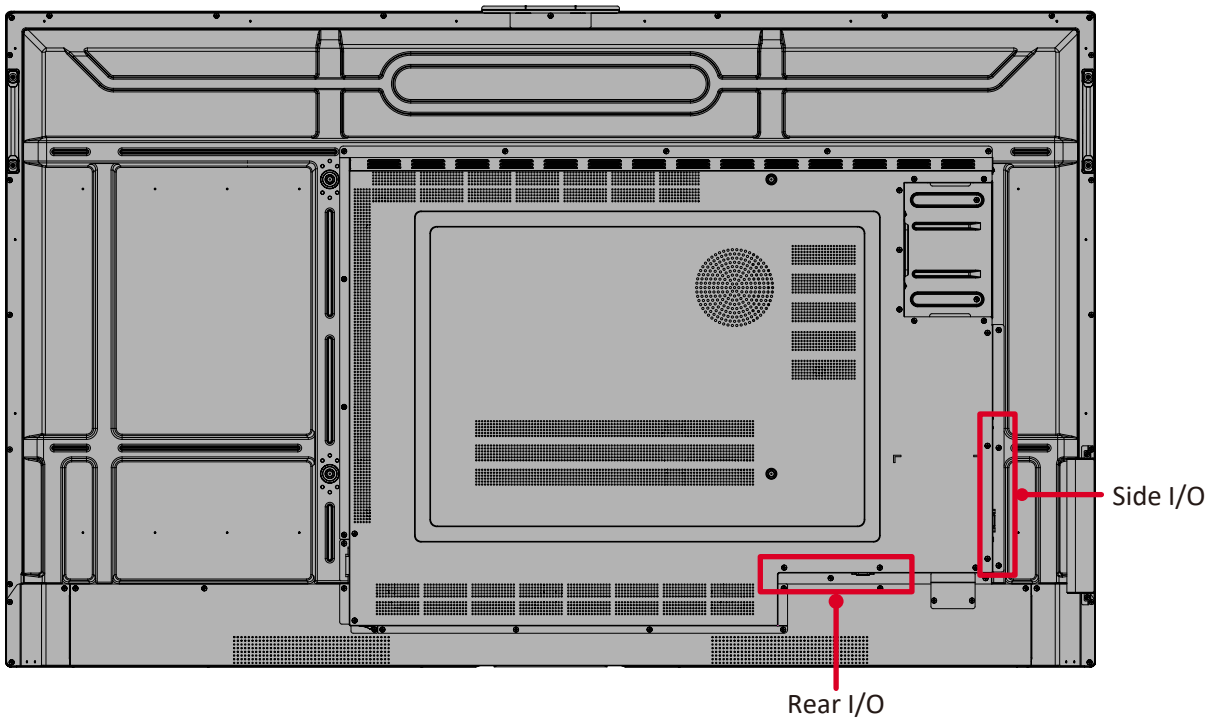
Rear Panel



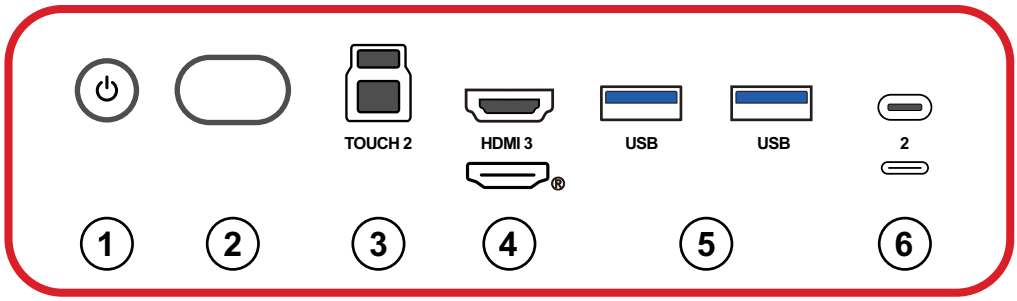
I/O Panels

NOTE: The following illustrations are for instructional purpose only. For details, please refer to the actual device.





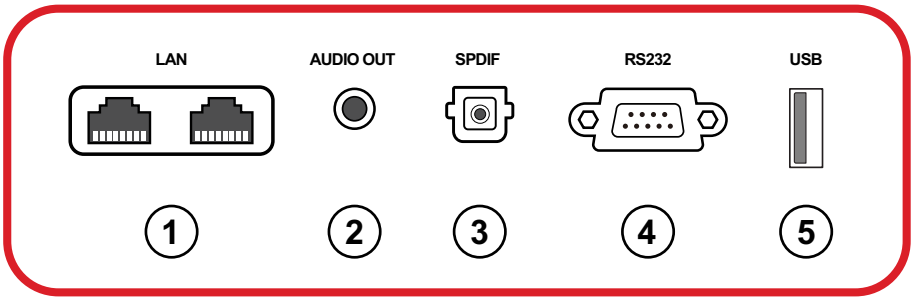
Control Panel and Front I/O



Number	Item	Description
1		• Power indicator light • Press to turn on the display • Once on, press again to turn on or off the backlight only • Once on, press and hold to turn off the display
2		• Ambient Light Sensor • Remote control IR receiver
3	**TOUCH 2**	• USB Type B • Touch signal output to external computer • After connection (with an external computer), the device connected to the **USB** port can directly be used by the external computer **NOTE:** Pairs with the **HDMI 3** port next to it.
4	(HDMI 3)	• HDMI input • Connect to a computer with HDMI output, set-top box, or other video device • Supports 4K display; HDMI v. 2.1; CEC 2.0; HDCP 2.2
5	**USB**	• USB Type A input • USB 3.0 standard • Connect USB devices such as hard disks, keyboard, mouse, etc. • Automatically switches between the external computer and ViewBoard • Power charge supported: 5V/0.9A
6	(TYPE C 2)	• USB Type C input • USB 3.0 standard • Supports DP v. 1.2 with audio, video, and touch • Supports LAN by 10M/100M • Supports power charge up to 65W[1]. Power charge supported: 5V/3A, 9V/3A, 15V/3A, 20V/3.25A

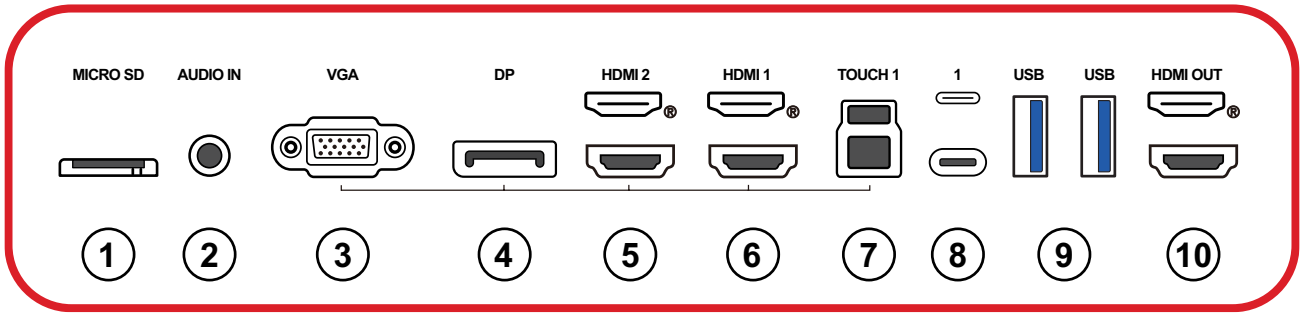
1 - Only when OPS PC module (purchase separately) is connected.

Rear I/O



Number	Item	Description
1	LAN	• Standard RJ45 (10M/100M/1000M) Internet connection interface • Features hub support for network sharing
2	AUDIO OUT	Audio output to an external speaker/headset
3	SPDIF	Multichannel sound via optical signals
4	RS232	• Serial interface • Used for mutual transfer of data between devices
5	USB	• USB Type A input • For system update

Side I/O

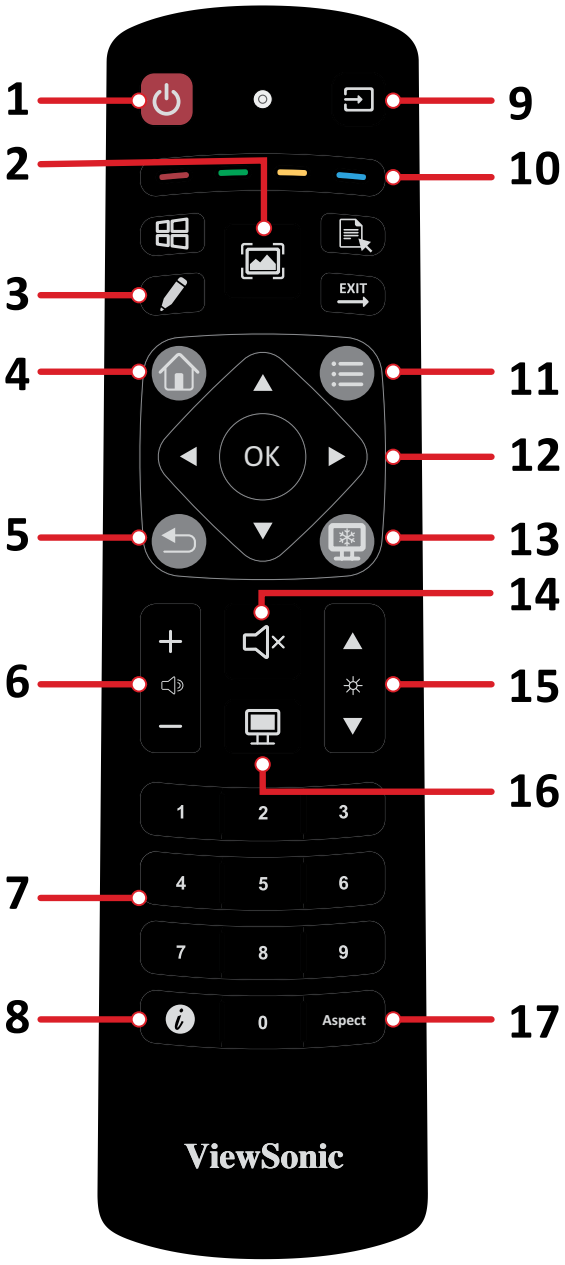


Number	Item	Description
1	**MICRO SD**	Data only, up to 512 GB
2	**AUDIO IN**	External computer audio input
3	**VGA**	External computer video input
4	**DP**	• DisplayPort input (v. 1.2) • Supports 4K display
5	(HDMI 2)	• HDMI input • Connect to a computer with HDMI output, set-top box, or other video device • Supports 4K display; HDMI v. 2.1; HDCP 2.2; CEC 2.0
6	(HDMI 1)	• HDMI input • Connect to a computer with HDMI output, set-top box, or other video device • Supports 4K display; HDMI v. 2.1; HDCP 2.2; CEC 2.0; ARC
7	**TOUCH 1**	• USB Type B • Touch signal output to external computer • After connection (with an external computer), the device connected to the **USB** port can directly be used by the external computer **NOTE:** Pairs with the HDMI ((**HDMI 1/HDMI 2**)/ DisplayPort (**DP**)/**VGA** port next to it.
8	(Type C 1)	• USB Type C • USB 2.0 standard • For data read/write only

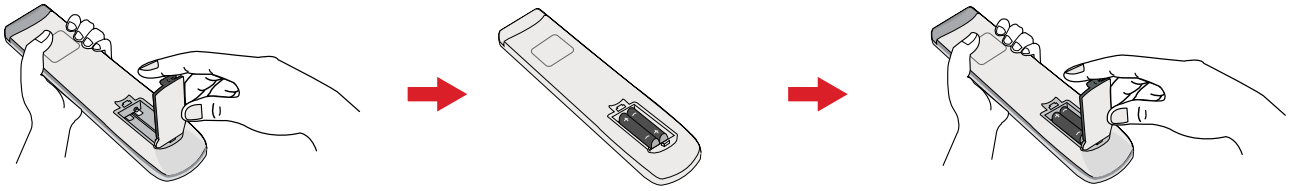
Number	Item	Description
9	**USB**	• USB Type A input • USB 3.0 standard • Connect USB devices such as hard disks, keyboard, mouse, etc. • Automatically switches between the external computer and ViewBoard • Power charge supported: 5V/0.9A
10	**HDMI OUT**	• Connect to a computer with HDMI output, set-top box, or other video device • Supports YUV444 format

Remote Control

Number	Description
1	Power on/off
2	Screen capture
3	Startup writing
4	Back to the ViewBoard player Home Screen
5	Back/Return to the previous page
6	Increase/Decrease the Volume
7	Number Keypad
8	Information
9	Input source selection
10	Media control buttons: • **Red**: Play/Pause • **Green**: Stop • **Yellow**: Forwards • **Blue**: Backwards
11	Settings menu
12	Up/Down/Right/Left/OK
13	Freeze screen
14	Mute/Unmute
15	Increase/Decrease Brightness
16	Blank Screen
17	Adjust Aspect Ratio



Inserting Remote Control 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 “+” symbol on the battery matches the “+” on the battery post.
3. Replace the cover by aligning it with the slot on the remote control and snapping the latch shut.

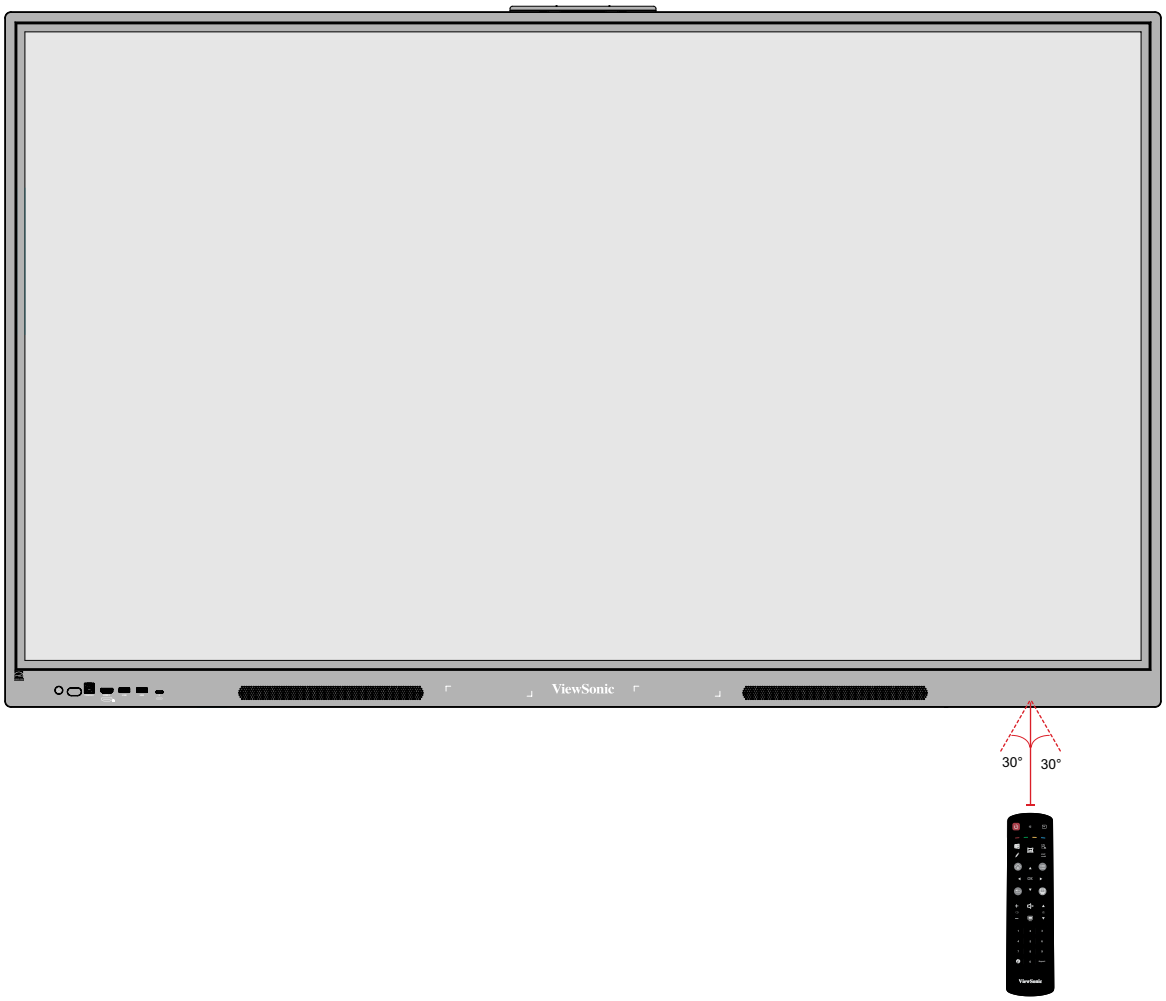
WARNING: There is a risk of explosion if batteries are replaced with the incorrect type.

NOTE:

- It is recommended that you do not mix battery types.
- Always dispose of old batteries in an environmentally friendly way. Contact your local government for more information on how to dispose of batteries safely.

Remote Control Receiver Range

The working range of the remote control is shown here. It has an effective range of 8 meters, 30° degrees left and right. Ensure there is nothing obstructing the remote control's signal to the receiver.

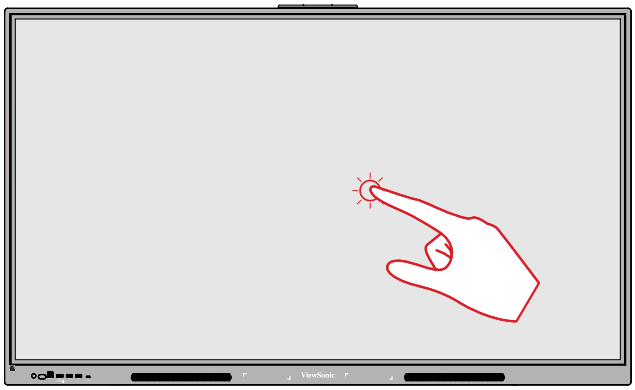


Using Gestures

Touch gestures allow the user to use pre-determined commands without using a keyboard or mouse. Using gestures on the ViewBoard, the user can select/deselect objects, change the location of an object, access settings, erase digital ink, and much more.

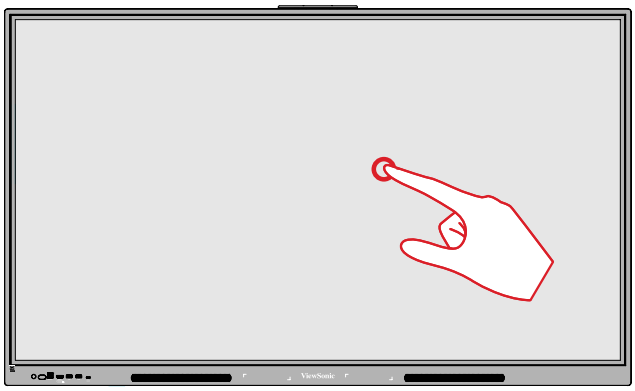
Select and Deselect an Object (Clicking)

Press and release the ViewBoard to select/deselect options or objects. This is like a single, standard left mouse click.



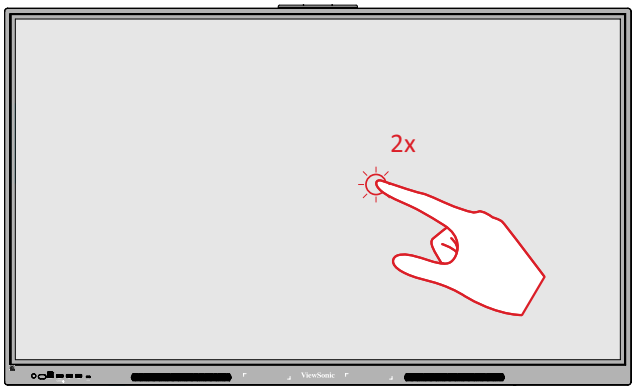
Display Menu Options (Right-Clicking)

Press and hold the ViewBoard with your finger. This is like a single, standard right mouse click.



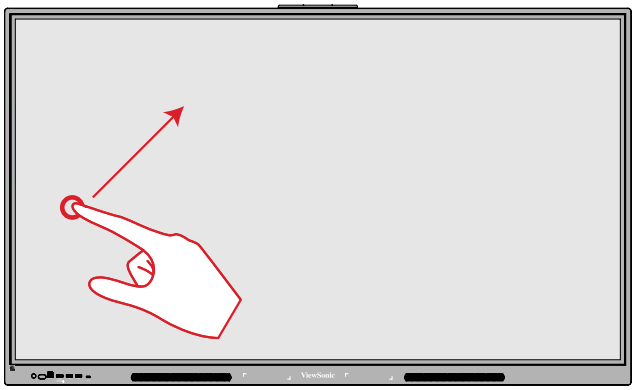
Double-Clicking

Quickly press and release twice in the same location on the ViewBoard. This is like a double, standard left mouse click.



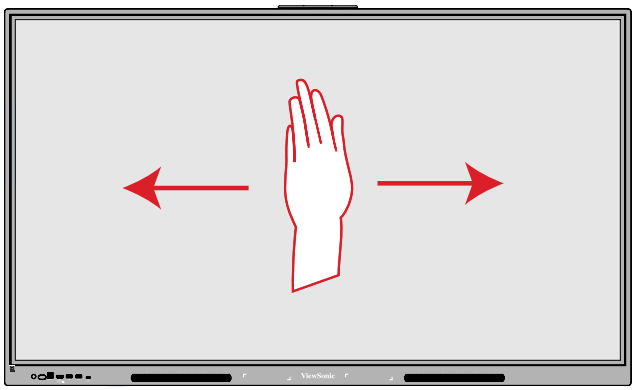
Moving an Object

Press and hold the object on the ViewBoard and slowly drag it with your finger to your desired location.



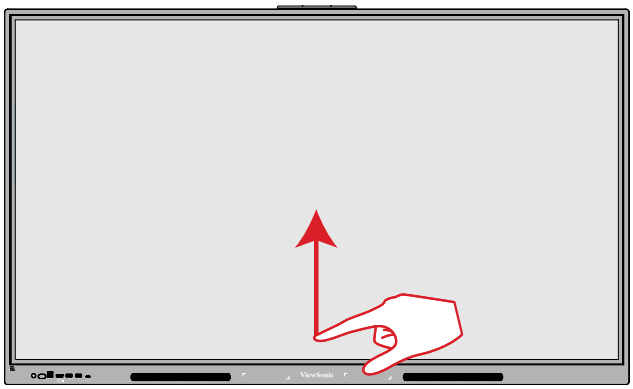
Erasing Digital Ink

Use your flattened hand, palm, or fist on the ViewBoard and move your hand across the area which you wish to erase.



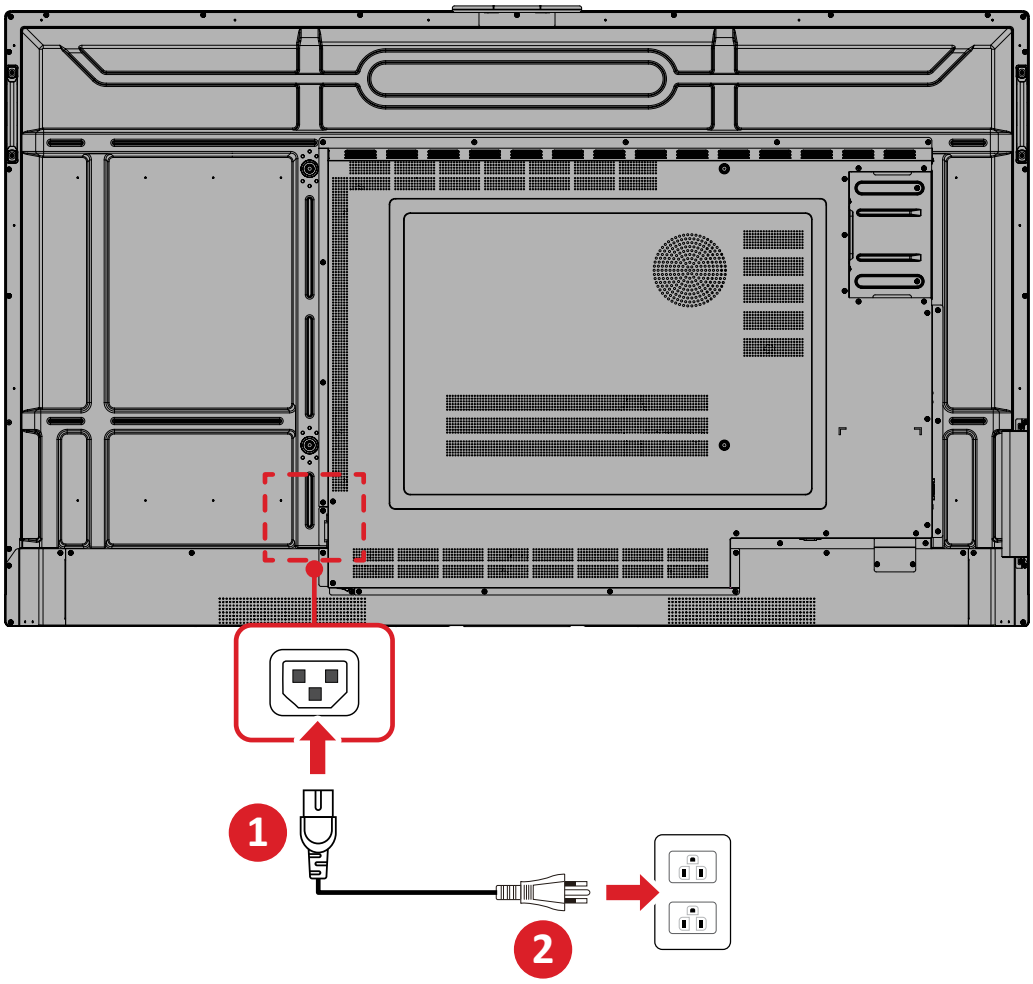
Swipe Up for General Settings

Swipe up from the bottom of the ViewBoard to launch the General Settings.



Making Connections

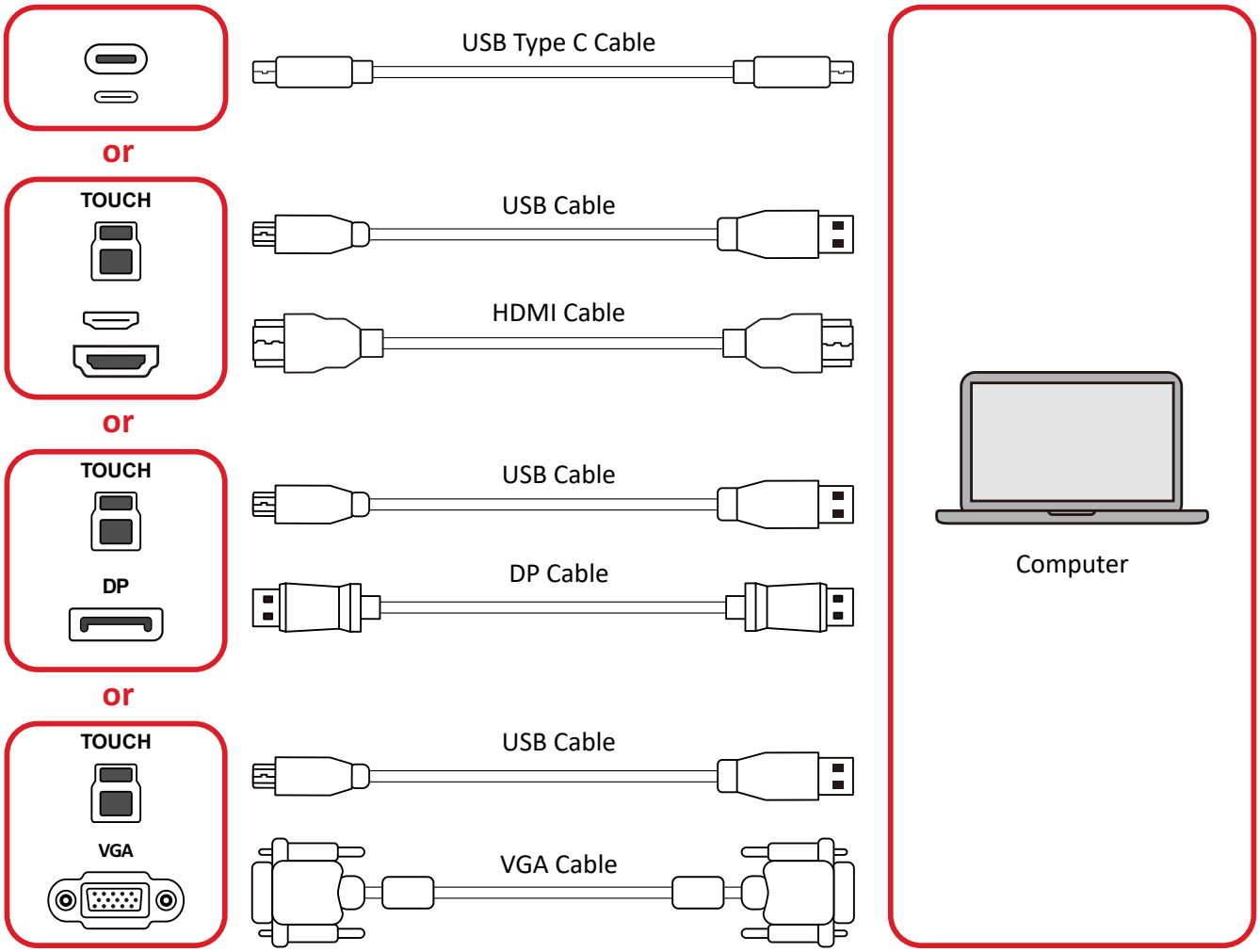
Connecting to Power



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 and Enabling Touch



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

USB Type C Connection

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

HDMI Connection

1. Connect an HDMI cable from your external device to the **HDMI 1/HDMI 2/ HDMI 3** port on the ViewBoard.
2. Connect a USB Type B to USB Type A cable to the external device from the appropriate **TOUCH** port of the ViewBoard.

NOTE:

- The **TOUCH 1** port is for the **HDMI 1/HDMI 2/DP/VGA** port.
- The **TOUCH 2** port is for the **HDMI 3** port.

DisplayPort Connection

1. Connect a DisplayPort cable from your external device to the **DP** port on the ViewBoard.
2. Connect a USB Type B to USB Type A cable to the external device from the appropriate **TOUCH** port of the ViewBoard.

NOTE:

- The **TOUCH 1** port is for the **HDMI 1/HDMI 2/DP/VGA** port.
- The **TOUCH 2** port is for the **HDMI 3** port.

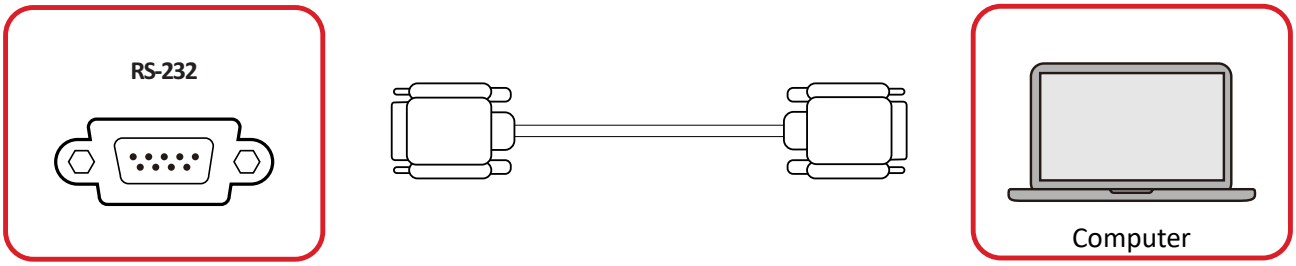
VGA Connection

1. Connect a VGA cable from your external device to the **VGA** port on the ViewBoard.
2. Connect a USB Type B to USB Type A to the external device from the appropriate **TOUCH** port of the ViewBoard.

NOTE:

- The **TOUCH 1** port is for the **HDMI 1/HDMI 2/DP/VGA** port.
- The **TOUCH 2** port is for the **HDMI 3** port.

RS-232 Connection



When you use a RS-232 serial cable to connect the ViewBoard 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.

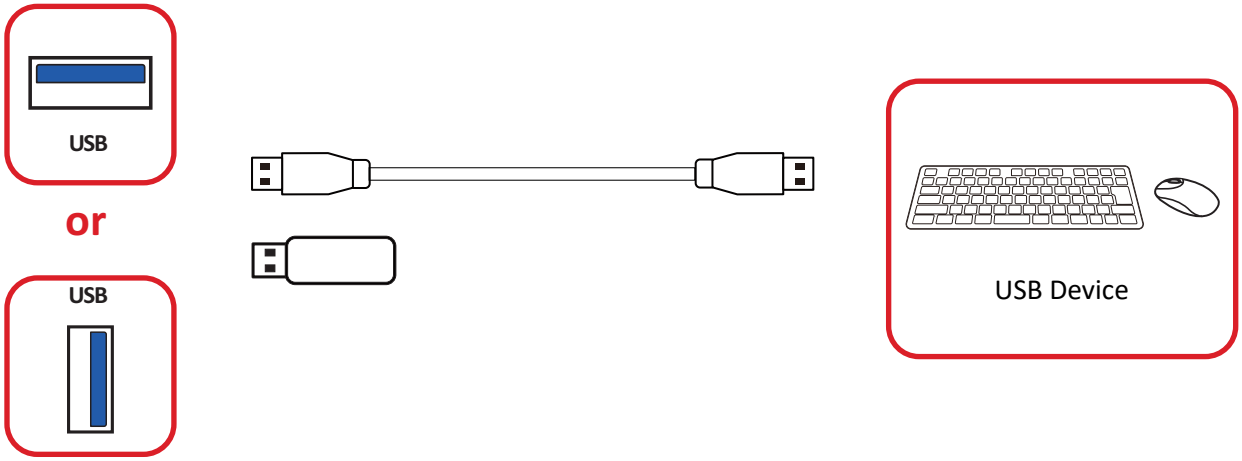
NOTE:

- The RS-232 port on the IFP34 mainboard uses a female connector. When connecting to external control systems (e.g., room control, Crestron, or AMX), observe the following guideline:
  - » If using a crossover (null modem) cable: use a male-to-male crossover mini adapter.
  - » If using a straight-through cable: use a male-to-male straight-through mini adapter.
- Make sure to confirm the pin configuration of your control system before connecting because the wrong cable type or adapter may result in communication failure.

USB Connections

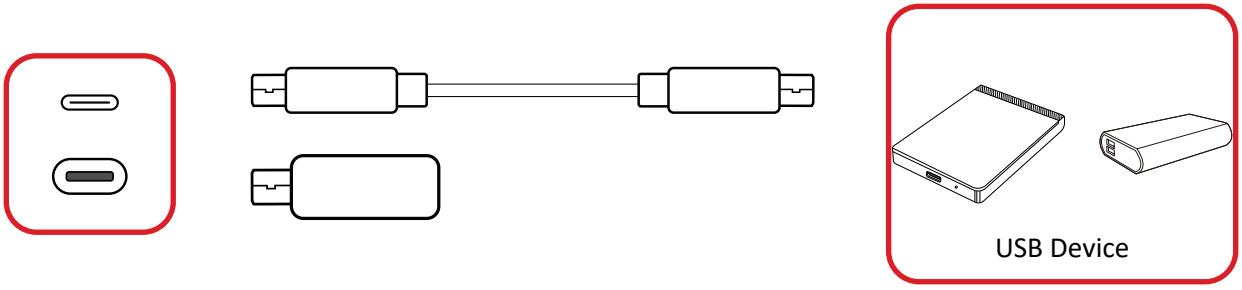
Just like any PC, it is easy to connect various USB devices and other peripherals to your ViewBoard.

USB Type A



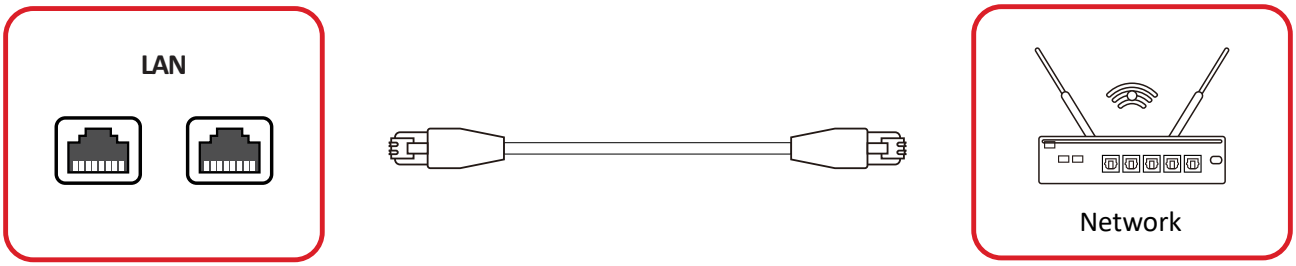
Plug the USB device or storage drive into a USB Type A port at the front or side of the ViewBoard.

USB Type C



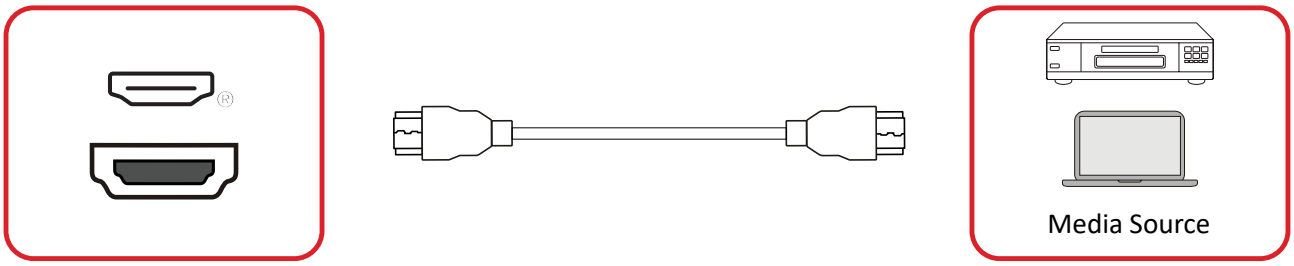
Plug the USB device or storage drive into a USB Type C port at the front of the ViewBoard.

Network Connection



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

Media Connection

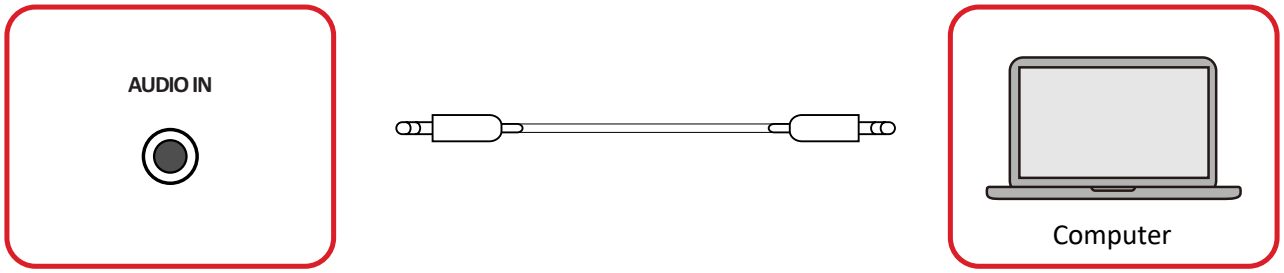


1. Connect an HDMI cable to a **HDMI** port on your ViewBoard and peripheral device.
2. Plug in the power cord of your ViewBoard, and turn on the Power Supply Switch.
3. Press the **Power** button on the ViewBoard to turn the screen on.
4. Press the **INPUT** button on the remote control and switch to the HDMI input source.

Audio Connection

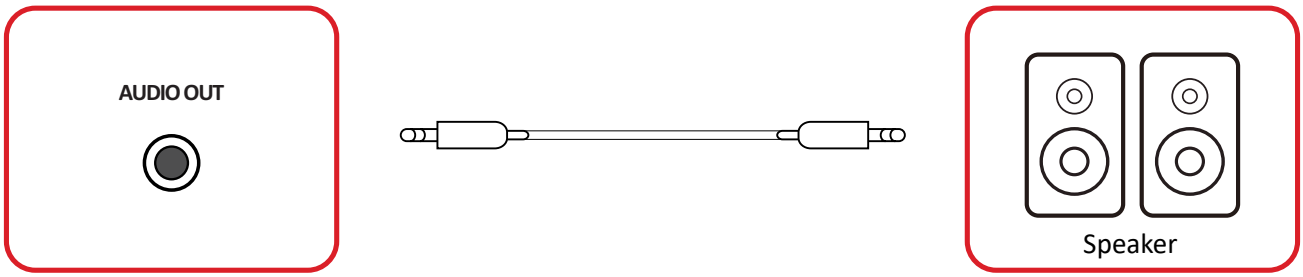
The ViewBoard supports **Audio In**, **Audio Out**, and **SPDIF**.

Audio In



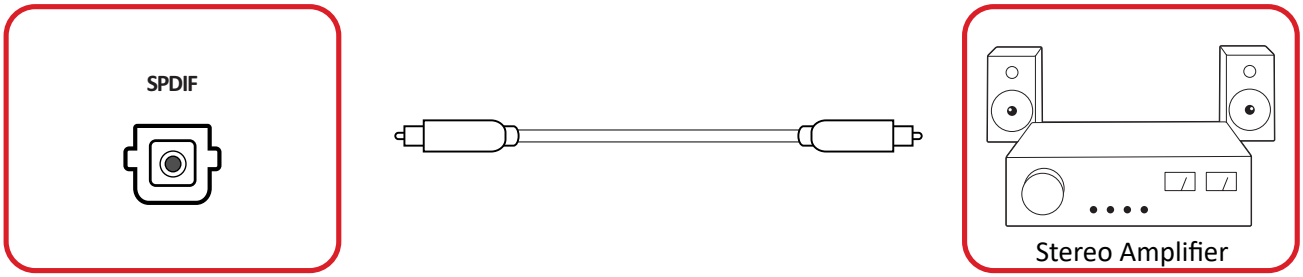
To play audio from your external device through the ViewBoard's speakers, connect one end of an audio cable to your external device, and the other end to the ViewBoard's **AUDIO IN** port.

Audio Out



To play audio from the ViewBoard through an external speaker, connect one end of an audio cable to the external speaker, and the other end to the ViewBoard's **AUDIO OUT** port.

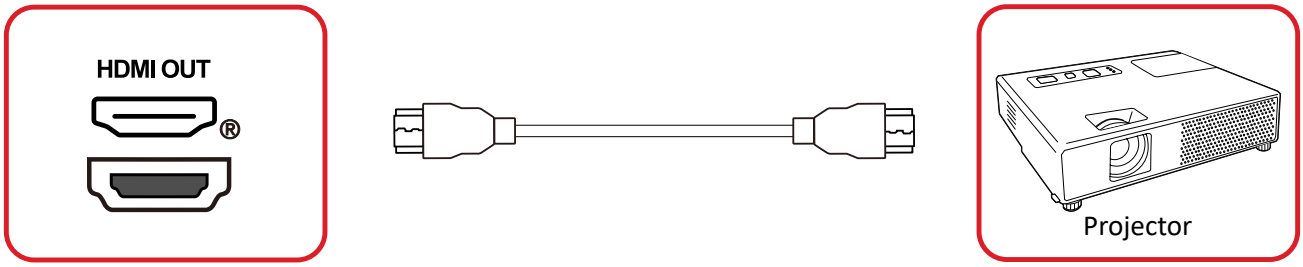
SPDIF Connection



To connect to an external sound system:

1. Connect an optical cable from the **SPDIF** port to your sound system's optical connector.
2. Plug in the power cord of your ViewBoard, and turn on the Power Supply Switch.
3. Press the **Power** button on the ViewBoard to turn the screen on.

Video Output Connection (HDMI Out)



To output video via a display device:

1. Connect an HDMI cable to the **HDMI IN** port of your display device, and the other end to the **HDMI OUT** port of the ViewBoard.
2. Plug in the power cord of the ViewBoard, and turn on the Power Supply Switch.
3. Press the **Power** button on the ViewBoard to turn the screen on.
4. Press the **INPUT** button on the remote control and switch to the HDMI IN input source.

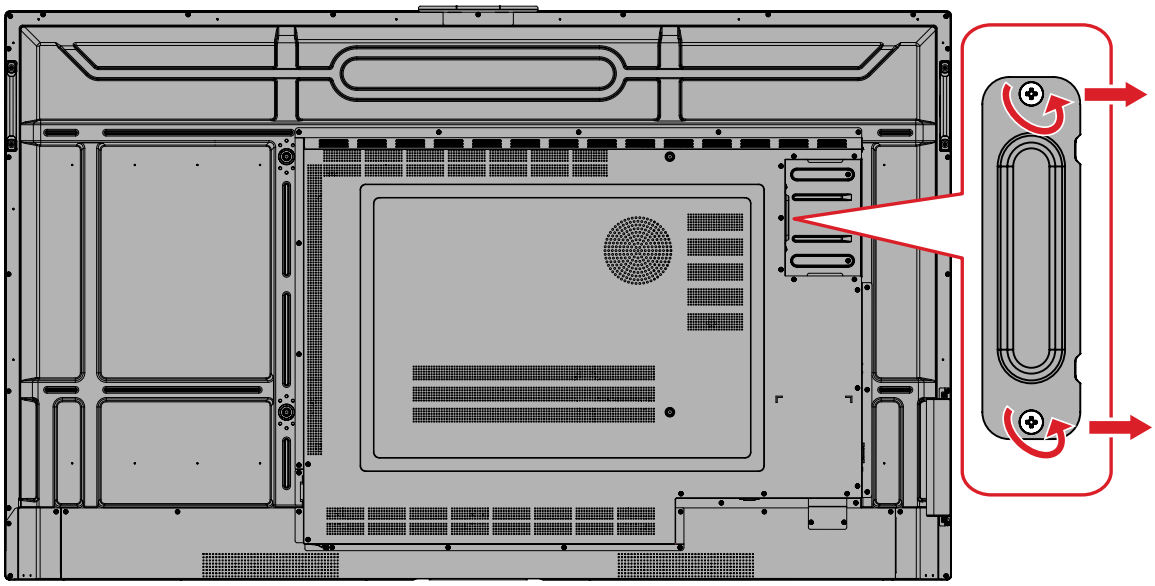
Optional Connections

NOTE: The following illustrations are for instructional purpose only. For details, please refer to the actual device.

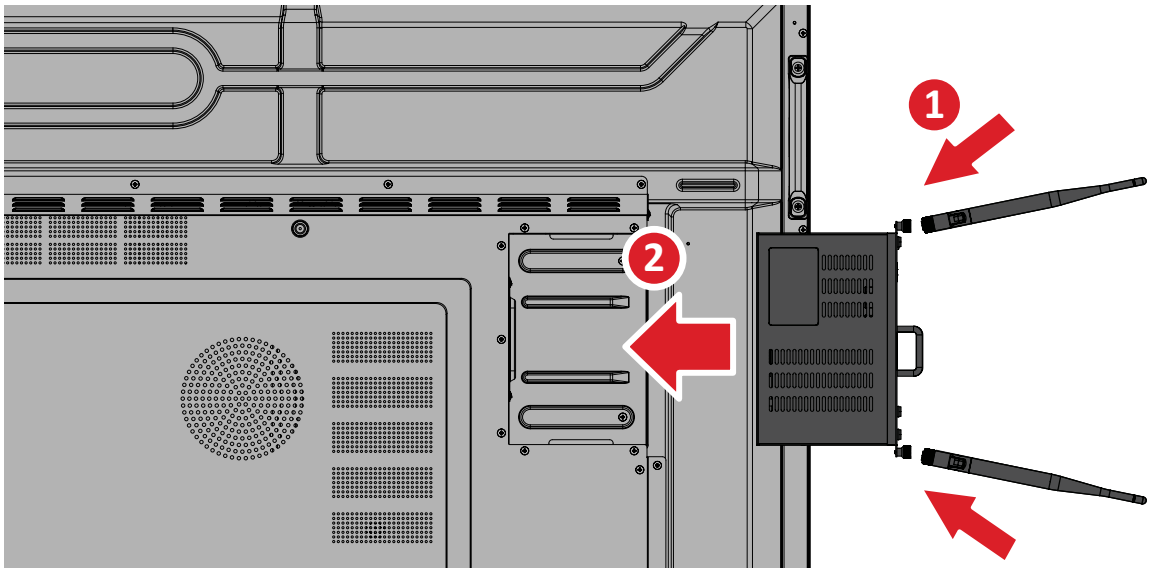
The ViewBoard comes with an **OPS Slot** as well as a **Wi-Fi Slot** for optional add-ons such as a slot-in PC (e.g., VPCP5 and VPC3X) or Wi-Fi card (e.g., VB-WIFI-004 and VB-WIFI-0006).

Slot-in PC (OPS Slot) Installation

1. Remove the **OPS Slot** cover of the ViewBoard.



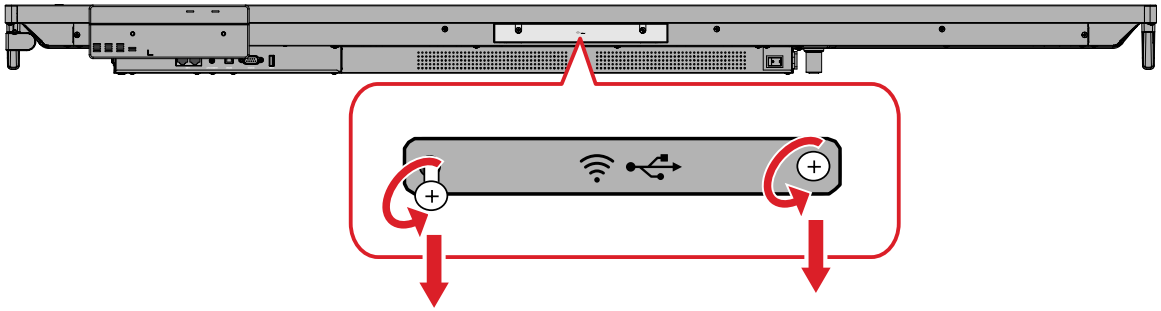
2. Carefully insert the slot-in PC into the **OPS Slot** of the ViewBoard.



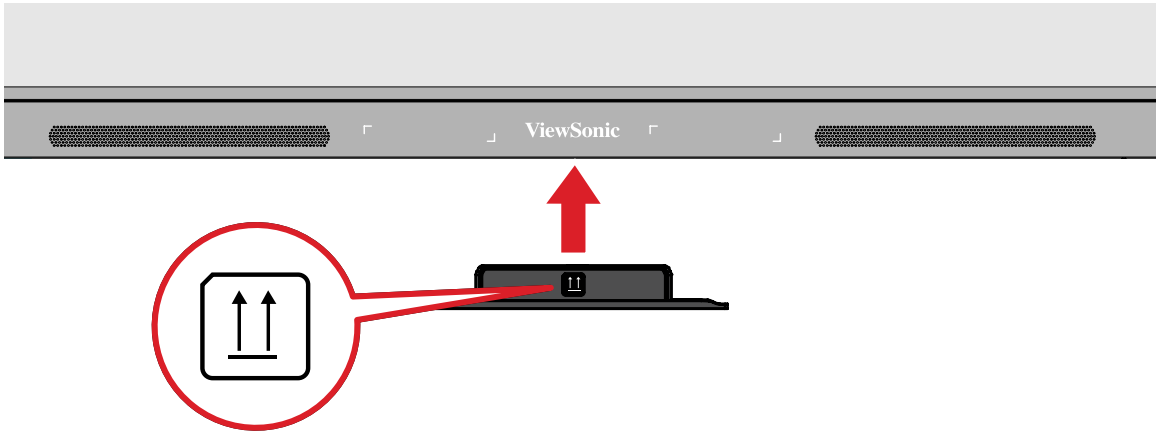
3. Secure the slot-in PC to the ViewBoard.

Wi-Fi Card (Wi-Fi Slot) Installation

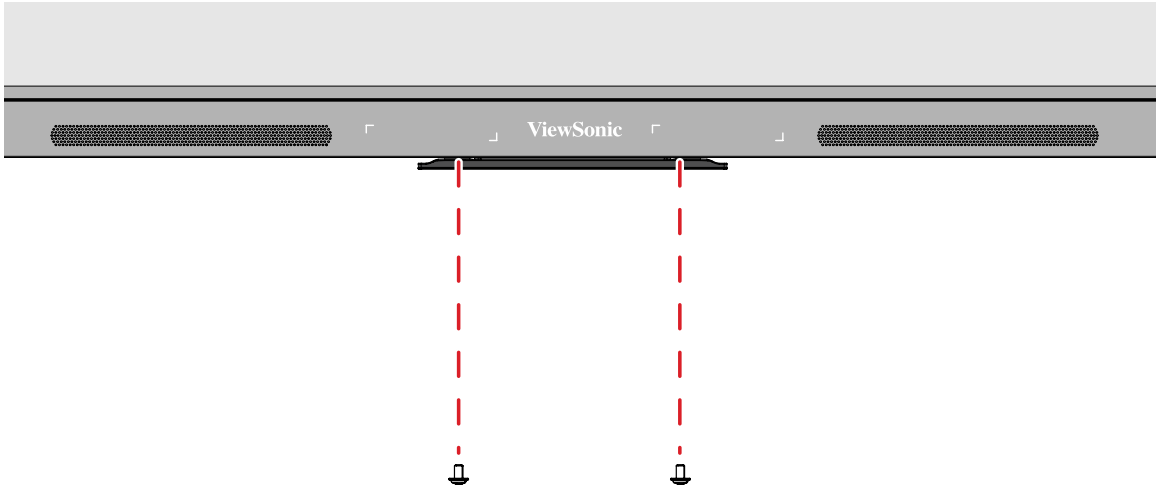
1. Remove the **Wi-Fi Slot** cover of the ViewBoard.



2. Carefully insert the slot-in Wi-Fi card into the **Wi-Fi Slot** of the ViewBoard.



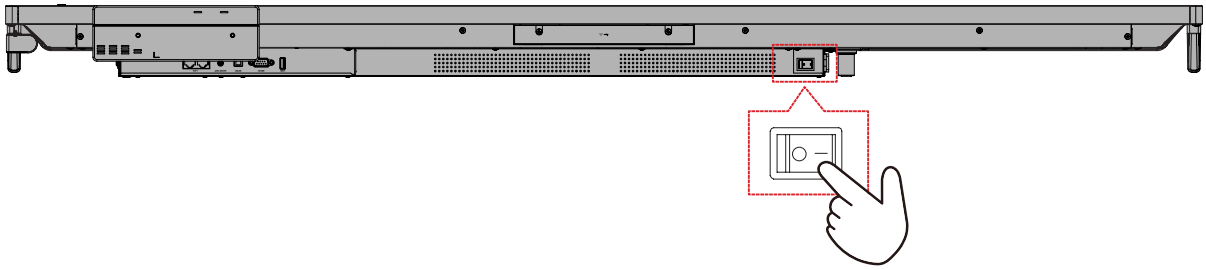
3. Secure the slot-in Wi-Fi card to the ViewBoard.



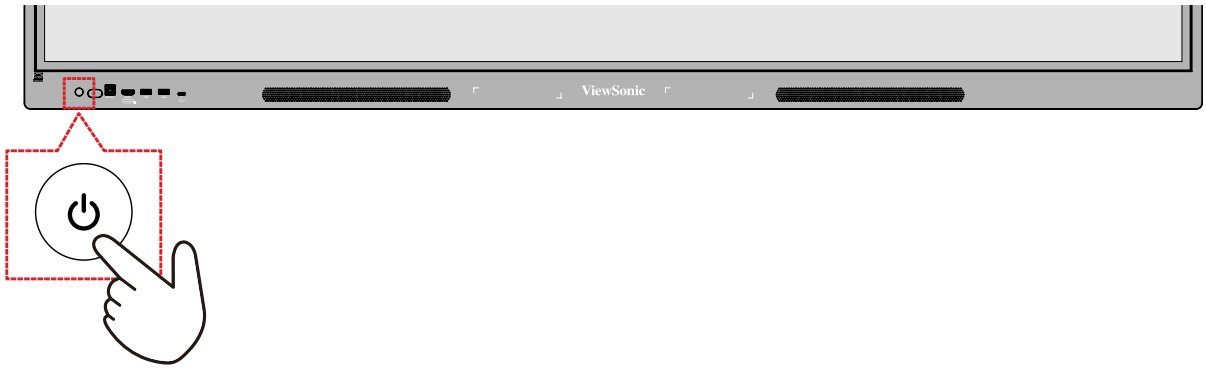
Using Your ViewBoard

Turning On/Off the ViewBoard

1. Make sure the power cord is connected, plugged into a power outlet, and the Power Supply Switch is in the “on” position.



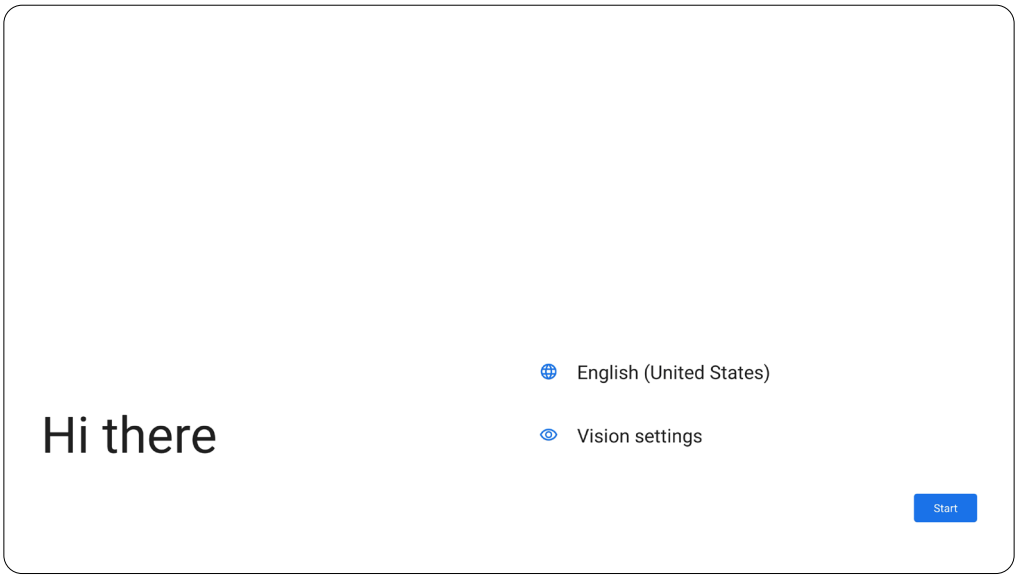
2. Press the **Power** button to turn on the ViewBoard.



3. To turn the ViewBoard off, press and hold the **Power** button.

Initial Launch Setup

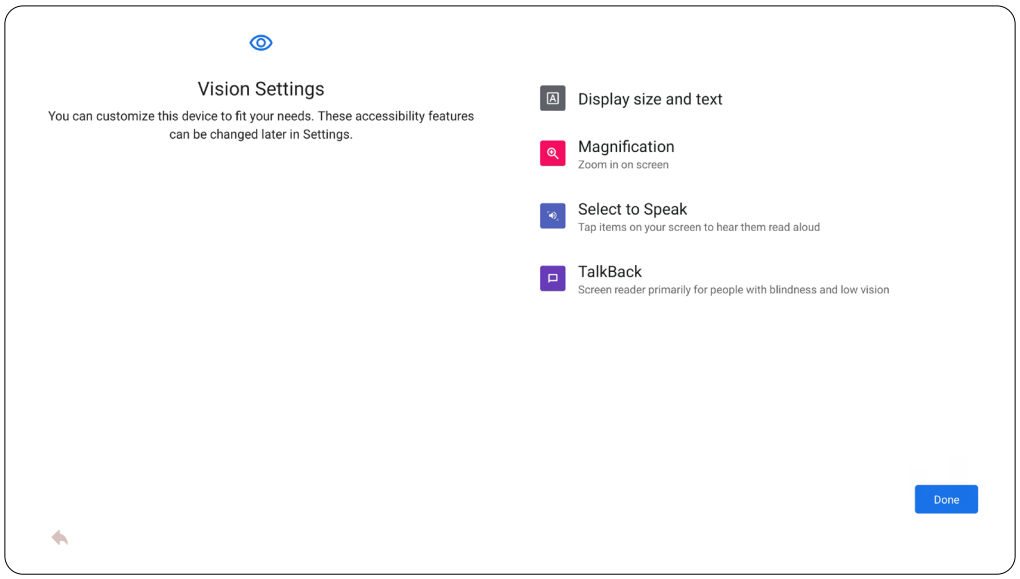
When you first turn on your ViewBoard, an initial setup wizard will launch.



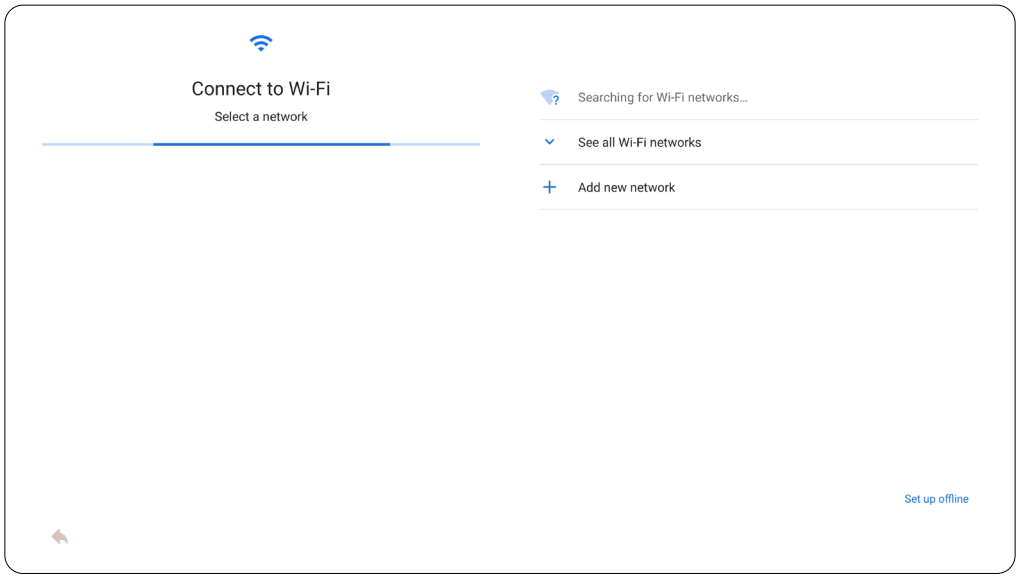
1. Choose your preferred Language.



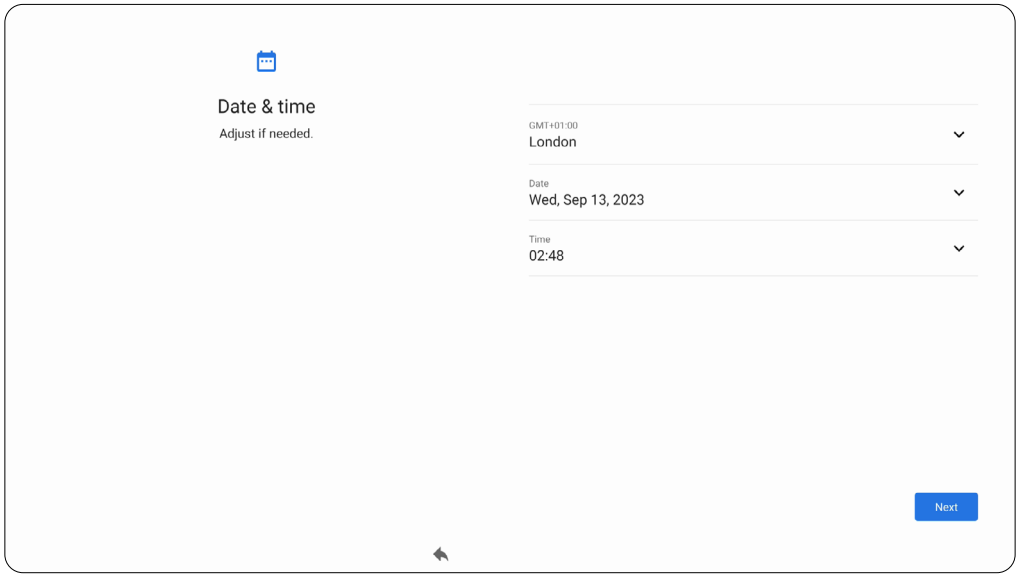
2. Adjust accessibility features as needed.



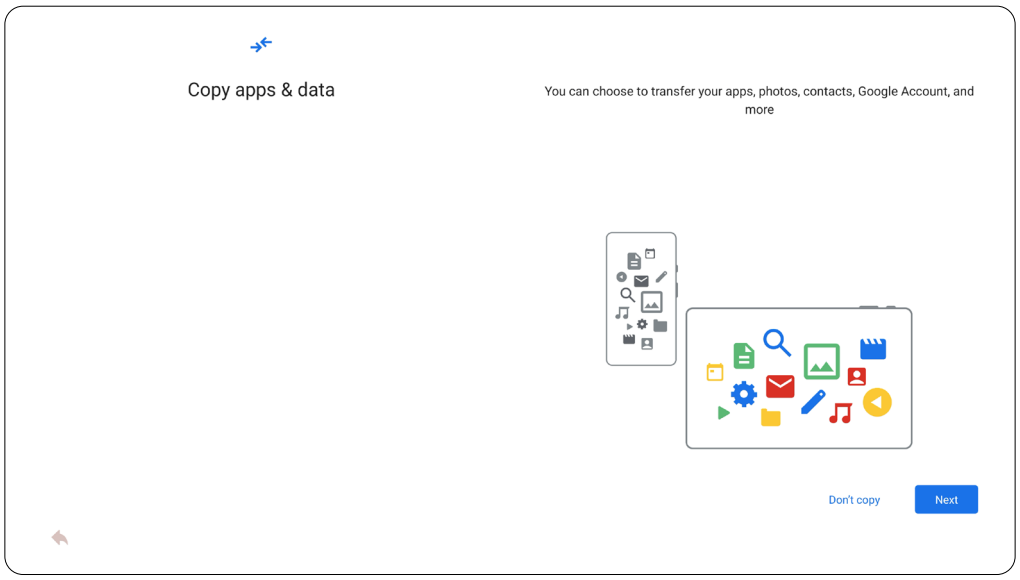
3. Setup and connect to a network.



4. Set and adjust the Date and Time as needed.

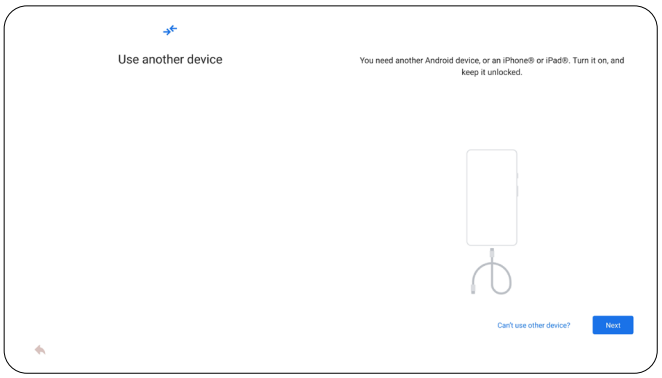


5. Copy your apps and data from another device to the ViewBoard.

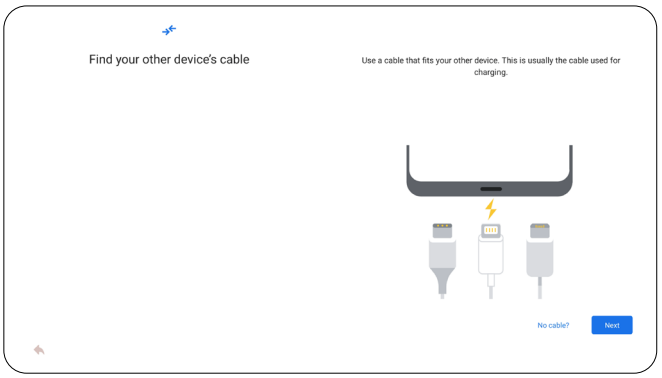


- If you want a fresh start, tap **Don't copy**.
- To start copying and transferring your apps and data, tap **Next**.
  - » If you use a USB cable to copy and transfer data, connect the cable to your devices and follow the on-screen directions to start transfer.
  - » If you don't have a cable, tap **No cable?** to start transfer wirelessly.

NOTE: Before starting, make sure your another device is connected to power, turned on, and unlocked.

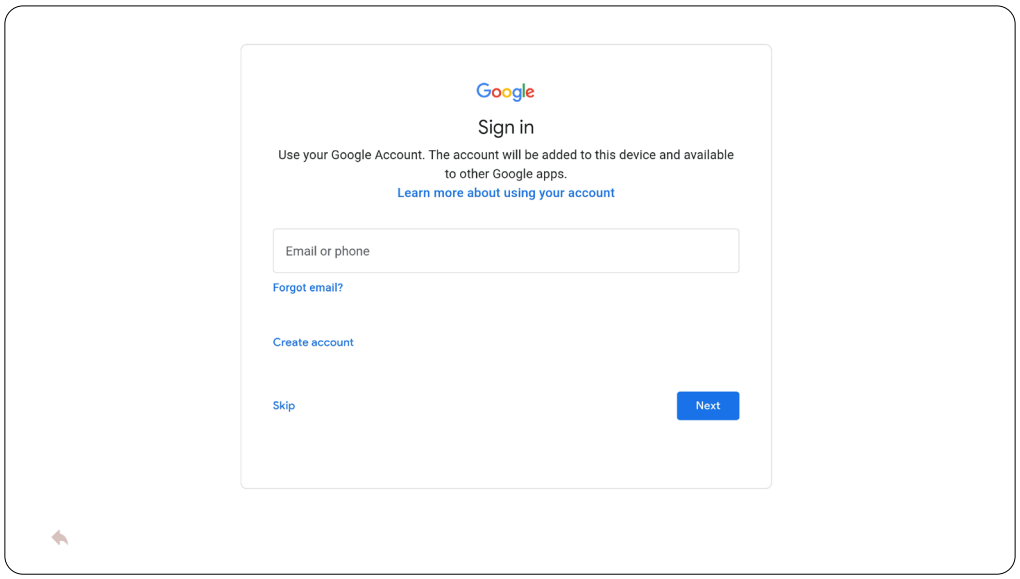


Transfering data with a USB cable

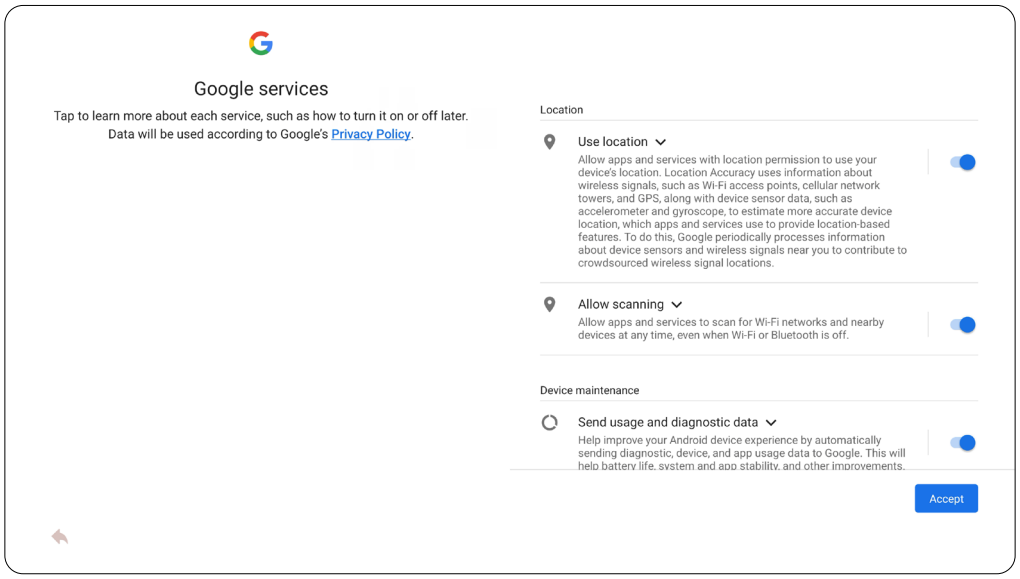


Transfering data wirelessly

6. Sign in with a Google account, or tap **Skip** to continue without signing in.

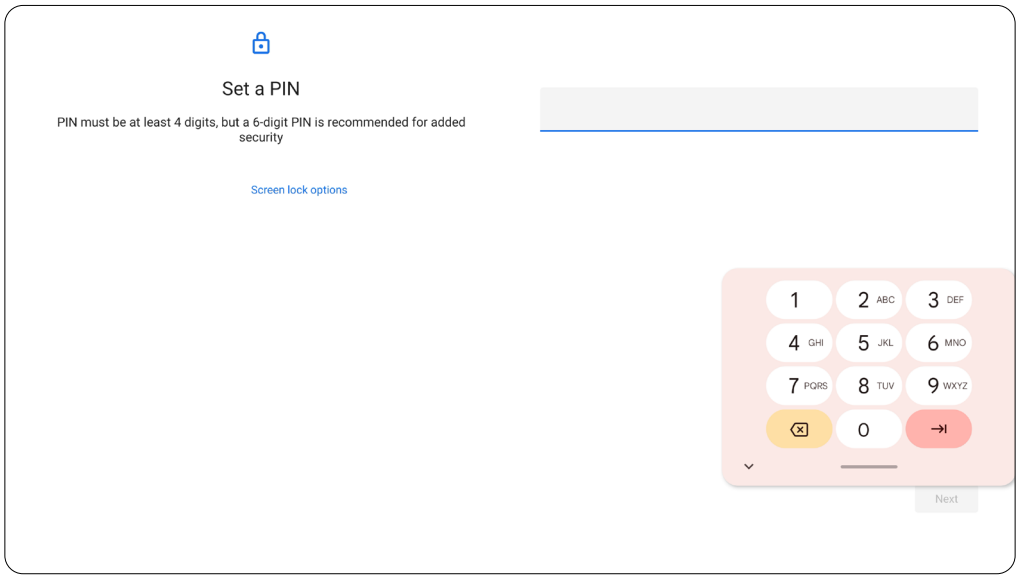


7. Accept or decline the Google services.

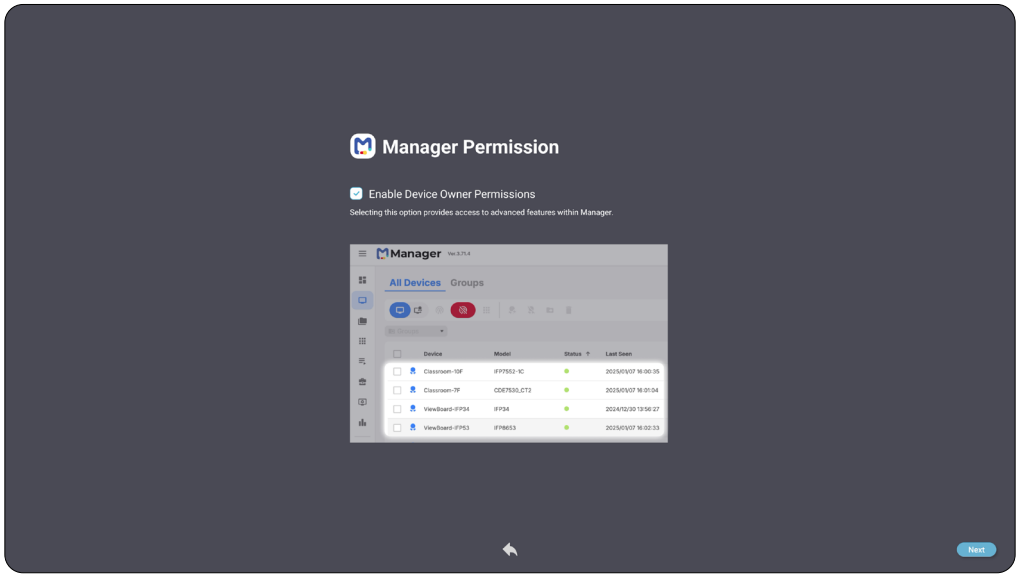


8. Set a PIN to setup a Screen lock. Then, tap **Next**, enter the PIN again, and tap **Confirm**.

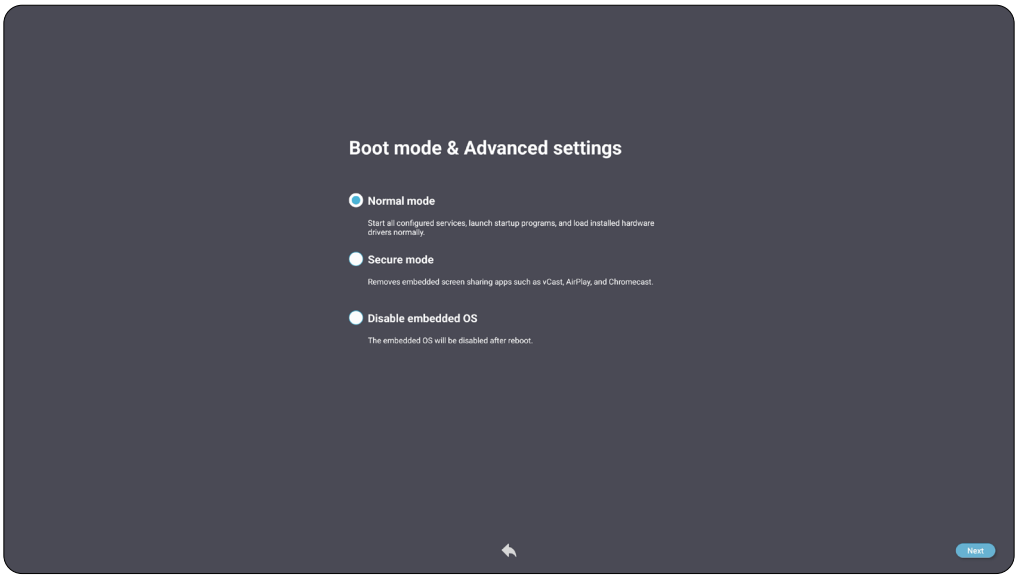
NOTE: Personal Identification Number (PIN) helps prevent unauthorized use of the ViewBoard. It is strongly recommended to set a pin for each of the owner profiles as only owners can manage access to the ViewBoard(s) and more.



9. Select **Enable Device Owner Permissions** to confirm the ownership and gain access to the advanced features on myViewBoard Manager. Then, tap **Next**.

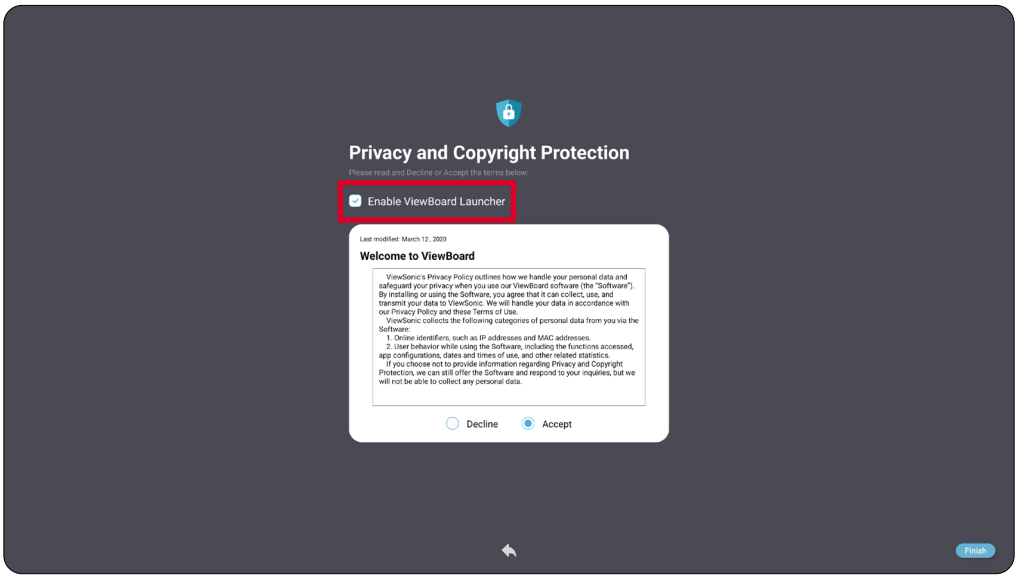


10. Select the preferred boot up mode, then tap **Next**.

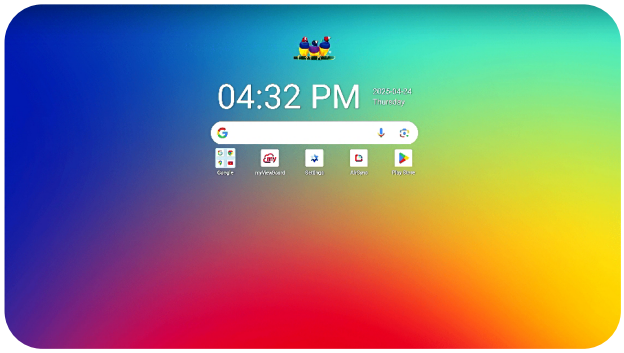


11. Select the preferred Operating System (OS) launcher.

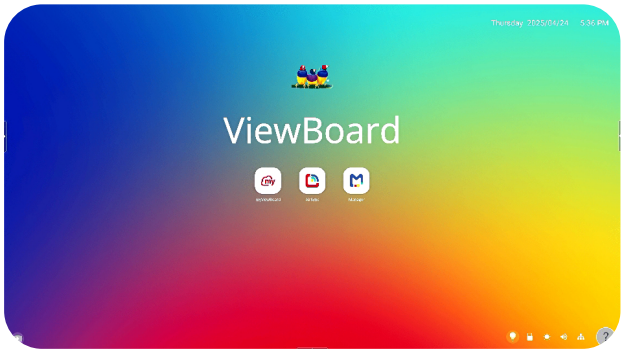
- Select **Enable ViewBoard Launcher** for the ViewBoard launcher scheme.
- Deselect **Enable ViewBoard Launcher** for the Android launcher scheme.



NOTE: You can always switch to the other launcher scheme later in the **System** settings. Go to “ViewBoard Settings” for more details.

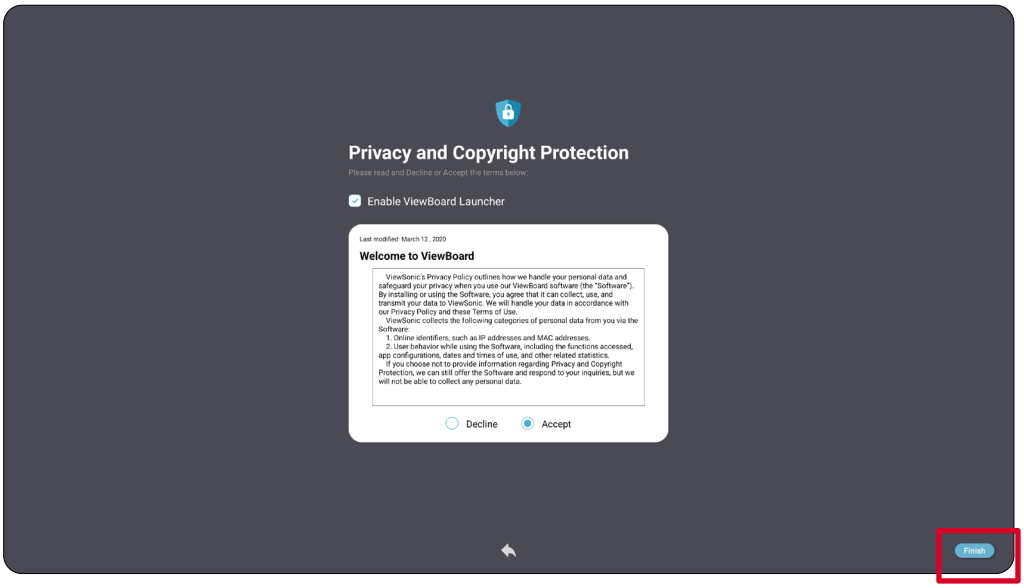


Android Launcher (Scheme A)



ViewBoard Launcher (Scheme B)

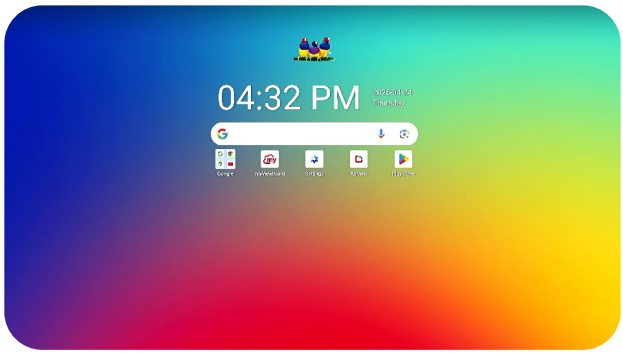
12. Accept or decline the Privacy and Copyright Protection terms. Then, tap **Finish** to complete the initial setup.



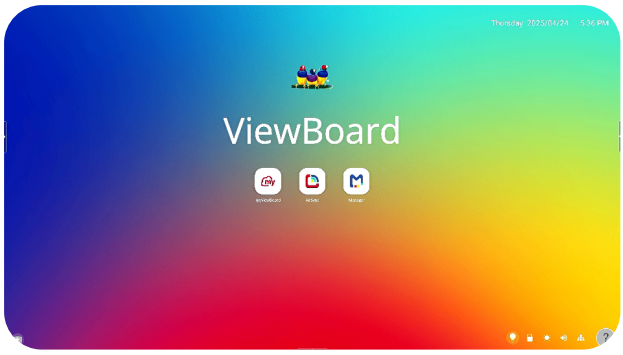
Home Screen

NOTE: The Home Screen layout varies between the two Launchers. Use the following ViewBoard Launcher example as a general reference only.

The IFP34 series' Home Screen layout can be customized by selecting from **Scheme A** and **Scheme B**.



Scheme A

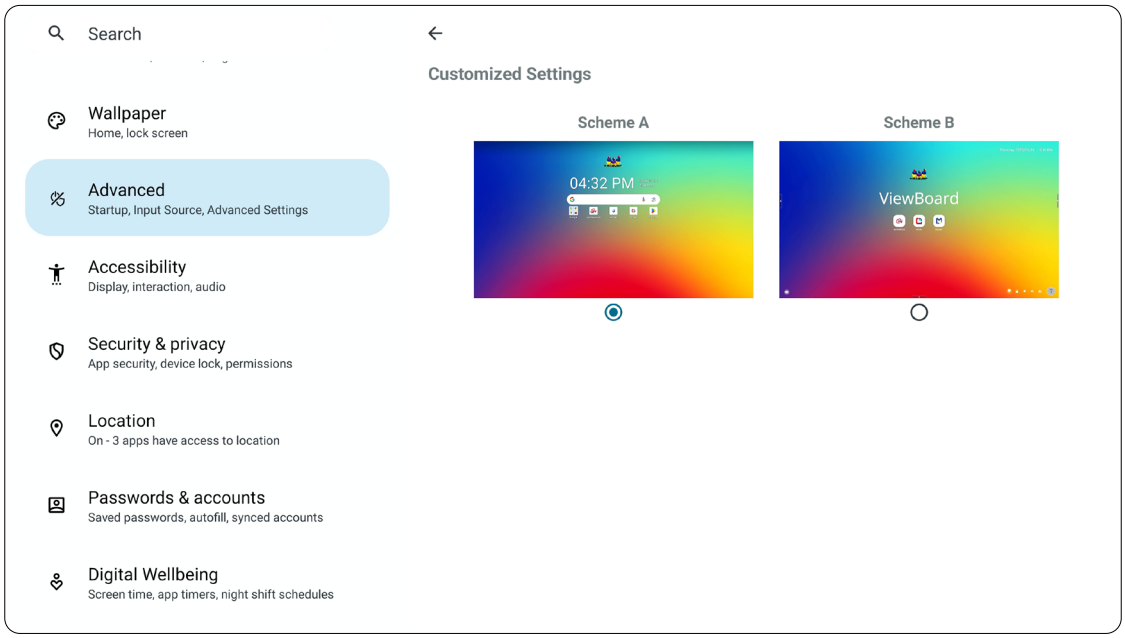


Scheme B

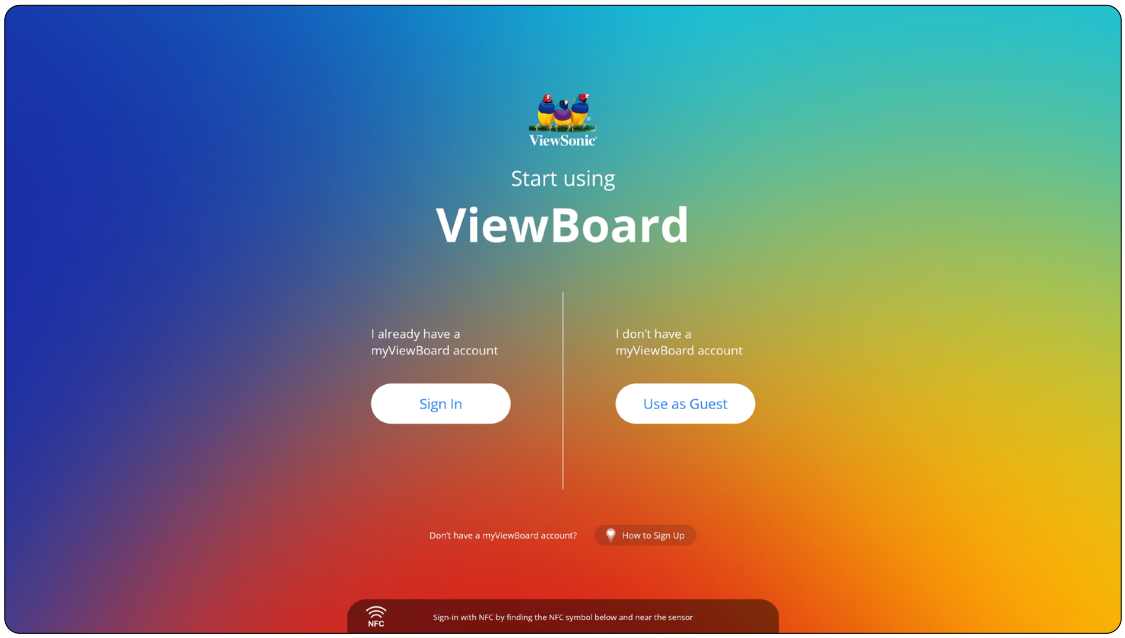
To change the scheme:

1. Go to: **Settings** > **Advanced** > **Launcher Scheme**

2. Select either **Scheme A** or **Scheme B**.

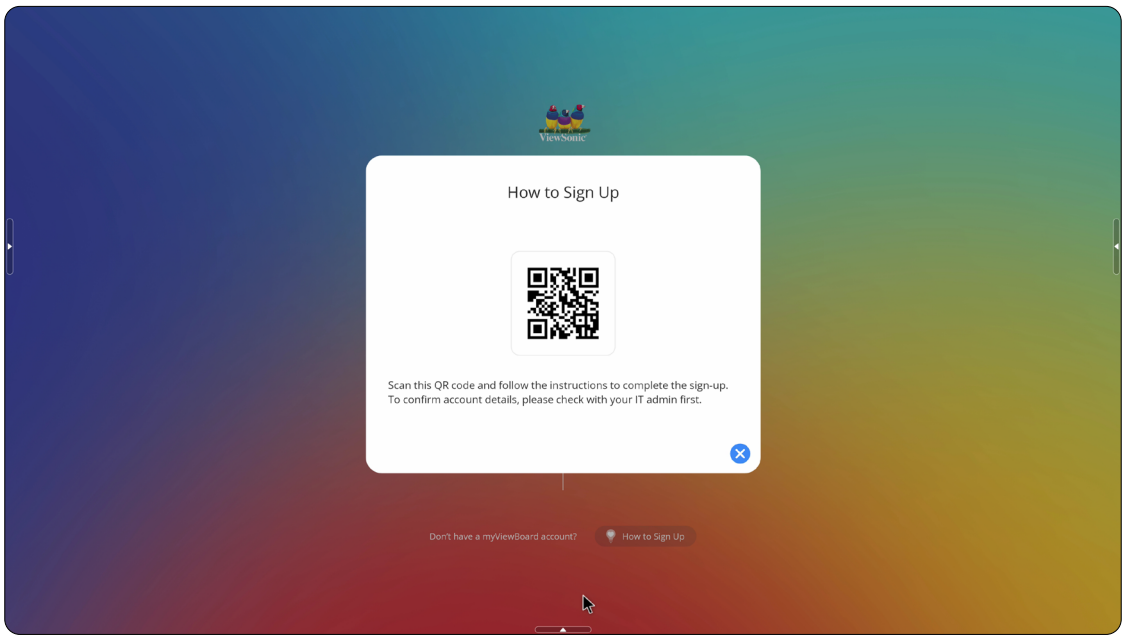


On the Home Screen select from **Use as Guest** and **Sign In**.



How to Sign Up

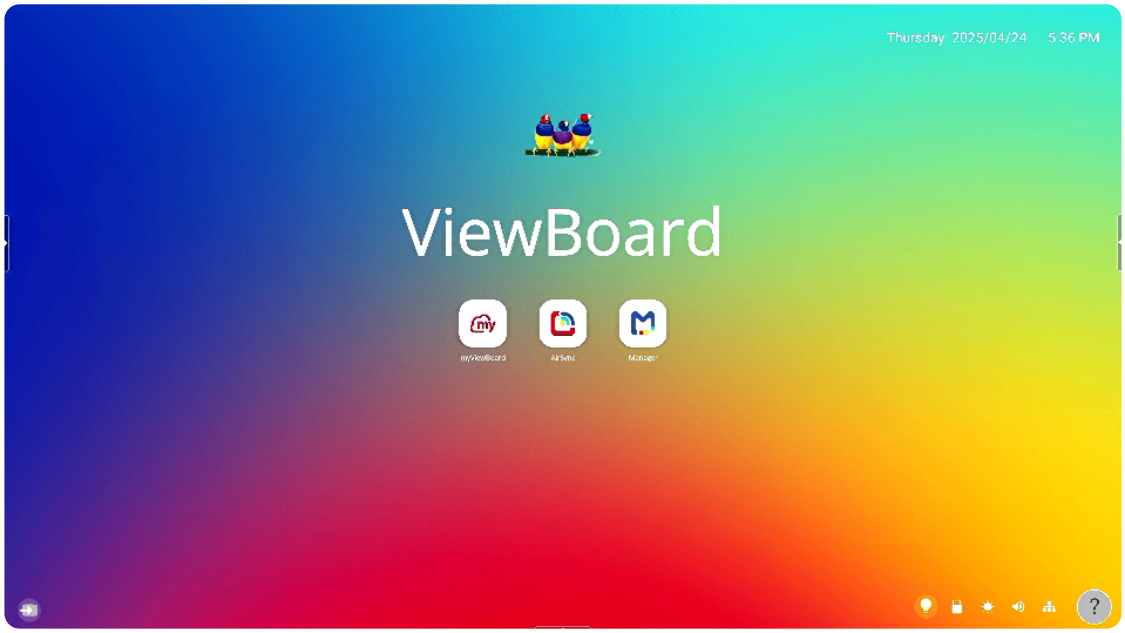
Select the **How to Sign Up** button at the bottom of the screen, then scan the QR code and follow the directions to log in.



Use as Guest

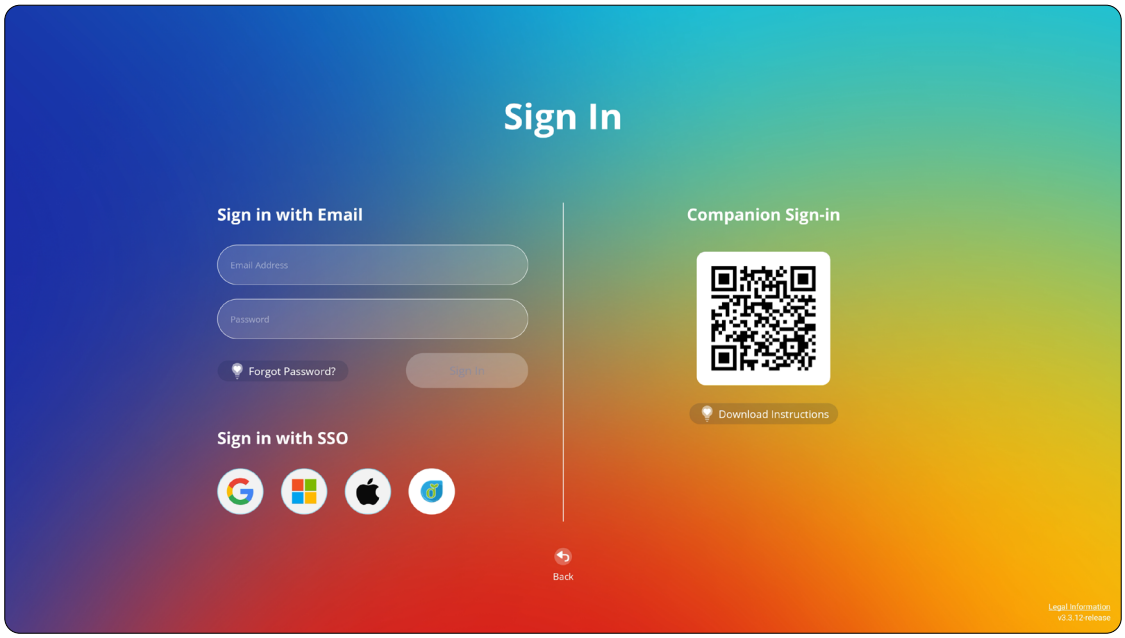
Select the **Use as Guest** button to log in with a guest account.

NOTE: Please note that user settings cannot be saved when logging in with a guest account.



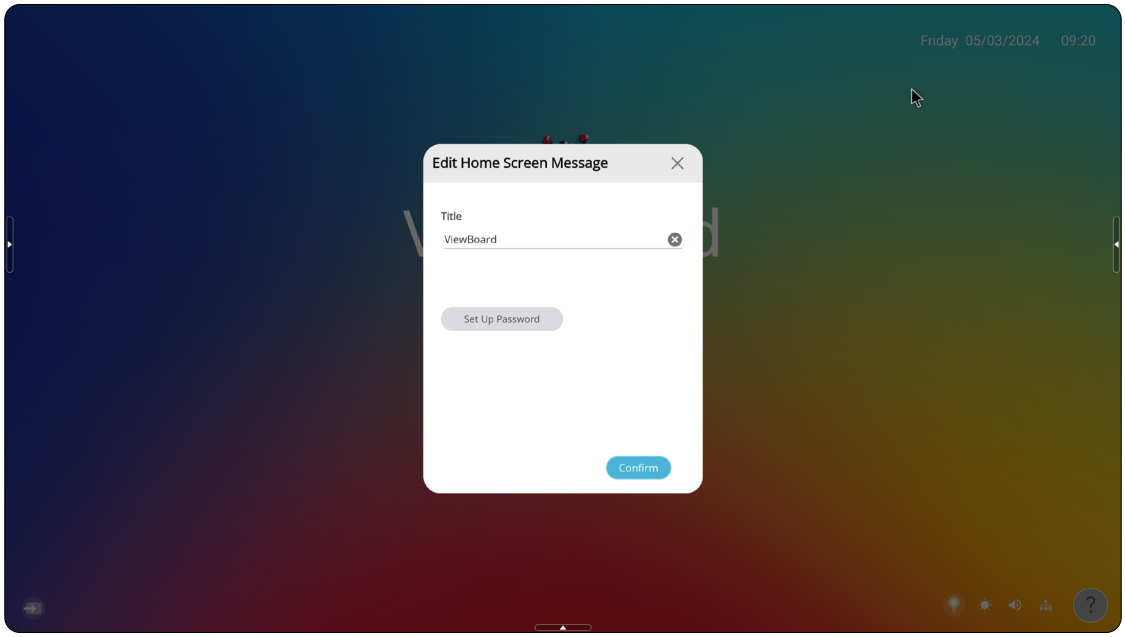
Sign In

Select the **Sign In** button to log in with various accounts.



Home Screen Message

The Home Screen message can be edited by selecting it directly on the Home Screen.

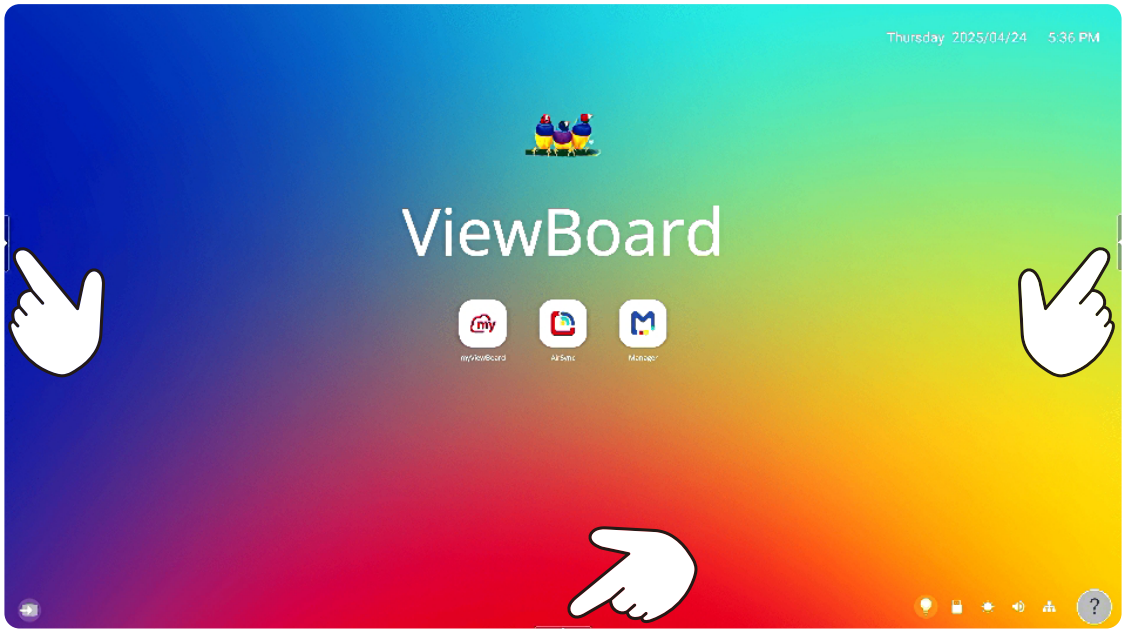


Additionally, a password can be set by selecting the **Set Up Password** button.

Toolbar

NOTE: The following illustrations are for instructional purpose only. For details, please refer to the actual device.

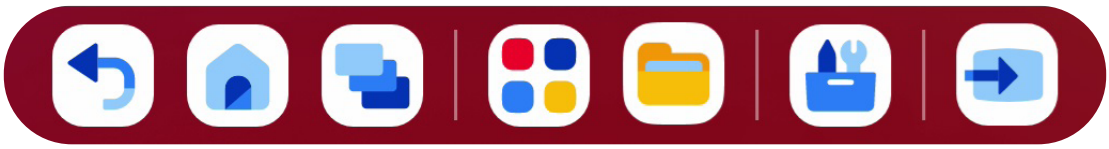
The Toolbar is where applications and tools can be found. Trigger icons are on the right, left, and bottom edge of the screen for quick access.



To launch an application or tool:

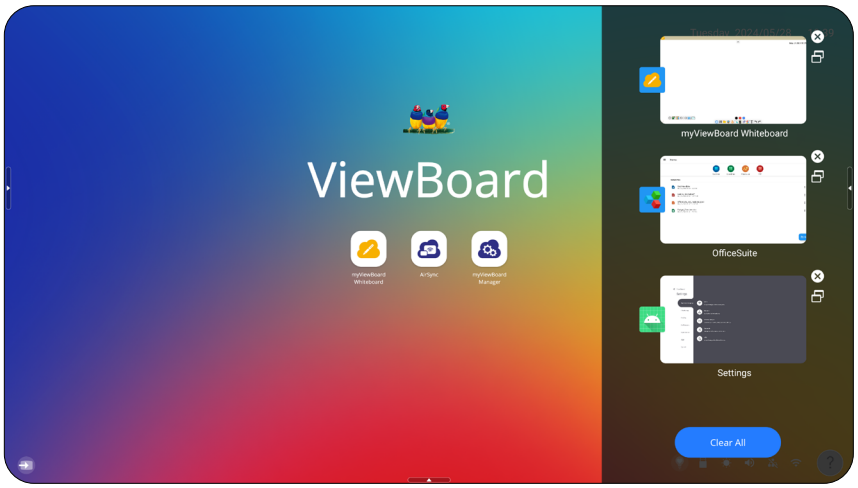
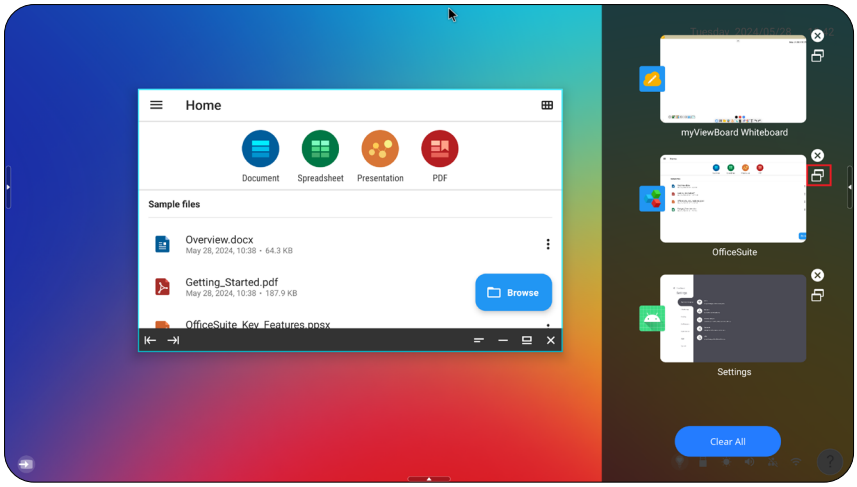
1. Tap a Toolbar trigger icon.

2. Tap on your desired application or tool.



NOTE: The default Toolbar setting is to be available for all input sources; however, users can go to: **Settings** > **Preference** > **Toolbar settings** to adjust the options: (1) Show side Toolbar, (2) Hide side toolbar, (3) Disable in all input sources.

Toolbar Icons

Icon	Description
Return	Return to the previous operation screen. **NOTE:** Only for the ViewBoard source.
Home	Return to the Home Screen.
Recent	Display all currently open applications.  Select the small frame to display in a PIP window.  **NOTE:** Selecting the “X” will close the application.
Applications	View all installed applications.
File Folder	Browse and open files.

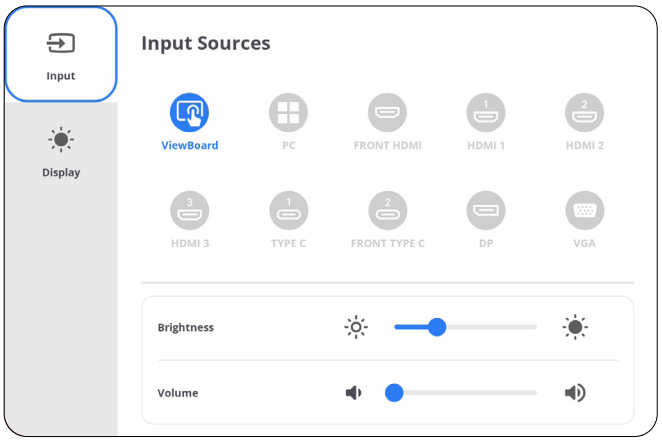
Icon	Description
Tools	Quickly view and adjust various frequently used tools.
Input Source	Select and change the input source signal.

NOTE: Marker will close when the Touch Pen is put back to the pen holder.

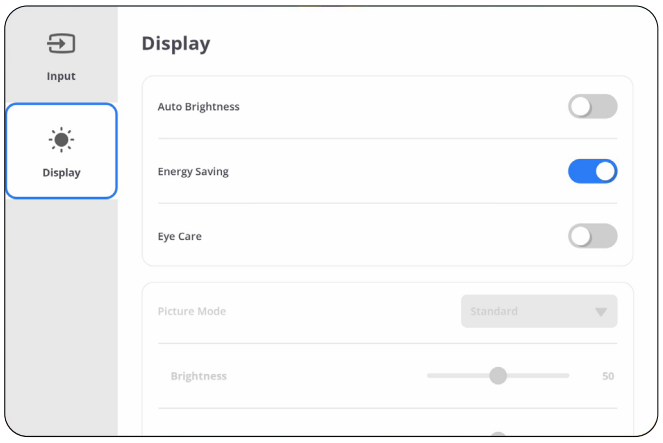


On-Screen Display (OSD) Menu - General Settings

Access **Input**, **Display,** and other general settings through the OSD Menu.

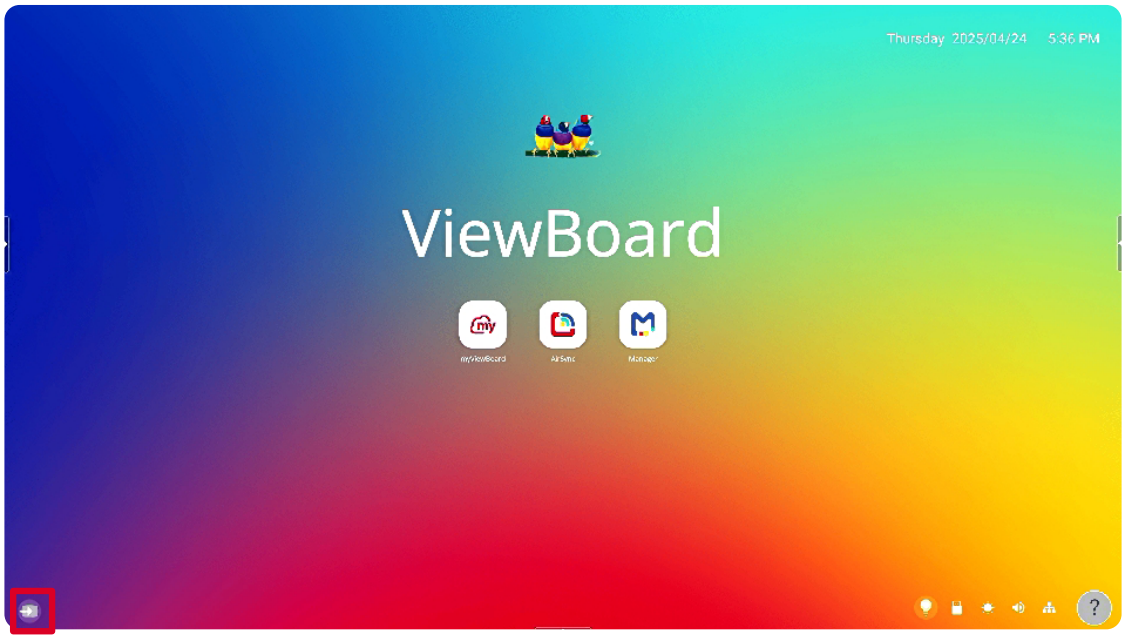


Input Settings

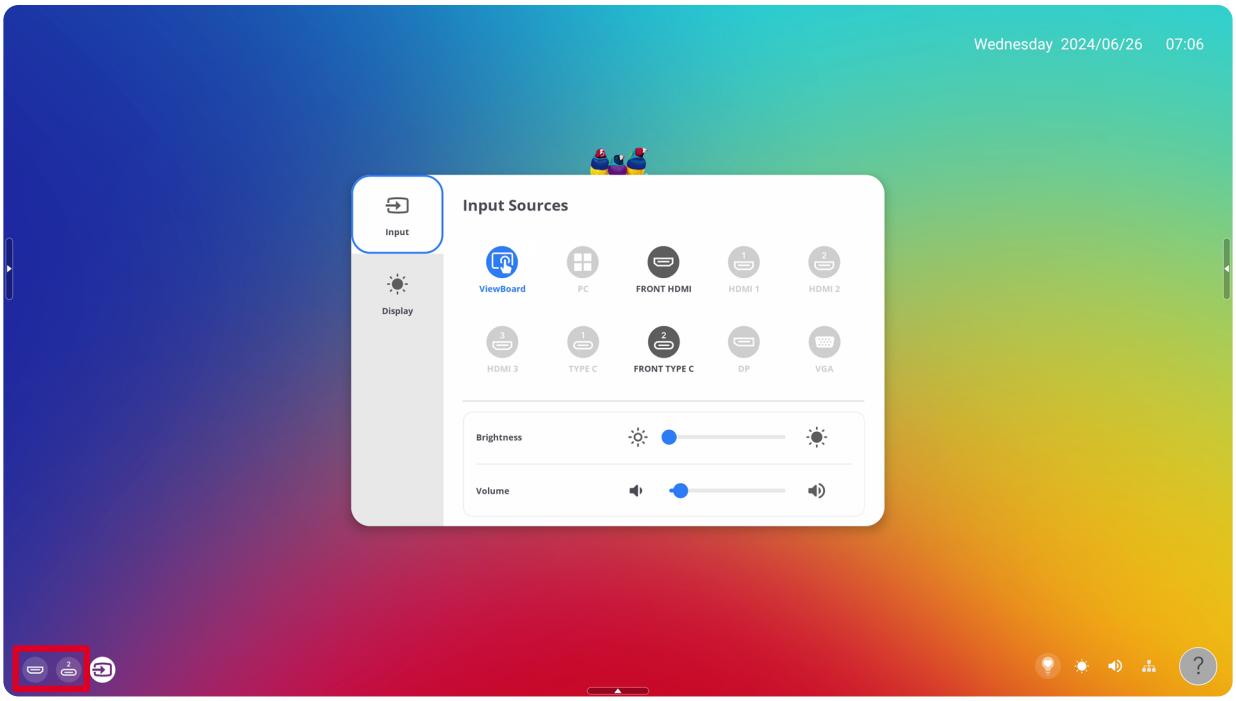


Display Settings

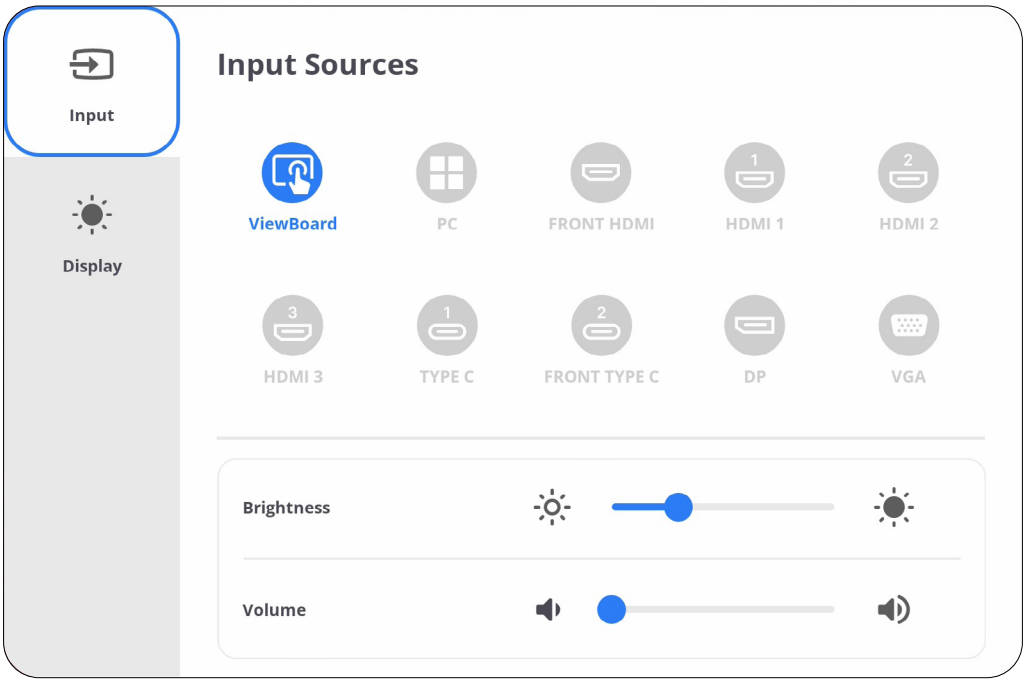
Open the OSD Menu by pressing **INPUT** on the remote control or tapping the **Input Source** icon in the bottom-left corner.



The **Input Sources** setting can also display by tapping the signal source icon.



Input Settings



To select an input source:

1. Press **INPUT** on the remote control or tap the **Input Source** icon to display the **Input Settings** menu.
2. Press ▼/▲/◀/▶ on the remote control to select the input source you want.

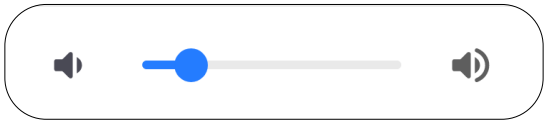
   NOTE: The PC source will only be visible when a slot-in computer is installed.
3. Press **ENTER** on the remote control, or tap the desired input source.
4. Press **BACK** on the remote control, or tap a blank area outside of the menu to exit.

To adjust the brightness:



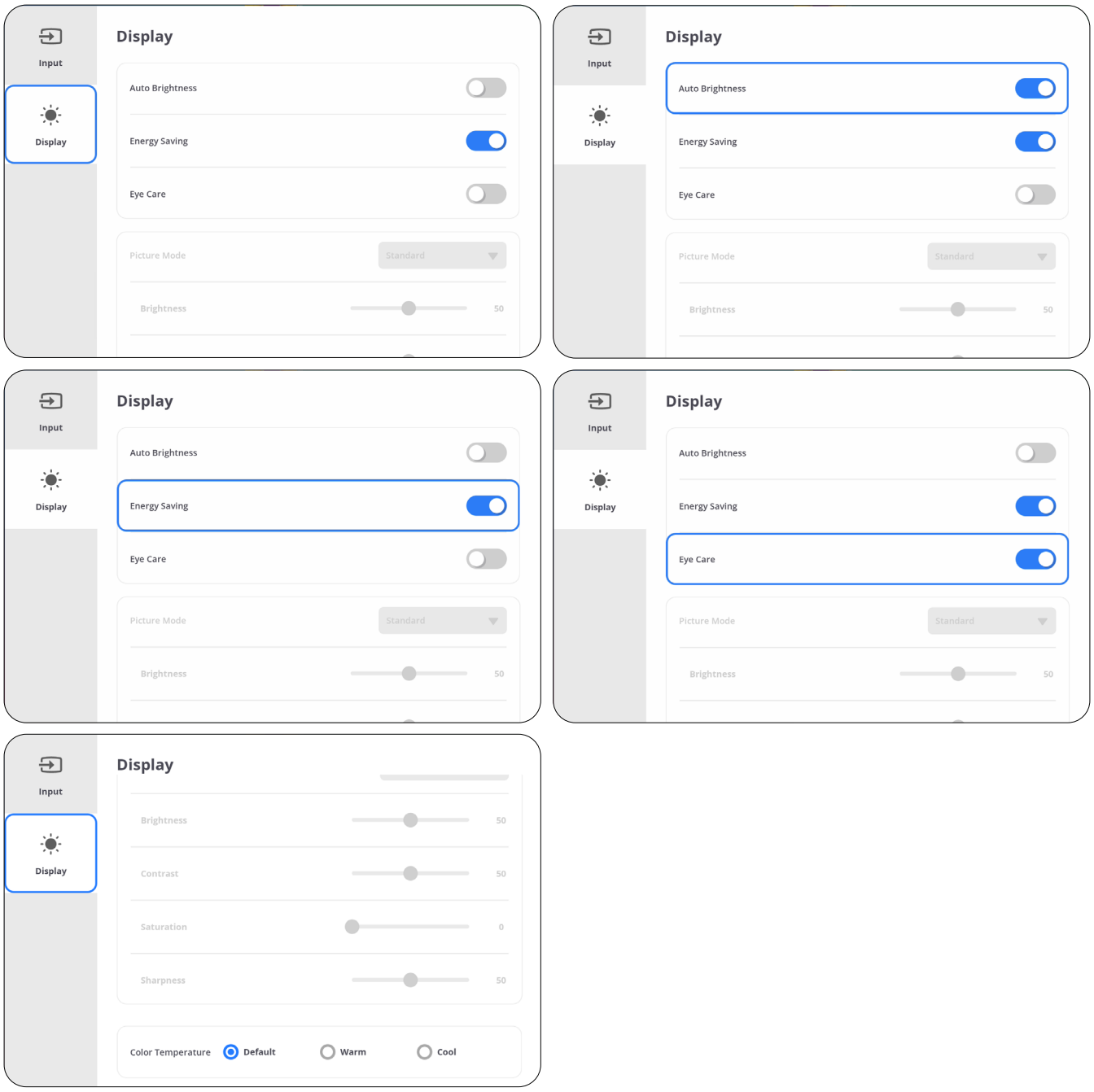
1. Press **INPUT** on the remote control or tap the **Input Source** icon to display the **Input Settings** menu.
2. Drag the brightness slider directly to adjust the backlight value.
3. Press **BACK** on the remote control, or tap a blank area outside of the menu to exit.

To adjust the volume:



1. Press **INPUT** on the remote control or tap the **Input Source** icon to display the **Input Settings** menu.
1. Drag the volume slider directly to adjust the value, or press **Volume Up/Down** on the remote control to adjust. Additionally, pressing **Mute** on the remote control will mute/unmute the volume.
2. Press **BACK** on the remote control, or tap a blank area outside of the menu to exit.

Display Settings



To adjust the display settings:

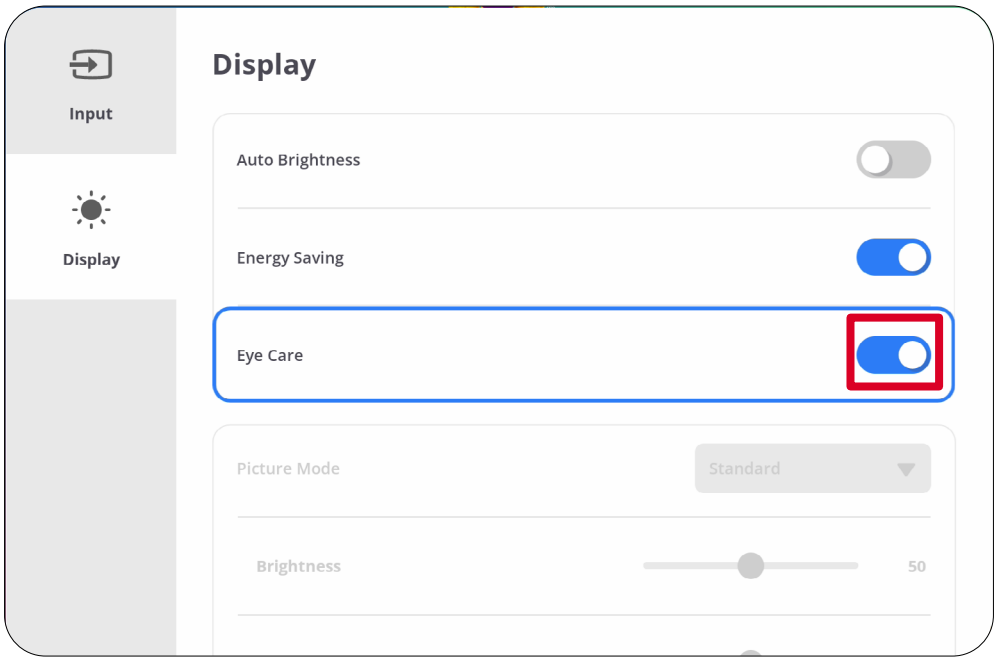
1. Press **INPUT** on the remote control or tap the **Input Source** icon to display the **Input Settings** menu. Then select the **Display** tab.
2. Press ▼/▲/◀/▶ on the remote control to select the menu option you want.
3. Press **ENTER** on the remote control to confirm or press ◀/▶ to adjust the menu option. Additionally, tap/adjust the menu option directly.
4. Press **BACK** on the remote control, or tap a blank area outside of the menu to exit.

Display Settings - Menu Options

<table>
<tr><th>Item</th><th>Description</th></tr>
<tr><td>Auto Brightness</td><td>Automatic brightness adjustment. Adjusts maximum brightness according to ambient light levels.</td></tr>
<tr><td>Energy Saving</td><td>Enable to reduce power consumption.</td></tr>
<tr><td>Eye Care</td><td>Adjusts the filter that blocks high-energy blue light for a more comfortable viewing experience.</td></tr>
<tr><td>Picture Mode</td><td>Select a predefined picture setting.
<table>
<tr><th>Mode</th><th>Description</th></tr>
<tr><td>Standard</td><td>Default picture mode.</td></tr>
<tr><td>Bright</td><td>Maximizes the brightness of the display. This mode is suitable for environments where extra-high brightness is required (e.g., well-lit rooms).</td></tr>
<tr><td>Soft</td><td>A high brightness level with lower contrast level.</td></tr>
<tr><td>Custom</td><td>Customize the picture settings.</td></tr>
</table></td></tr>
<tr><td>Brightness</td><td>Adjust the background black levels of the screen.</td></tr>
<tr><td>Contrast</td><td>Adjusts the difference between the image background (black level) and the foreground (white level). Use this to set the peak white level after you have previously adjusted the Brightness setting to suit your selected input and viewing environment.</td></tr>
<tr><td>Saturation</td><td>Adjust the amount of color present.</td></tr>
<tr><td>Sharpness</td><td>A high value results in a sharper picture; a low value softens the picture.</td></tr>
<tr><td>Color Temperature</td><td>Adjust the color temperature value.</td></tr>
</table>

Eye Care

Eye Care blocks high-energy blue light for a more comfortable viewing experience.



Calculating Breaks

When viewing screens for extended periods, it is recommended to take periodic breaks from viewing. Short breaks of at least 10 minutes are recommended after one hour of continuous viewing.

Taking shorter, more frequent breaks are generally more beneficial than longer, less frequent breaks.

Focus Fatigue (20-20-20 Rule)

To reduce the risk of eye fatigue by constantly looking at the screen, look away from the screen at least every 20 minutes and gaze at a distant object (at least 20 feet away) for at least 20 seconds.

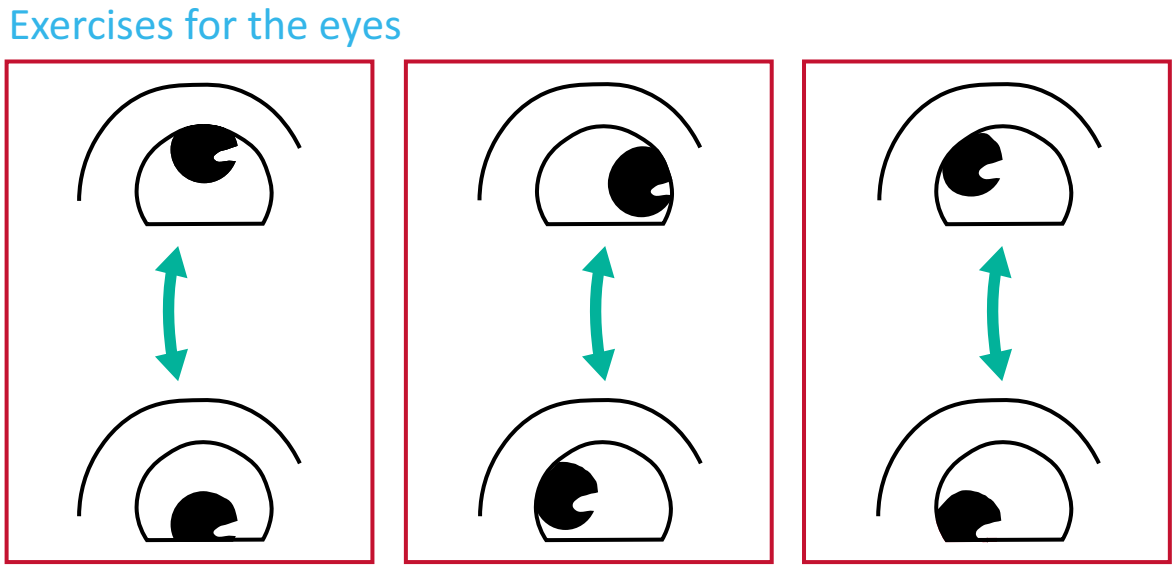
Looking at Distant Objects

While taking breaks, users can further reduce eye strain and dryness by focusing on objects that are further away from them for 10-15 seconds, then gaze at something up close for 10-15 seconds. Repeat this up to 10 times. This exercise reduces the risk of your eyes' focusing ability to "lock up" after prolonged computer work.

Eye and Neck Exercises

Eye Exercises

Eye exercises can help minimize eye strain. Slowly roll your eyes to the left, right, up, and down. Repeat as many times as needed.



(1) Keep the body and the head upright. Move the eyes up to look at the ceiling, then turn down to look at the floor.

(2) Move the eyes left and right slowly to look at objects on the two sides.

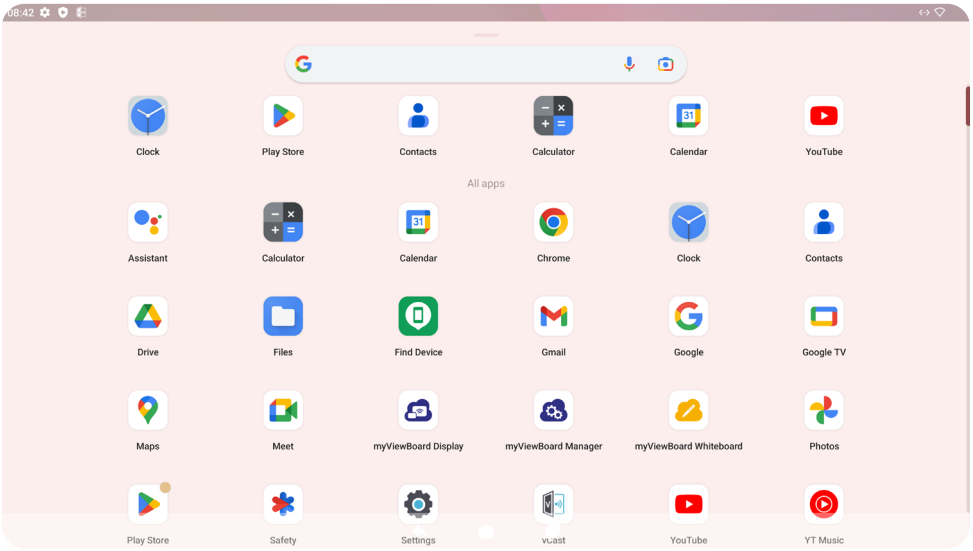
(3) Move the eyes to look at objects at the right upper direction and then right lower direction. Repeat for the left upper and left lower directions.

Neck Exercises

Neck exercises can also help minimize eye strain. Relax your arms and let them hang at your sides, bend forward slightly to stretch the neck, turn your head to the right and to the left. Repeat as many times as needed.

Applications

Much like any smart phone or tablet you can install several different applications.



Applications can be accessed from the Toolbar, directly from the Home Screen via shortcuts, or by selecting the **All Apps** icon.

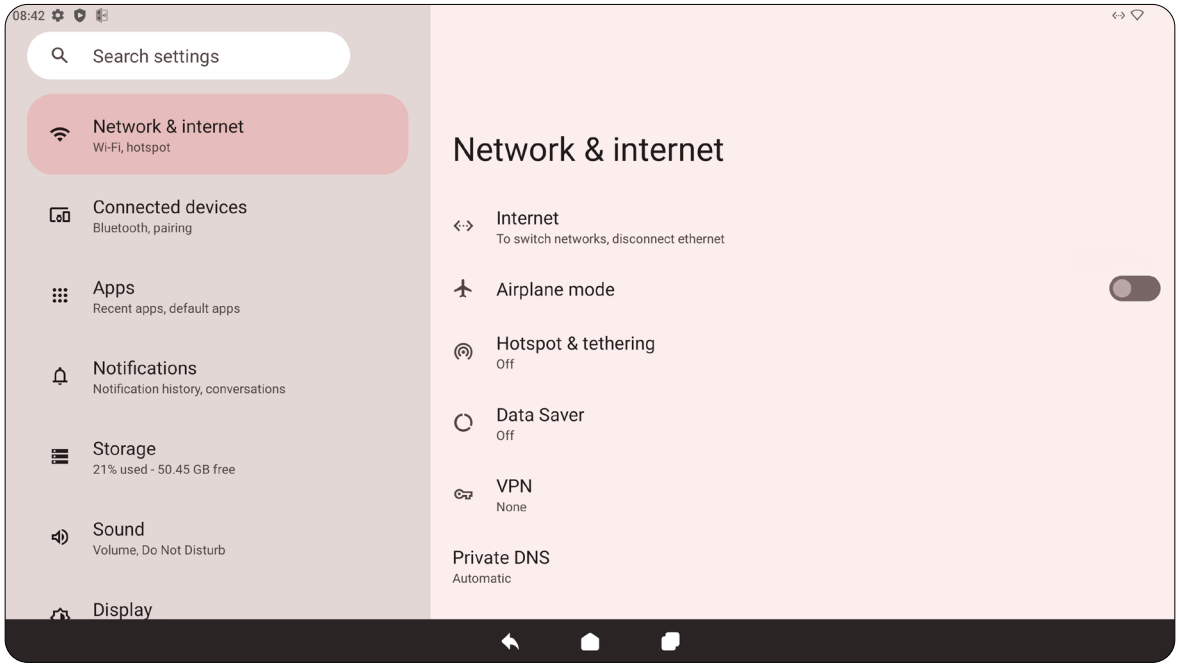
NOTE: The following included application descriptions are not a comprehensive list and will vary by the user.

Icon	Description
	AirSync Wirelessly mirror screens to a larger display.
	myViewBoard Manager Remotely manage multiple installations of ViewSonic devices.
	myViewBoard Whiteboard A digital whiteboarding application.
	Settings Access the System Settings.
	vCast Working with ViewBoard Cast software, receive vCastSender laptop screens (Windows/Mac/Chrome) and mobile (iOS/Android) users' screens, photos, videos, annotations, and camera(s).

ViewBoard Settings

Network & Internet

Check current connection status, set up and manage Wi-Fi, Ethernet, **VPN**, and wireless **Hotspot**.



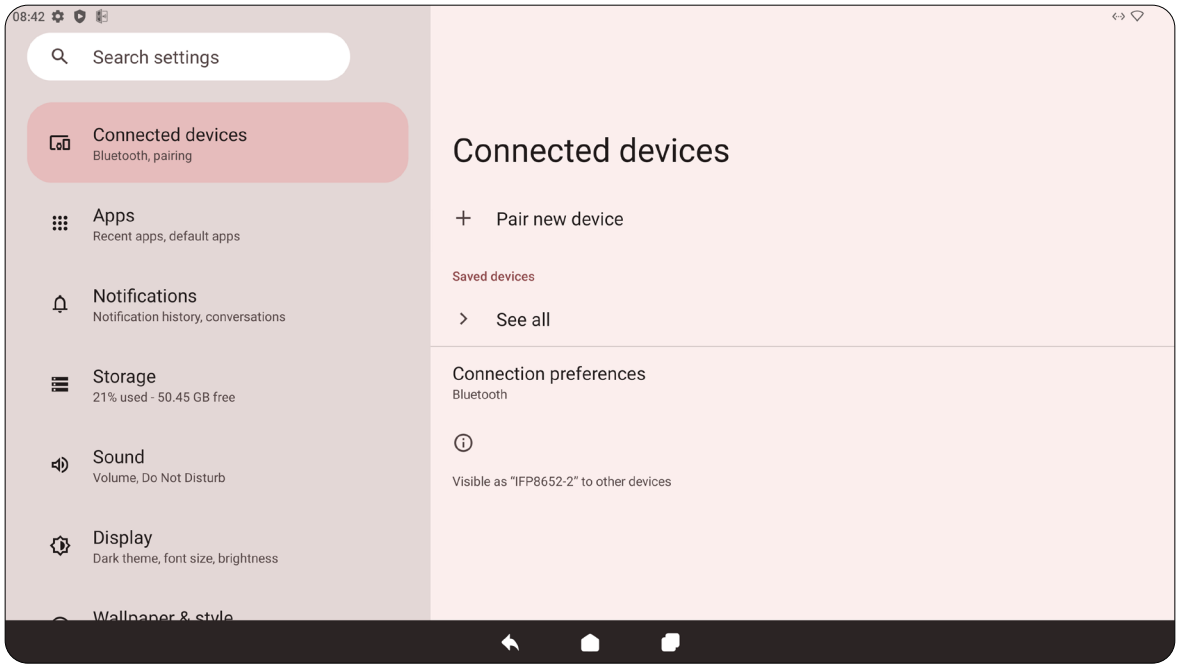
Item	Description
Internet	Set up and manage Ethernet and Wi-Fi connection, as well as Network preferences.
Airplane Mode	When enabled, all wireless communication will be turned off.
Hotspot & Tethering	Set and share your internet connection with other devices.
Data Saver	When enabled, most apps and services will get background data via an internet connection. Active apps will not be affected.
VPN	Set up and manage Virtual Private Networks.
Private DNS	Maintain an Automatic Private DNS or set one up manually for security and privacy.

NOTE:

- Wi-Fi, Hotspot, and Bluetooth settings will appear when an optional Wi-Fi card (e.g., VB-WIFI-004) has been installed in the Wi-Fi Slot.
- Ethernet will take priority when both Ethernet and Wi-Fi are enabled.
- The device can connect to the Internet when Hotspot is enabled.

Connected Devices

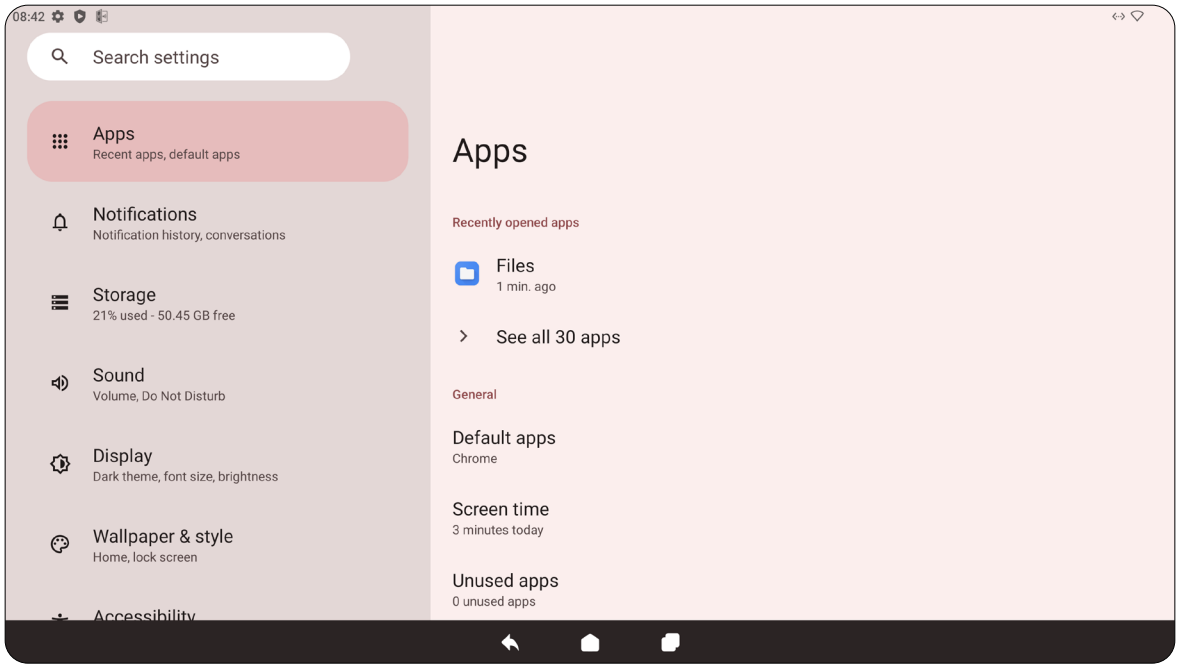
Set up and manage Bluetooth connections, saved devices, and connection preferences for Bluetooth, Casting, and Print Services.



Item	Description
Pair New Device	Enable Bluetooth to search for and connect to a Bluetooth device.
Saved Devices	View all previously connected Bluetooth devices. **NOTE:** Bluetooth will turn on.
Connection Preferences	View Bluetooth, Cast, and Print Service preferences and share files with nearby devices.

Apps

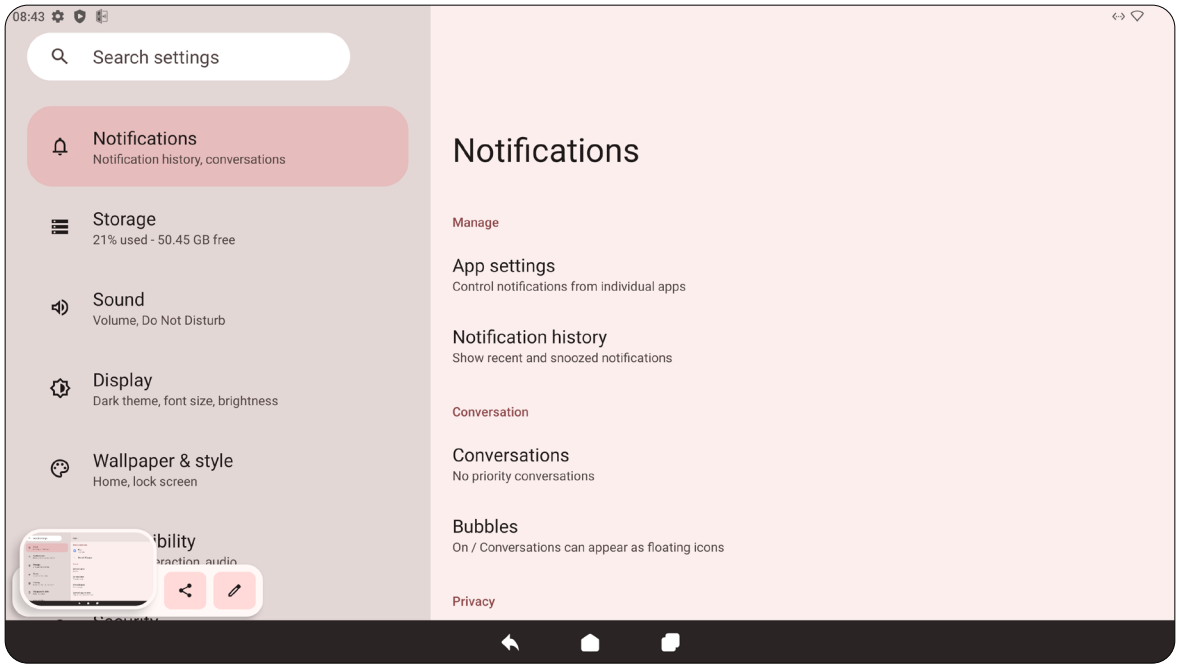
View any running or installed applications. Tap on them for more detailed information and options.



Item	Description
Recently Opened Apps	Any recently used applications will be listed here.
Default Apps	Set default applications for certain uses (e.g., default browser application).
Screen Time	Displays the total amount of time the ViewBoard has been in use by the day.
Unused Apps	Applications that have not been used for a certain period of time will be listed here.
Special App Access	Set several access permissions for applications.

Notifications

Manage notification and conversation settings and preferences.

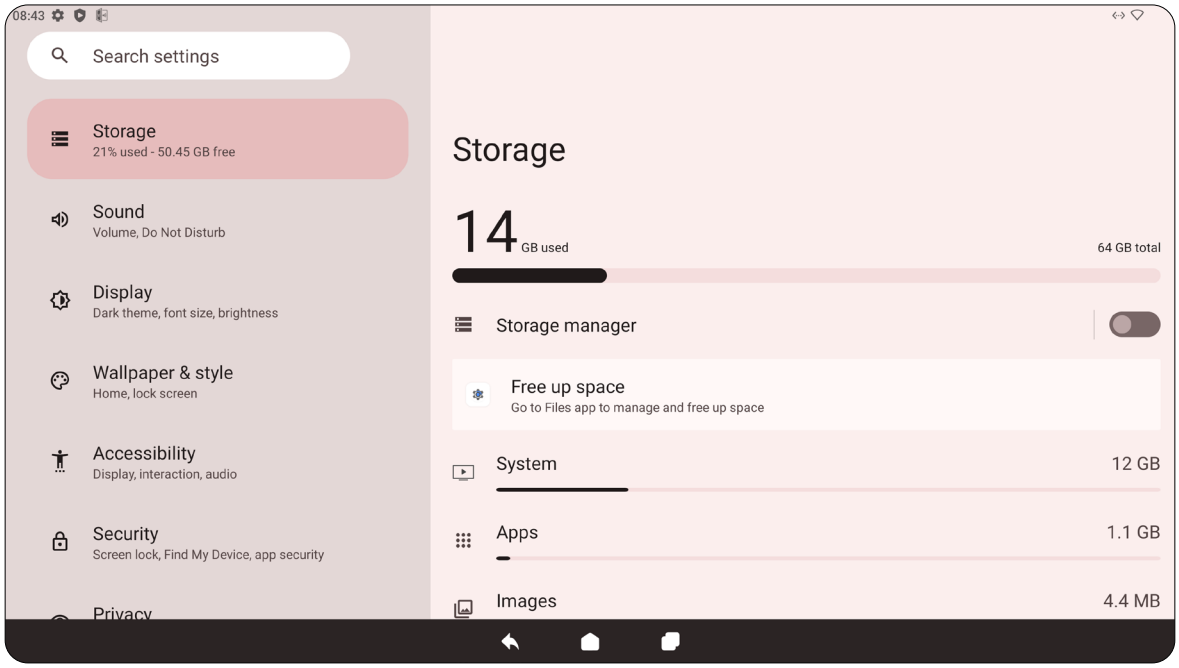


Item	Description
App Settings	Set up notification settings for individual applications.
Notification History	View recent notifications.
Conversations	Set previously received notifications or messages as priority.
Bubbles	When enabled, conversations can appear as a floating icon on screen.
Device & App Notifications	Control which applications and devices can read notifications.
Notifications on Lock Screen	Choose to show all, some, or no conversations or notifications on the lock screen.
Do Not Disturb	Set notification preferences for when “Do Not Disturb” mode is turned on.
Wireless Emergency Alerts	Choose to receive or not receive Emergency Alerts.
Hide Silent Notifications in Status Bar	When enabled, notifications that have been “silenced” will no longer appear in the status bar area.
Allow Notification Snoozing	When enabled, notifications can be “snoozed” for a short period of time for applications.
Notification Dot on App Icon	When enabled, a small dot will appear on the application icon when there is a new notification available.

Item	Description
Enhanced Notifications	When enabled, receive suggestions for actions, replies, etc.

Storage

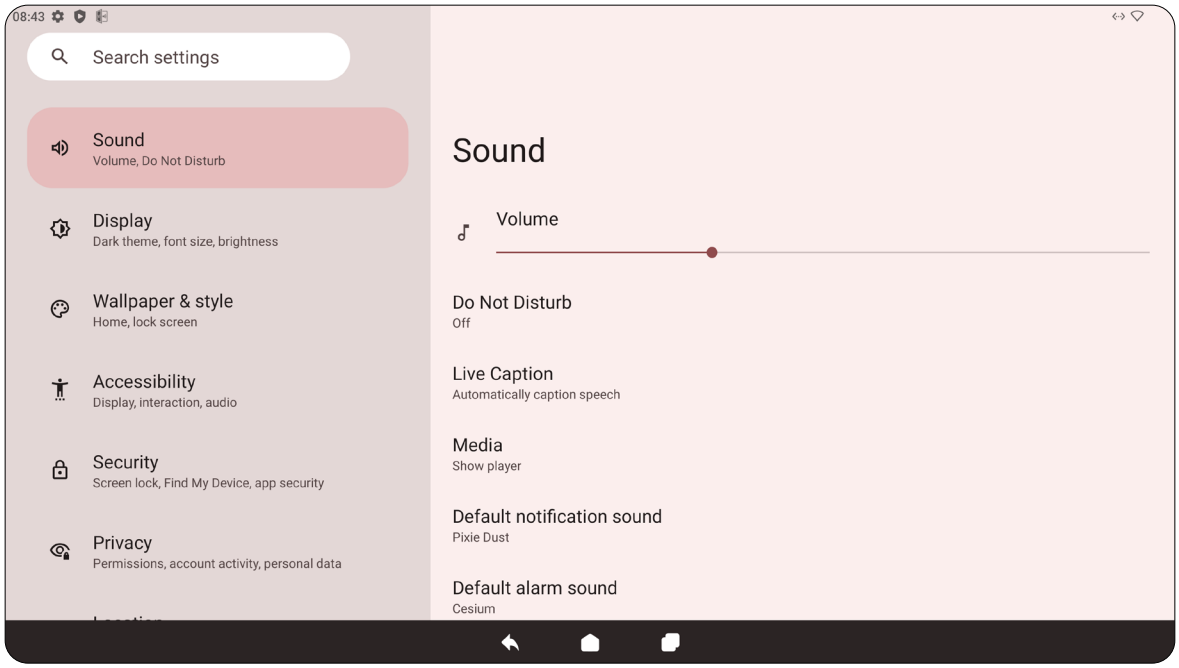
Check the storage status of the ViewBoard.



Item	Description
Storage Manager	When enabled, the storage manager will remove backed up photos and videos.
System	View the total storage space of system files.
Apps	View and manage the storage space used by applications.
Documents & Other	View and manage the Documents folder.
Images	View and manage the Images folder.
Trash	View and manage files that have been moved to the Trash.
Games	View and manage the storage space used by gaming applications.
Audio	View and manage the Audio folder.
Videos	View and manage the Video folder.

Sound

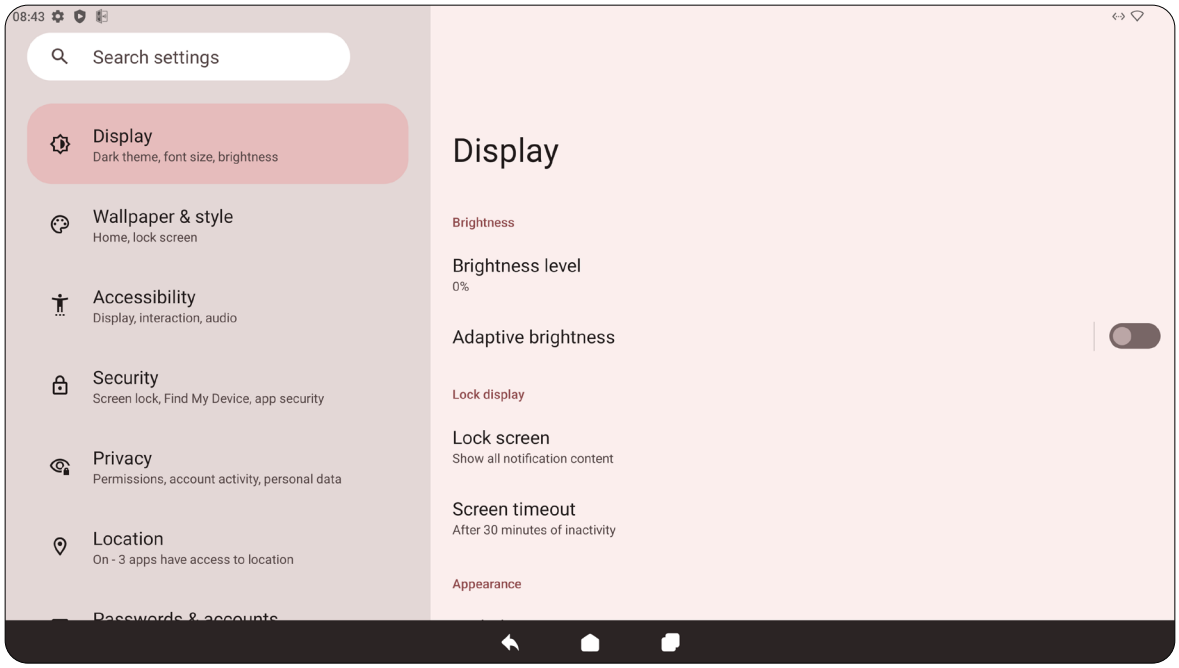
Adjust the volume level and set up varies sound preferences.



Item	Description
Volume	Adjust the volume level.
Do Not Disturb	Set sound preferences for when “Do Not Disturb” mode is turned on.
Live Caption	When enabled, automatically caption
Media	Set the media player preferences.
Default Notification Sound	Choose the default sound effect for notifications.
Default Alarm Sound	Choose the default sound for alarms.
Screen Locking Sound	When enabled, a sound effect will play when the ViewBoard’s screen is locked.
Touch Sounds	When enabled, a sound effect will play every time a touch input is received.

Display

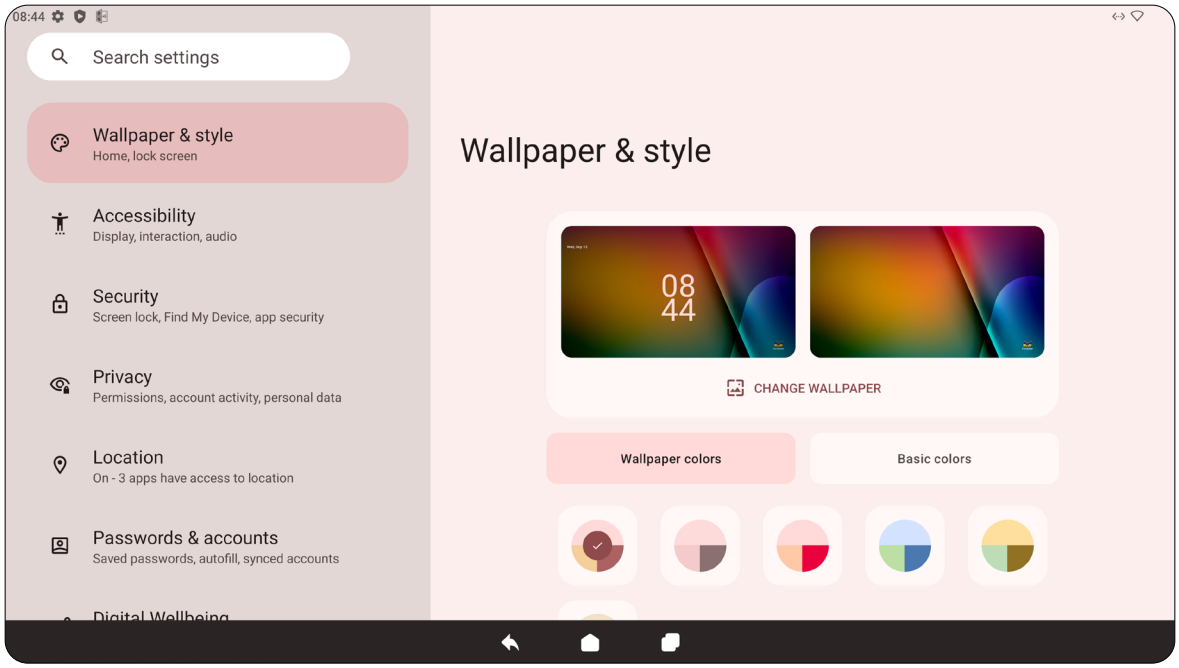
Adjust Brightness, Timeout, Theme, HDMI CEC, and other display related settings.



Item	Description
Brightness Level	Adjust the brightness level.
Adaptive Brightness	When enabled, the brightness level will dynamically adjust automatically based on the ambient light level of the surrounding area.
Lock Screen	Set lock screen preferences.
Screen Timeout	Set when the screen will lock after a period of inactivity.
Dark Theme	When enabled, the brighter default background color will be changed to a darker one.
Display Size and Text	Adjust the overall display size or only the text size.
Screen Saver	When enabled, a screen saver will play when the ViewBoard is not in use.
HDMI CEC	When enabled, HDMI CEC allows devices connected to the ViewBoard via HDMI to turn on automatically when the ViewBoard is turned on.
Wake Up by Active HDMI Input	When enabled, and if the ViewBoard is in standby mode, the ViewBoard display will “wake up” and turn on when connecting to an external device via HDMI.

Wallpaper & Style

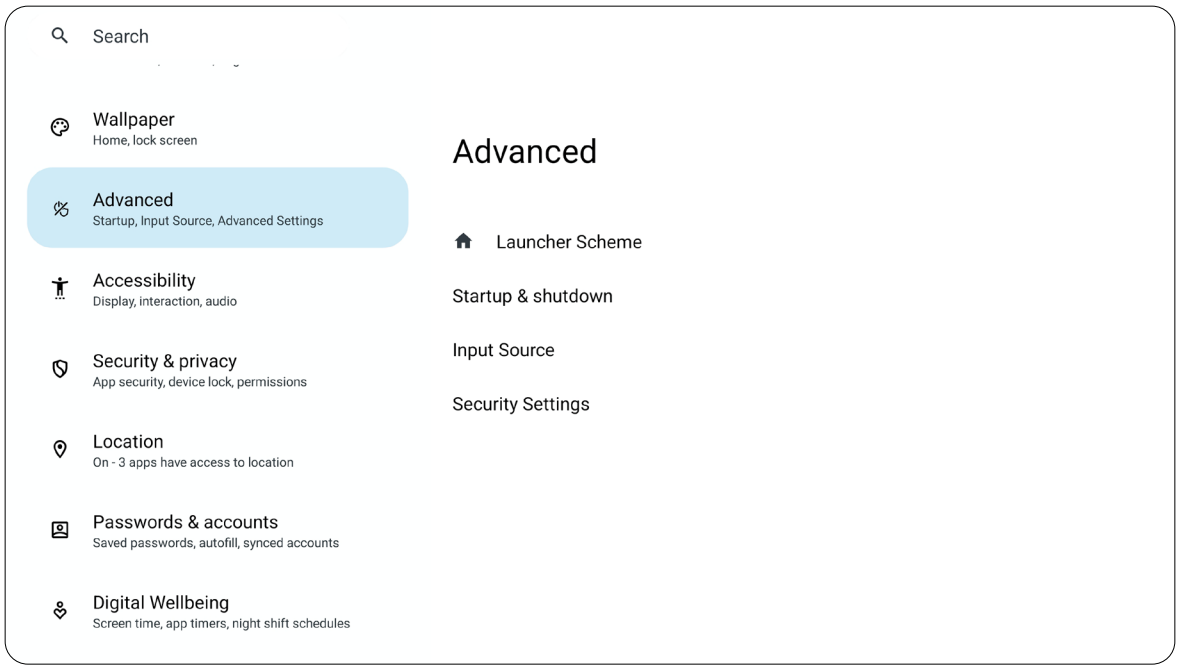
Adjust and personalize the Wallpaper, Colors and theme of the ViewBoard.



Item	Description
Change Wallpaper	Select a wallpaper for the background.
Wallpaper Colors	Choose a color scheme based on the selected wallpaper.
Basic Colors	Choose a color scheme from a select amount of options.
Dark Theme	When enabled, the brighter default background color will be changed to a darker one.

Advanced

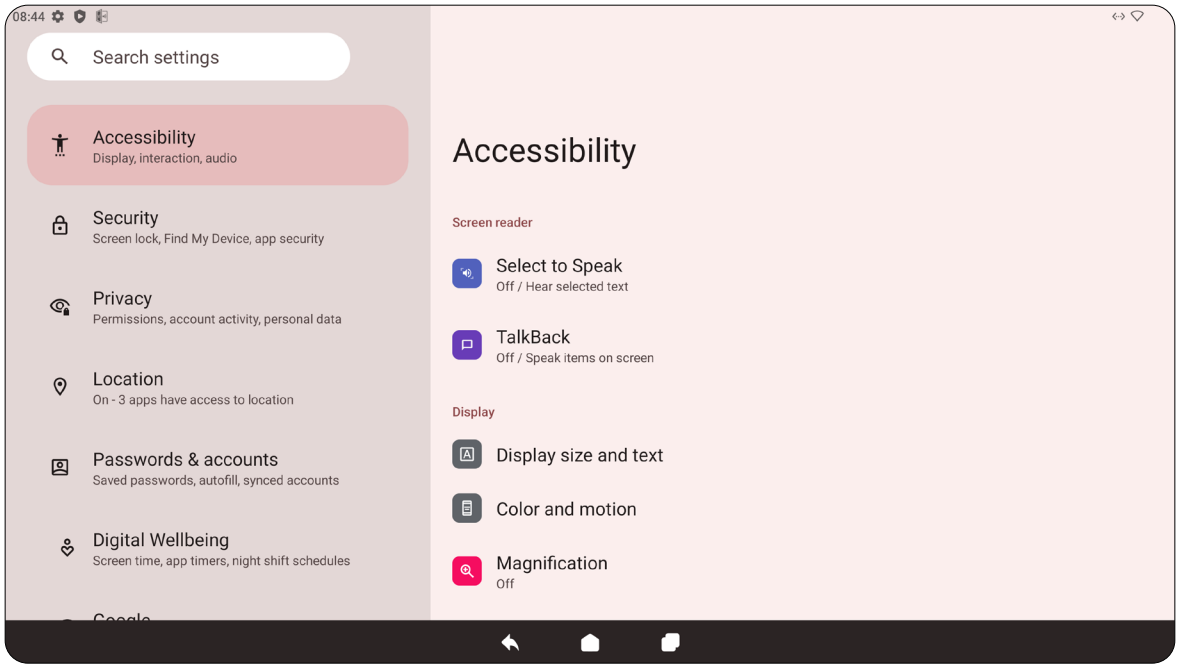
View and adjust various system settings.



Item	Description
Launcher Scheme	Choose between Scheme A and Scheme B to set the Home Screen layout.
Startup & shutdown	Set the startup and shutdown settings.
Input Source	Adjust the input source names, HDMI CEC, and other input source settings.
Security Settings	Set a password for the ViewBoard or the advanced settings, or manage the permissions to install applications from unknown sources.

Accessibility

View and adjust various tools that can help people with visual, auditory, speech, or physical disabilities use the ViewBoard.

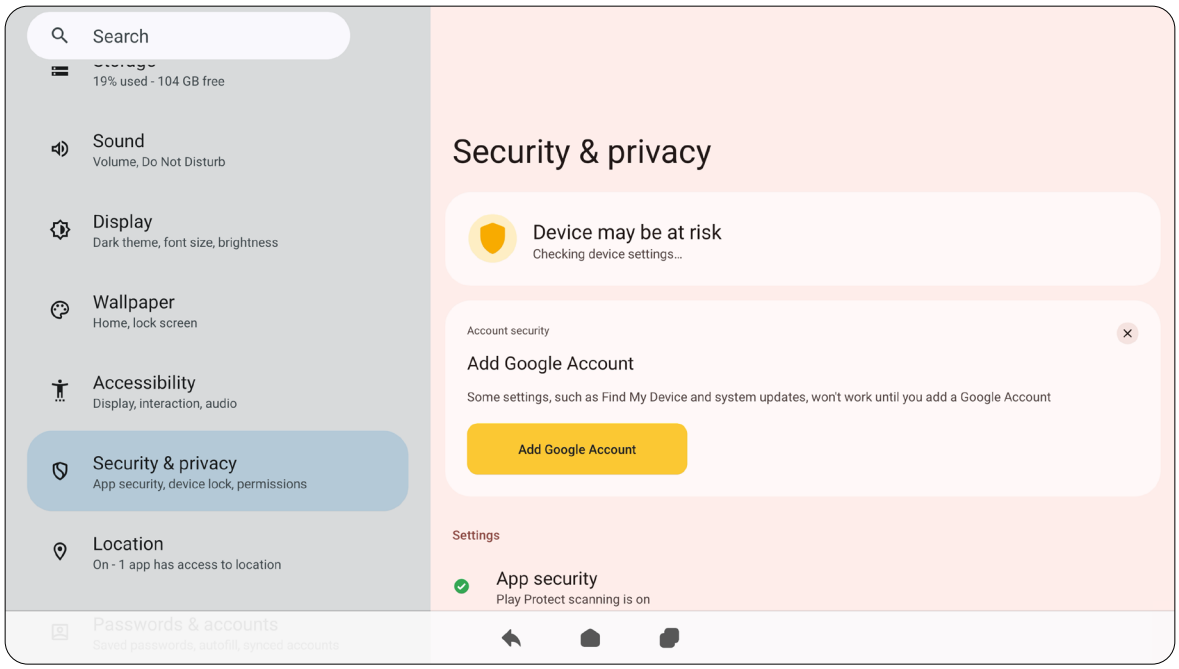


Item	Description
Select to Speak	When enabled, certain on-screen items will be read or described aloud when tapped (e.g., text or image).
TalkBack	When enabled, device actions will be described by audio so it can be used without looking at the screen.
Display Size and Text	Adjust the overall display size or only the text size.
Color and Motion	Apply color correction and inversion and enlarge the mouse pointer.
Magnification	Zoom in on the screen to enlarge the content.
Accessibility Menu	Add a shortcut for a enlarged on-screen menu to control the device.
Switch Access	Allows the use of one or more switch, keyboard, controller, etc. to control the device.
Timing Controls	Adjust how long temporary messages that ask for an action are on screen, enable Autoclick, and adjust the touch and hold delay time.
System Controls	Adjust the way to navigate the system.
Live Caption	Set the live caption preferences.
Caption Preferences	Enable captions and adjust the size and style.

Item	Description
Audio Description	When enabled, an audio description of what is happening on screen in supported movies and shows will be given.
Hearing Aids	Connect a hearing aid to the ViewBoard.
Audio Adjustment	Combine audio channels into a single mono channel.
Accessibility Shortcuts	Adjust the shortcut settings and availability on the lock screen.
Text-to-Speech Output	When set up, text can be read out loud.

Security & Privacy

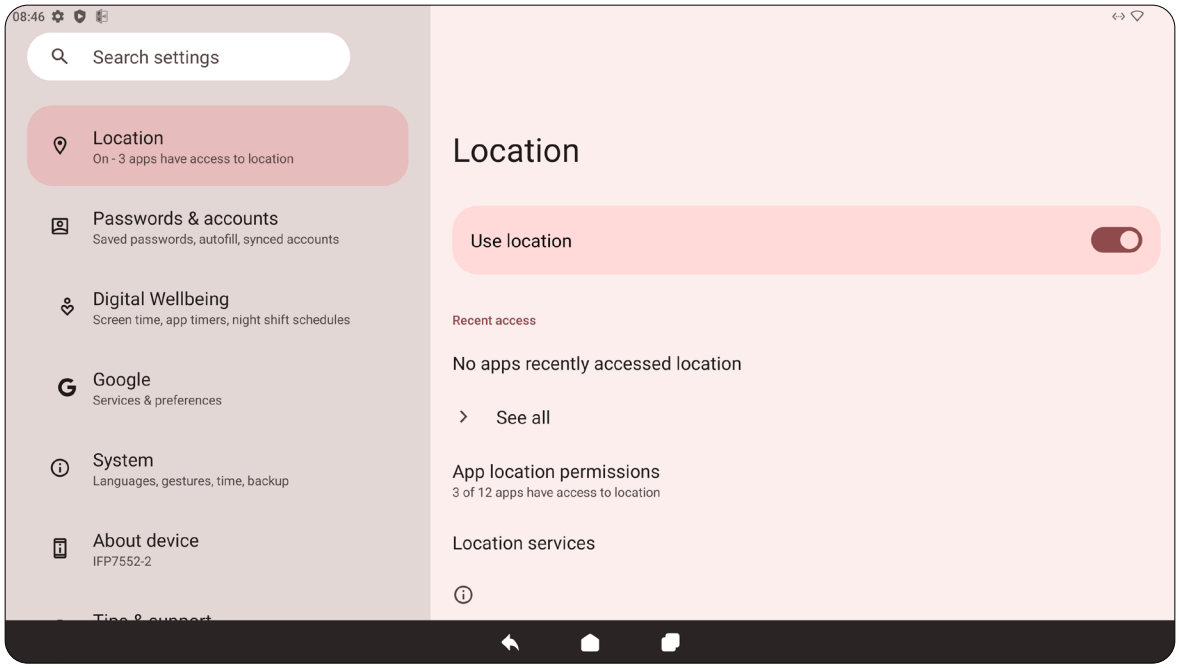
Review and adjust device security and privacy settings.



Item	Description
Device May Be at Risk	Scans regularly if the ViewBoard is safe from any harmful behaviors. Recommendations, and actions, will also be given to enhance the overall security and privacy.
Add Google Account	Add, remove, and manage your Google accounts linked to your ViewBoard.
App Security	Manage permissions for installed applications.
Device Unlock	Set the preferred options to lock/unlock the ViewBoard.
Account Security	Manage security permissions for all accounts on the ViewBoard.
Device Finders	Locate the ViewBoard remotely.
System & Updates	Check for system and security updates.
Privacy	Manage application access to your data (e.g., location or camera permissions, etc.)
More Security & Privacy	View and adjust additional security and privacy settings.
More Security Settings	View and adjust various security-related settings.

Location

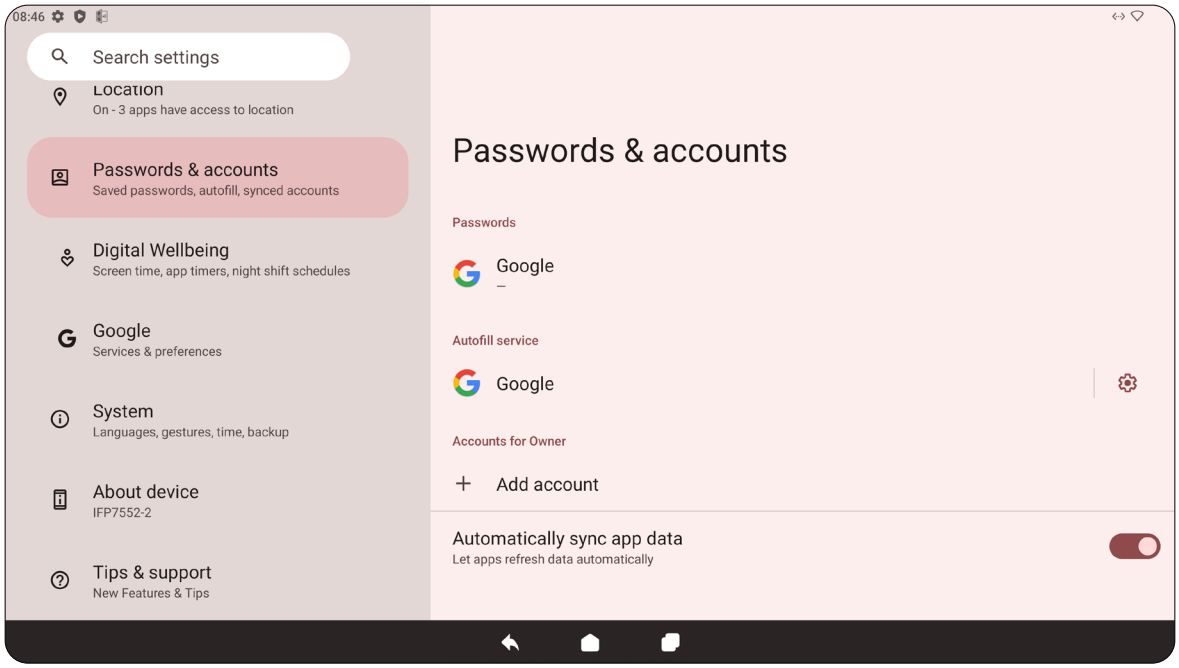
View and manage location settings.



Item	Description
Use Location	When enabled, the location of the device will be accessible to applications.
Recent Access	Review which applications recently accessed the device's location.
App Location Permissions	Review which applications have permission to access the device's location.
Location Services	Turn ON/OFF various alerts, services, and scanning related to location and location accuracy.

Passwords & Accounts

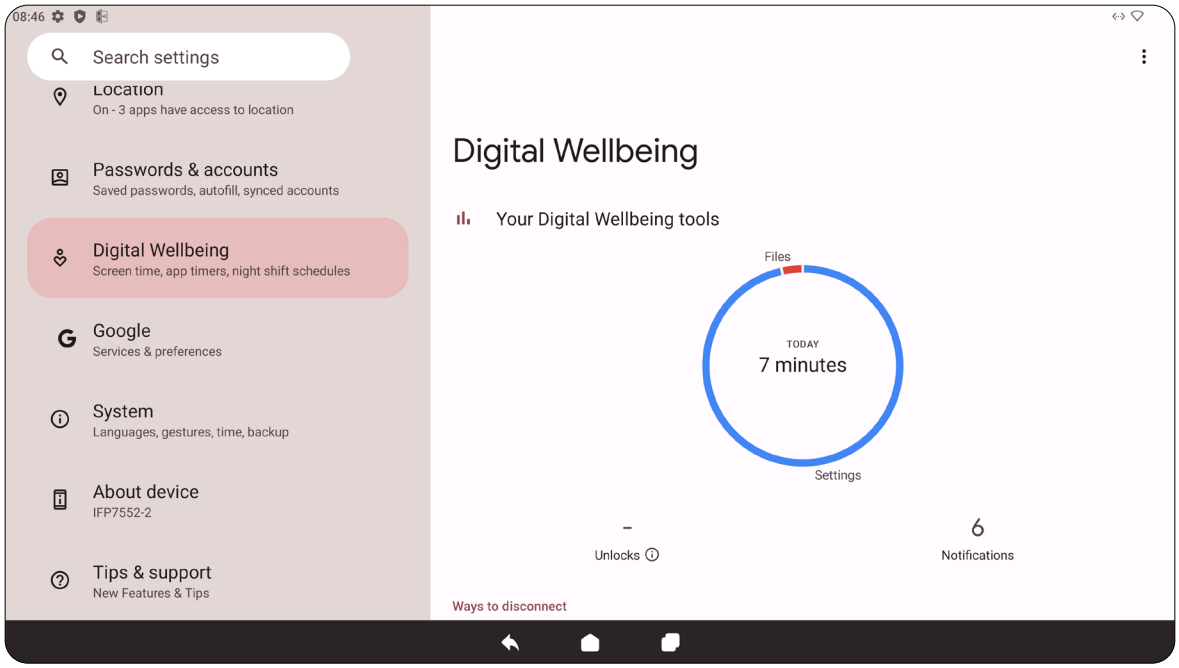
Review saved passwords, select autofill services, and add accounts.



Item	Description
Passwords	Review saved passwords.
Autofill Service	Select which autofill service to use, if any.
Accounts for Owner	Add or remove accounts.
Automatically Sync App Data	When enabled, applications can refresh data automatically.

Digital Wellbeing

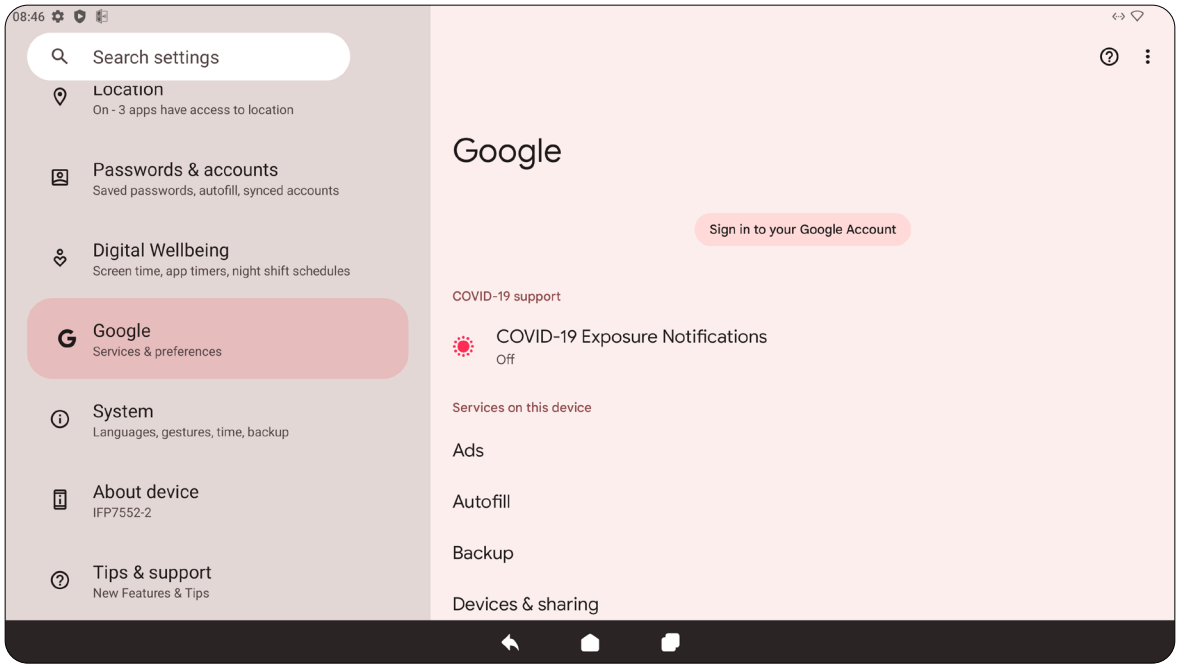
Review the ViewBoard's usage time, and set up various tools to promote a better balance with the device.



Item	Description
Your Digital Wellbeing Tools	A brief overview of device usage, unlocks, and notifications.
Dashboard	Review screen time, number of notifications, and number of device unlocks.
Night Shift	Reduce the amount of blue light emitted by the ViewBoard's screen.
Focus Mode	When set up, distracting applications can be paused and their notifications hidden.
Manage Notifications	Review which applications can send notifications.
Do Not Disturb	Set notification preferences for when "Do Not Disturb" mode is turned on.

Google

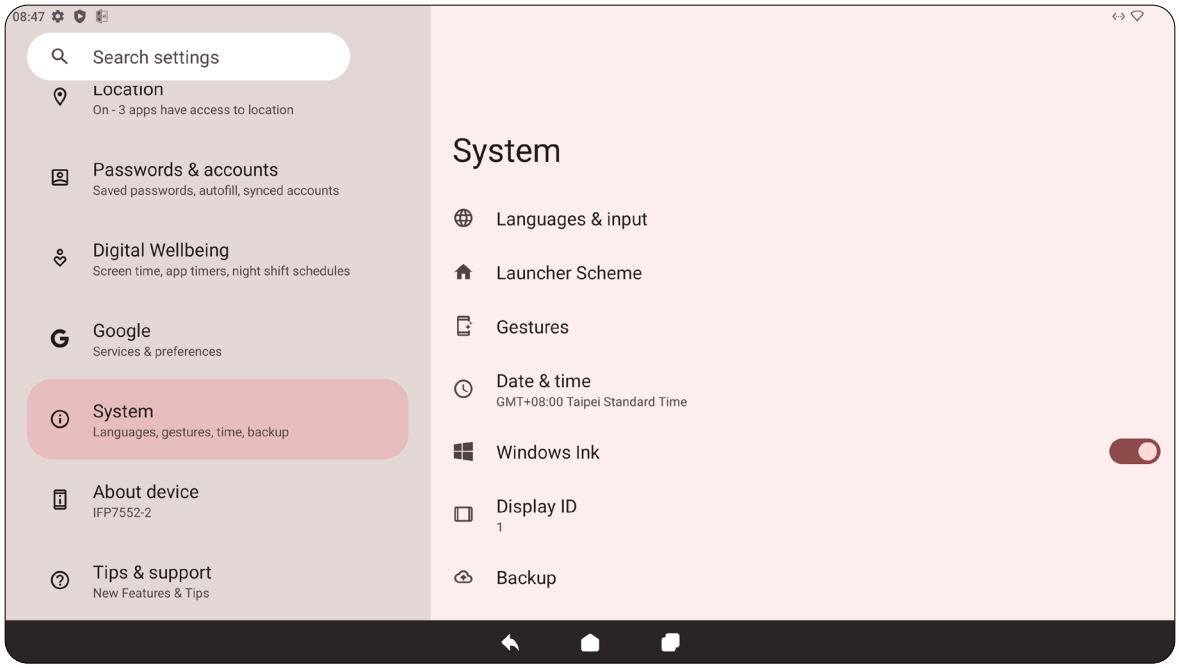
Review all of Google's services and set up preferences.



Item	Description
Ads	Manage advertisement personalization.
Autofill	With a Google account, passwords and other information can be filled in automatically.
Backup	With a Google account, back up the device's data.
Devices & Sharing	Set Cast and device sharing options.
Find My Device	Locate the ViewBoard remotely.
Parental Controls	Set up parental controls with Google's Family Link application.
Personalize Using Shared Data	Allow or disallow Google to use the installed applications' data for diagnostics and recommendations.
Set Up & Restore	Set up a nearby device or a work profile.
Settings for Google Apps	Review settings for Google-specific applications.

System

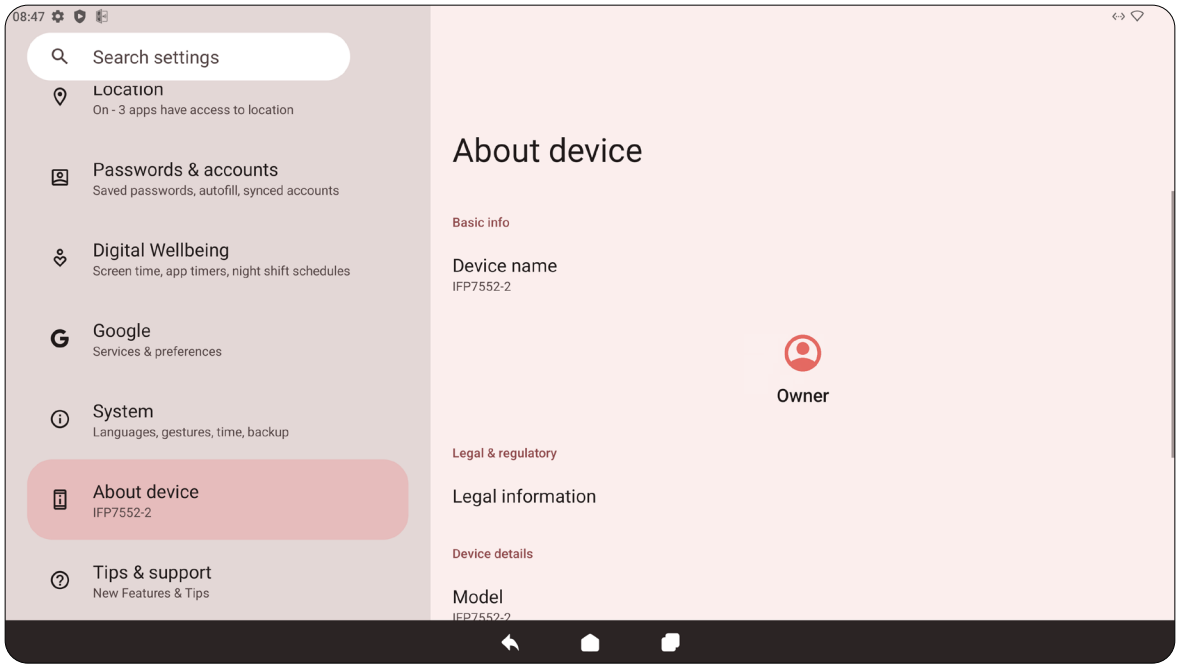
View and adjust various system settings.



Item	Description
Languages & Input	Choose the preferred language and input method.
Launcher Scheme	Choose between Scheme A and Scheme B to set the Home Screen layout.
Sidebar	Adjust the side toolbar settings.
Date & Time	Set the date and time.
Windows Ink	Enable and set up Windows Ink support.
Display ID	Assign a number to remote control the display by RS-232/LAN.
Backup	With a Google account, back up the device's data.
ViewSonic System Update	Check for system updates.
Multiple Users	Review who is signed in and the available user logins.
Reset Options	Reset the ViewBoard to factory default settings.

About Device

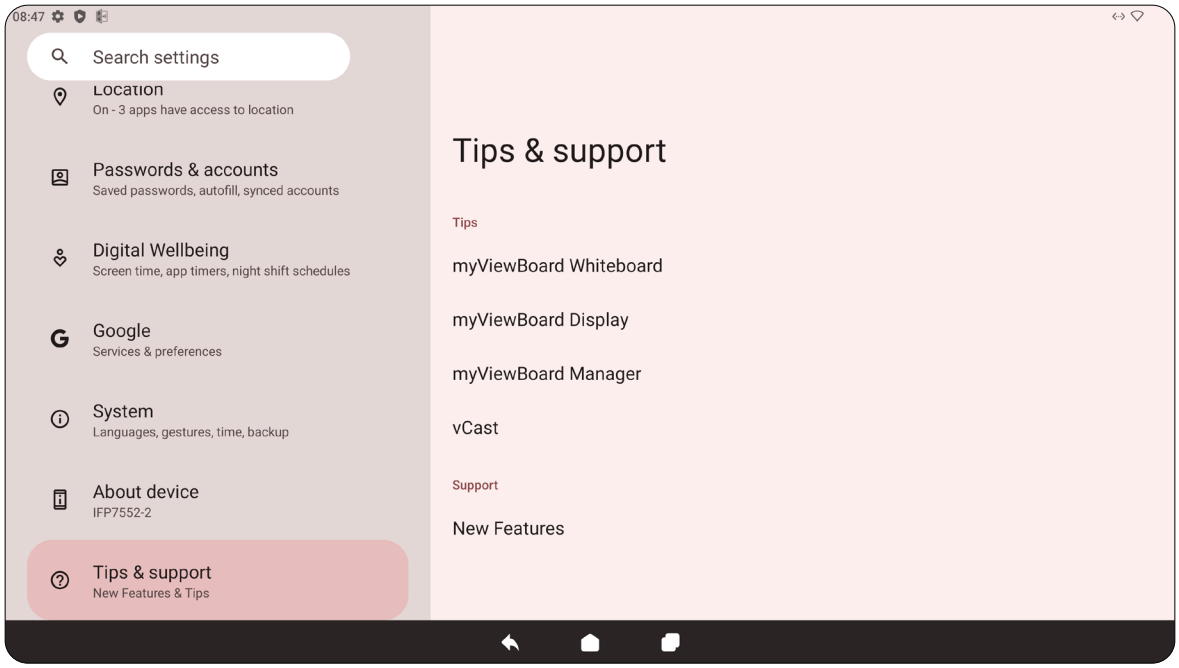
Review device information.



Item	Description
Device Name	View the name of the device.
Legal Information	View the relevant legal information.
Model	View the model of the ViewBoard.
Android Version	View the installed version of Android.
IP Address	View the IP Address.
Ethernet Address	View the Ethernet Address.
Wi-Fi MAC Address	View the Wi-Fi MAC Address.
Device Wi-Fi MAC Address	View the Device Wi-Fi MAC Address.
Bluetooth Address	View the Bluetooth Address.
Up Time	View how long the device has been in operation.
Build Number	View the build number.
Custom Build Number	View the custom build number.

Tips & Support

View new features, tips, and get support for the myViewBoard Whiteboard, myViewBoard Display, myViewBoard manager, and vCast applications.



Android Settings Menu Tree

<table>
<tr><th>Menu</th><th>Sub-menu</th><th colspan="3">Menu Option</th></tr>
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</table>

Menu	Sub-menu	Menu Option		
Network & Internet	Data Saver	Use Data Saver		
		Unrestricted data		
	VPN	Name		
		Type	IKEv2	
			IPSec RSA	
		Server address		
		IPSec identifier		
		IPSec server certificate		
		Proxy	None	
			Manual	Proxy hostname
				Proxy port
		Username		
		Password		
		Always-on VPN		
	Private DNS	Off		
		Automatically		
		Private DNS provider hostname	Enter hostname of DNS provider	

Menu	Sub-menu	Menu Option		
Connected Devices	Pair new device	Device name		
		Available devices		
	Saved devices	See all		
	Connection preferences	Bluetooth	Use Bluetooth	
			Pair new device	Available devices
		Cast		
		Printing	Default Print Service	Use print service
				Add service
		Nearby Share	Account & device	
			Device visibility	
			Data	Wi-Fi only
				Without internet
			Show notification	

Menu	Sub-menu	Menu Option	
Apps	Recently opened apps		
	Default apps		
	Screen time		
	Unused apps		
	Special app access	All files access	
		Device admin apps	
		Display over other apps	
		Do No Disturb access	
		Media management apps	
		Modify system settings	
		Device & app notifications	
		Picture-in-picture	
		Premium SMS access	
		Unrestricted data	
		Install unknown apps	
		Alarms & reminders	
		Usage access	
		VR helper services	
		Wi-Fi control	
		Turn screen on	

Menu	Sub-menu	Menu Option		
Notifications	App settings			
	Notification history	Use notification history		
	Conversations			
	Bubbles	Allow apps to show bubbles		
	Device & app notifications	Allowed		
		Not allowed		
	Notifications on lock screen	Show conversations, default, and silent		
		Hide silent conversations and notifications		
		Don’t show any notifications		
	Do Not Disturb	People	Message	Favorite contacts
				Contacts
				Priority conversations
				Anyone
				None
			Calls	Favorite contacts
				Contacts
				Anyone
				None
				Allow repeat callers

Menu	Sub-menu	Menu Option		
Notifications	Do Not Disturb	Apps	Add apps	
		Alarms & other interruptions	Alarms	
			Media sounds	
			Touch sounds	
			Reminders	
			Calendar events	
		Schedules	Sleeping	
			Event	
			Add more	
		Duration for Quick Settings	Until you turn off	
			For 1 hour	
			Ask every time	
		Display options for hidden notifications	No sound from notifications	
			No visuals or sound from notifications	
			Custom	
	Wireless emergency alerts			
	Hide silent notifications in status bar			
	Hide silent notifications in Always-on Panel			
	Allow notification snoozing			
	Notification dot on app icon			
	Enhanced notifications			

Menu	Sub-menu	Menu Option	
Storage	Storage manager		
	System		
	Apps		
	Documents & other		
	Images		
	Trash		
	Games		
	Audio		
	Videos		
Sound	Volume		
	Do Not Disturb		
	Live Caption		
	Media	Pin media player	
		Show media on lock screen	
		Show media recommendations	
	Default notification sound	None	
		Alya	
		Argon	
		Canopus	
		Deneb	
		Highwire	
		Iridium	
		Pixie Dust	
		Talitha	
		Add notification	

Menu	Sub-menu	Menu Option		
Sound	Default alarm sound	None		
		Argon		
		Beep-Beep-Beep		
		Cesium		
		Helium		
		Oxygen		
		Piezo		
		Platinum		
		Add alarm		
	Screen locking sound			
	Touch sounds			
Display	Brightness level			
	Adaptive brightness			
	Lock screen	Privacy	Show all notifications content	
			Don’t show notifications at all	
		Add users from lock screen		
		Add text on lock screen		
		Show wallet		
		Show device controls		
		Control from locked device		
		Double-line clock		

Menu	Sub-menu	Menu Option	
Display	Screen timeout	15 seconds	
		30 seconds	
		1 minute	
		2 minutes	
		5 minutes	
		10 minutes	
		30 minutes	
	Dark theme		
	Display size and text	Font size	
		Display size	
		Bold text	
		High contrast text	
		Reset Settings	
	Screen saver		
	HDMI CEC		
	Wake up by active HDMI input		
Wallpaper	Change Wallpaper		
	Wallpaper colors		
	Basic colors		
	Dark theme		

Menu	Sub-menu	Menu Option		
Accessibility	Select to Speak	Select to Speak shortcut		
		Settings	Text to speech settings	Preferred engine
				Language
				Speech rate
				Pitch
			Read in background	
			Read text on images	
			Help & feedback	
	TalkBack	Use TalkBack		
		TalkBack shortcut		
		Settings	New features in TalkBack	
			Text-to-speech settings	Preferred engine
				Language
				Speech rate
				Pitch
			Verbosity	Choose a preset
				Speak usage hints
				Speak list and grid info
				Always speak number of list items
				Speak element type
				Speak window names
				Speak notifications when screen is off
				Use pitch changes

Menu	Sub-menu	Menu Option		
Accessibility	TalkBack	Settings	Verbosity	Speak letters with examples
				Keyboard echo: On-screen keyboard
				Keyboard echo: Physical keyboard
				Capital letters
				Speak all progress updates
				Speak element IDs
				Speak punctuation and symbols
			Sound	Audio ducking
				Sound feedback
				Sound feedback volume
			Customize Focus Indicator	Default
				Red
				Orange
				Yellow
				Green
				Blue
				Grey
			Customize Gestures	Customize TalkBack menu
				Customize reading controls
			Automatically describe icons	

Menu	Sub-menu	Menu Option		
Accessibility	TalkBack	Settings	Braille keyboard	Set up braille keyboard
				Typing languages
				Preferred language
				Review all gestures
				Include all pressed dots
				Reverse dots
			Braille display	Languages
				Preferred reading language
				Preferred typing language
				Braille commands
				Auto-connect
				Show braille output on screen
			Tutorial and help	Tutorial
				Practice gestures
				Help & feedback

Menu	Sub-menu	Menu Option		
Accessibility	TalkBack	Settings	Advanced settings	Speak passwords
				Custom labels
				Single-tap to activate
				Element description order
				Reduce window announcement delay
				Typing preference
				Touch and hold delay when typing
				Keyboard shortcuts
				Developer settings
				Privacy Policy
				Terms of service
			Open TalkBack at the Play Store	
	Display size and text	Font size		
		Display size		
		Bold text		
		High contrast text		
		Reset Settings		

Menu	Sub-menu	Menu Option		
Accessibility	Color and motion	Color inversion		
		Dark theme		
		Color correction	Red-green (deuteranomaly)	
			Red-green (protanomaly)	
			Blue-yellow	
			Grayscale	
			Color correction shortcut	
		Remove animations		
		Large mouse pointer		
	Magnification	Magnification shortcut		
		Magnification type	Magnify full screen	
			Magnify part of screen	
			Switch between full and partial screen	
		Magnify typing		
	Accessibility Menu	Accessibility Menu		
		Settings	Large buttons	
			Help & feedback	

Menu	Sub-menu	Menu Option		
Accessibility	Switch Access	Use Switch Access		
		Switch Access shortcut		
		Settings	Help & feedback	
			Open setup guide	USB switch
				Bluetooth switch
				Camera switch
			Camera Switch settings	Use Camera Switches
				Open Mouth
				Smile
				Raise Eyebrows
				Look Left
				Look Right
				Look Up
				Enhanced visual feedback
				Enhanced audio feedback
				Keep screen on
				Ignore repeated Camera Switch triggers

Menu	Sub-menu	Menu Option		
Accessibility	Switch Access	Settings	Assign switches for scanning	Pause
				Camera Switch
				Auto-scan
				Reverse auto-scan
				Select
				Next
				Previous
				Touch & hold
				Scroll forward
				Scroll backward
			Assign switches to global actions	Pause Camera Switch
				Back
				Home
				Notifications
				Quick Settings
				Overview
			Assign switches to shortcuts	
			Enable Menu Customization	
			Revert to Default Menu	
			Auto-scan	Auto-scan time
				Delay on first item
				Number of scans
			Scanning method	Linear scanning
				Row-column scanning
				Group selection

Menu	Sub-menu	Menu Option		
Accessibility	Switch Access	Settings	Point scan	Line speed
				Delay on first item
				Number of scans
				Vertical scans
				Horizontal scans
			Automatically start scanning	
			Auto-select	
			Scanning highlight style	Highlight color
				Highlight line style
			Speech, sound & vibration	Speak descriptive text
				Verbosity
				TTS settings
				Finish speech before moving
				Maximum spoken time per item
				Vibration feedback
				Sound feedback
				Sound volume
				Audio ducking
			Ignore repeated presses	
			Release to perform action	
			Privacy policy	

Menu	Sub-menu	Menu Option		
Accessibility	Timing controls	Settings	Developer settings	Version
				Display speech output
				Delete all shortcuts
				Log output level
		Touch & hold delay	Short	
			Medium	
			Long	
		Time to talk action	Default	
			10 seconds	
			30 seconds	
			1 minute	
			2 minutes	
		Auto click	Off	
			Short	
			Medium	
			Long	
			Custom	
	System controls	System navigation	Gesture navigation	
			3-button navigation	
	Live Caption	Languages		
		Hide profanity		
		Show sound labels		
		Live Caption in volume control		
		Help		

Menu	Sub-menu	Menu Option		
Accessibility	Caption preferences	Show captions		
		Caption size and style	Text size	Very Small
				Small
				Medium
				Large
				Very Large
			Caption style	Set by app
				White on black
				Black on white
				Yellow on black
				Yellow on blue
				Custom
		More options	Language	
	Audio description			
	Hearing aids			
	Audio adjustment	Mono audio		
		Audio balance		
	Accessibility shortcuts	Accessibility button	Location	Floating over other apps
				Navigation bar
			Size	Small
				Large
			Fade when not in use	
			Transparency when not in use	
		Shortcut from lock screen		

Menu	Sub-menu	Menu Option		
Accessibility	Text-to-speech output	Preferred engine	Speech Services by Google	
		Language		
		Speech rate		
		Pitch		
Security	Google Play Protect			
	Find My Device	Find My Device		
		Find My Device app		
		Find My Device web		
	Security update			
	Google Play system update			
	Screen lock	None		
		Swipe Pattern		
		PIN		
		Password		
	More security settings	Smart Lock		
		Device admin apps		
		Encryption & credentials	Encrypt tablet	
			Trusted credentials	
			User credentials	
			Install a certificate	
			Clear credentials	
			Certificate management app	
		Trust agents		
		App pinning		

Menu	Sub-menu	Menu Option	
Privacy	Privacy dashboard	Location	
		Camera	
		Microphone	
		Body sensors	
		Calendar	
		Call logs	
		Contacts	
		Files	
		Music and audio	
		Nearby devices	
		Phone	
		Photos and videos	
		Physical activity	
		SMS	
	Permission manager	Body sensors	
		Calendar	
		Call logs	
		Camera	
		Contacts	
		Files	
		Location	
		Microphone	
		Music and audio	
		Nearby devices	
		Notifications	
		Phone	
		Photos and videos	
		Physical activity	
		SMS	
		Additional permissions	

Menu	Sub-menu	Menu Option		
Privacy	Camera access			
	Microphone access			
	Show passwords			
	Notifications on lock screen	Show all notification content		
		Don’t show notifications at all		
	Show media on lock screen			
	Android System Intelligence	Device learning		
		Keyboard	Show smart text suggestions in the keyboard suggestion strip including smart reply and paste	
		Clear data	Last hour	
			Last 24 hours	
			All time	
	App content			
	Show clipboard access			
	Autofill service from Google			
	Activity controls			
	Ads			
	Usage & diagnostics			

Menu	Sub-menu	Menu Option	
Location	Use location		
	Recent access		
	App location permissions		
	Location services	Earthquake alerts	
		Emergency Location Service	
		Google Location Accuracy	
		Google Location History	
		Google Location Sharing	
		Wi-Fi scanning	
		Bluetooth scanning	
Passwords & Accounts	Passwords		
	Autofill service		
	Accounts for Owner		
	Automatically sync app data		

Menu	Sub-menu	Menu Option		
Digital Wellbeing	Your Digital Wellbeing tools			
	Dashboard			
	Night Shift	Do Not Disturb for Night Shift mode		
	Focus Mode			
	Manage notifications			
	Do Not Disturb	People	Messages	Favorite contacts
				Contacts
				Priority conversations
				Anyone
				None
			Calls	Favorite contacts
				Contacts
				Anyone
				None
				Allow repeat callers
		Apps		
		Alarms & other interruptions	Alarms	
			Media sound	
			Touch sounds	
			Reminders	
			Calendar events	
		Schedule	Sleeping	
			Event	

Menu	Sub-menu	Menu Option		
Digital Wellbeing	Do Not Disturb	Duration for Quick Settings	Until you turn off	
			For 1 hour	
			Ask every time	
		Display options for hidden notifications	No sound from notifications	
			No visuals or sound from notifications	
			Custom	
Google	COVID-19 Exposure Notifications			
	Ads			
	Autofill			
	Backup			
	Devices & sharing			
	Find My Device			
	Parental controls			
	Personalize using shared data			
	Set up & restore			
	Settings for Google apps			

Menu	Sub-menu	Menu Option		
System	Languages & input	Languages		
		App Languages		
		On-screen keyboard		
		Physical keyboard	Use on-screen keyboard	
			Keyboard shortcuts	
		Voice input		
		Text-to-speech output	Preferred engine	
			Language	
			Speech rate	
			Pitch	
		Spell checker	Languages	
			Default spell checker	
		Personal dictionary		
		Pointer speed		
	Launcher Scheme	Scheme A		
		Scheme B		
	Sidebar			

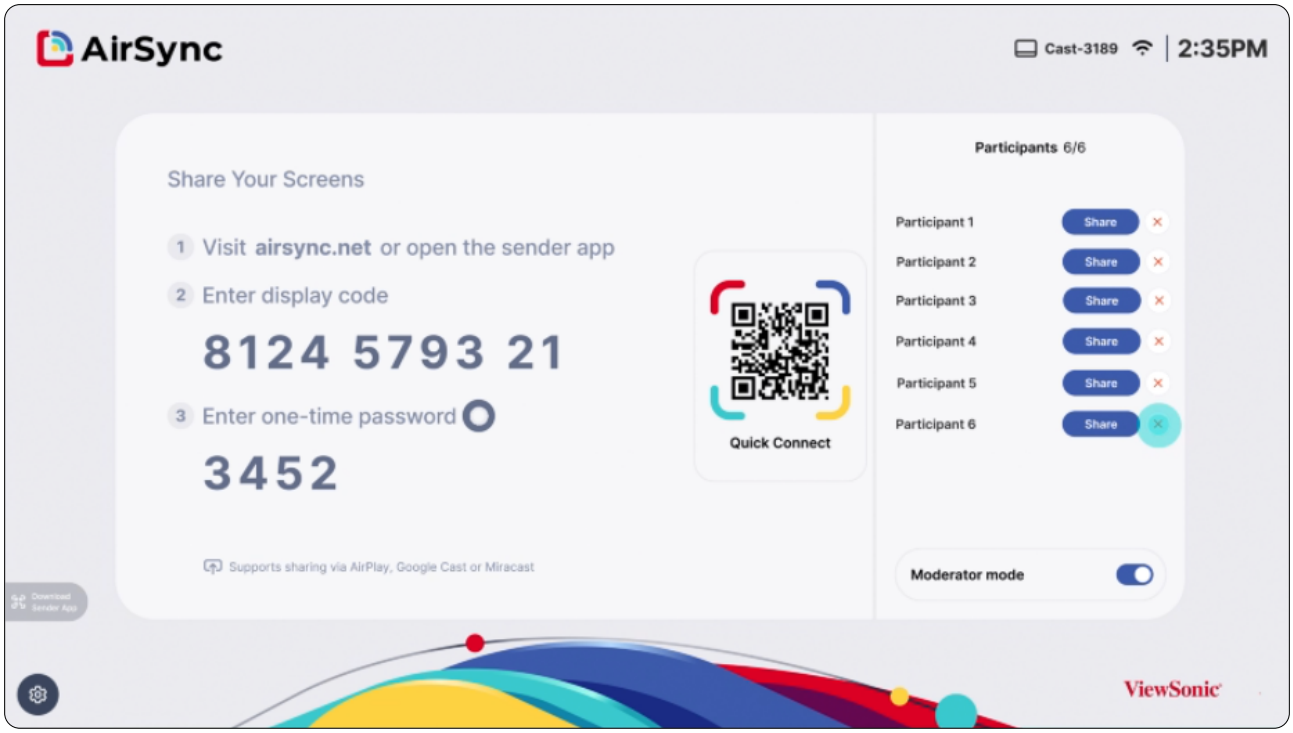
Menu	Sub-menu	Menu Option	
System	Date & time	Set time automatically	
		Date	
		Time	
		Set time zone automatically	
		Use location to set time zone	
		Time zone	
		Use locale default	
		Use 24-hour format	
	Windows Ink		
	Display ID		
	Backup		
	ViewSonic System Update		
	Multiple Users	User	
		Guest	
		Delete guest activity	
		Add users from lock screen	
	Reset options	Reset Wi-Fi, mobile & Bluetooth	
		Reset all settings	
		Erase all data (factory reset)	

Menu	Sub-menu	Menu Option
About Device	Device name	
	Legal information	
	Model	
	Android version	
	IP address	
	Ethernet address	
	Wi-Fi MAC address	
	Device Wi-Fi MAC address	
	Bluetooth address	
	Up time	
	Build number	
	Custom build version	
Tips & Support	myViewBoard Whiteboard	
	myViewBoard Display	
	myViewBoard Manager	
	vCast	
	New Features	

Pre-installed Applications and Settings

AirSync

Wirelessly mirror screens to a larger display.



To share a screen to a ViewBoard with AirSync:

1. Open AirSync on the ViewBoard you want to share your screen to.

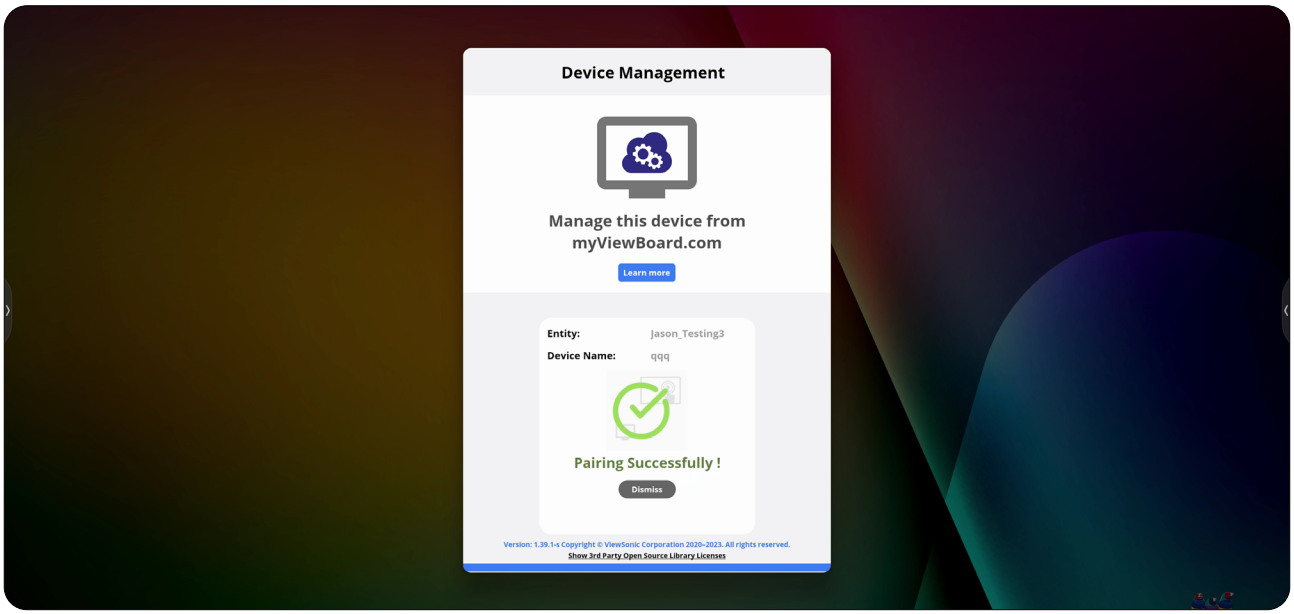
2. On the device you want to share the screen from, go to: https://airsync.net.

3. Enter the **Display Code** and **One Time Password** for the ViewBoard you wish to share to.

NOTE: The password refreshes every 30 seconds.

myViewBoard Manager

Remotely manage multiple installations of ViewSonic devices.



Once devices are set up and have myViewBoard Manager installed, they can be added to the entity and managed remotely from the Manager web application.

NOTE: Only available to Entity Admins from myviewboard.com after signing in.

Add a Device

On the device to manage:

1. Download and install myViewBoard Manager.

2. Open myViewBoard Manager and note the 6-digit PIN displayed.

In the myViewBoard Manager web application on myviewboard.com:

1. Click **Add Device**.

2. Input the 6-digit PIN obtained earlier.

3. Name the device (if applicable).

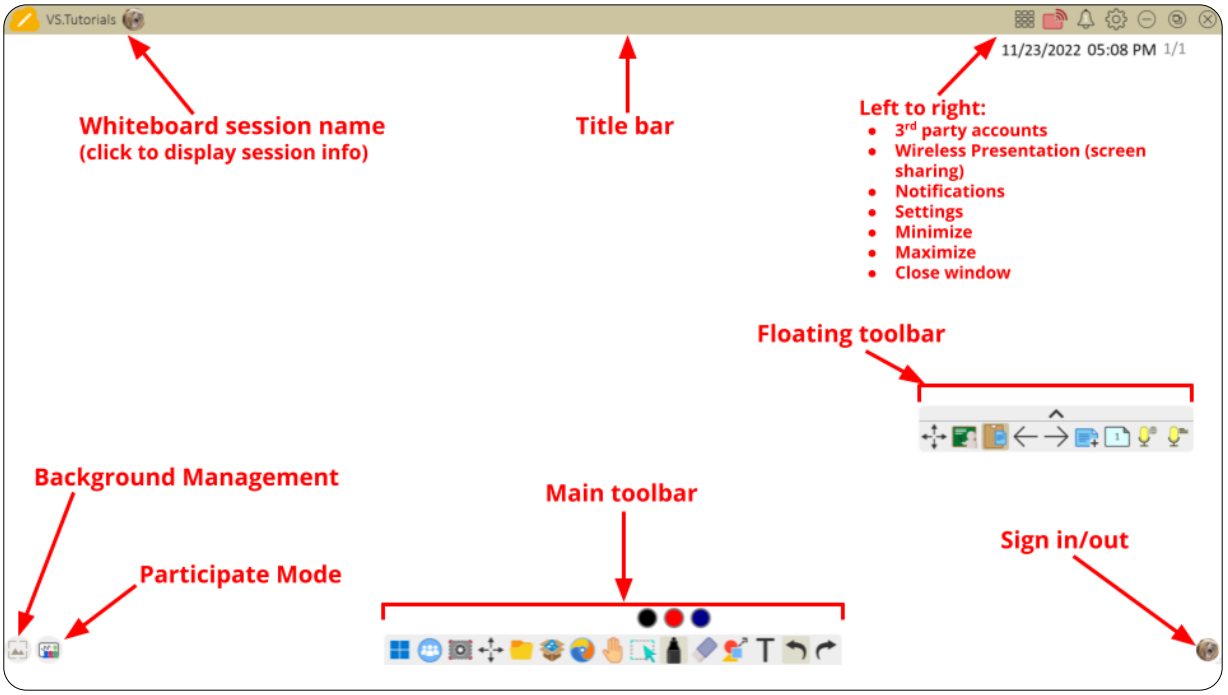
4. Click **Add**.

NOTE: To learn more about myViewBoard Manager, visit Manager overview.

myViewBoard Whiteboard

A digital whiteboarding application.

NOTE: To learn more about myViewBoard Whiteboard, visit Knowledge Base.



Floating Toolbar

Item		Description
	Move	Move the Floating Toolbar.
	Present Mode	Switch between presentation and preparation modes.
	Paste from Clipboard	Insert the current clipboard content onto the canvas.
	Previous Page	Go to the previous page (if the canvas has multiple pages).
	Next Page	Go to the next page (if the canvas has multiple pages).
	New Page	Add a new canvas.
	Pages in Whiteboard	Create, select, rearrange, copy and delete pages.

Main Toolbar

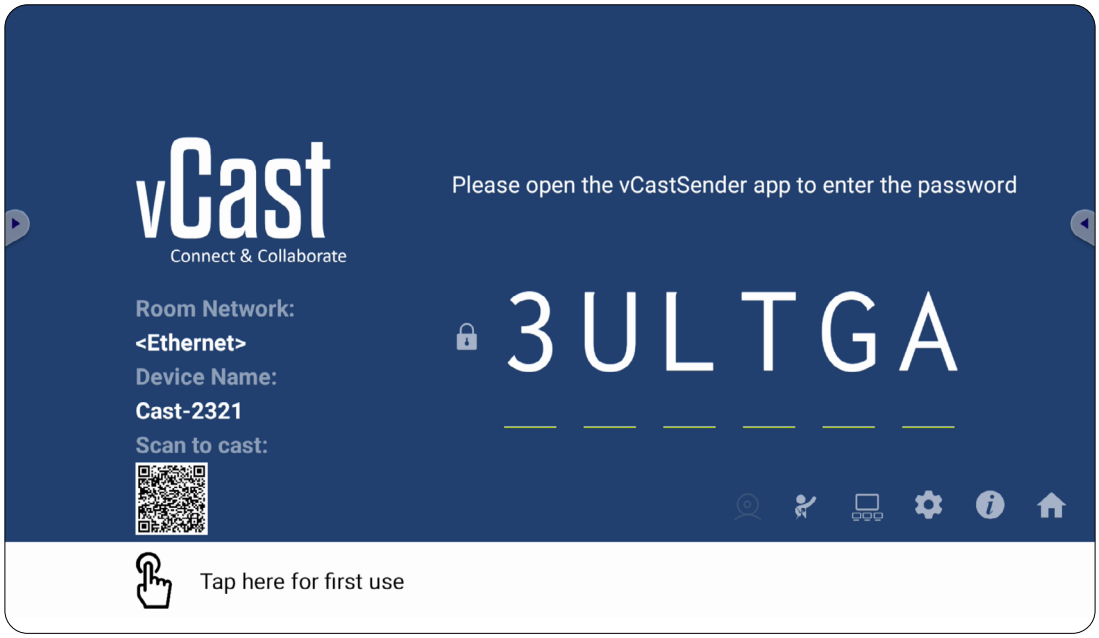
Item		Description
	**Screen Capture**	Screenshot, video, and audio recording.
	**Move**	Select and hold to move the toolbar to the left side, right side, or bottom of the screen.
	**File**	Open, save, export, and print whiteboard files.
	**Magic Box**	Import resources (image, video, audio, etc.) to the whiteboard.
	**Embedded Browser**	Open the built-in browser to access internet resources, which can be dragged onto the canvas.
	**Infinite Canvas**	Drag to move the canvas. Use two hands to zoom in/ zoom out. Select again for an overview.
	**Selection**	Select objects, text, and other elements on the canvas.
	**Pen**	Writing tools and customization options.
	**Eraser**	Erase objects or clear the page.
	**Shapes and Lines**	Draw shapes, arrows, and add tables.
	**Text and Handwriting**	Add a text box.
	**Undo**	Undo the previous action.
	**Redo**	Redo the previous action.

Background Management

Item		Description
	**Sign In**	Sign in to a myViewBoard account.
	**Background Management**	Change the canvas background.
	**FollowMe Setting**	Display custom images uploaded to a cloud storage account.
	**Color Palette**	Choose from solid or gradient colors as the background.
	**Pre-installed**	Choose backgrounds that come pre-installed with Whiteboard.
	**myViewBoard Originals**	Display original content created by myViewBoard.
	**Local Hard Drive**	Use images from the local hard drive.

vCast

Working with ViewBoard® Cast software (vCast, vCast Pro, and vCastSender), the vCast application will allow the ViewBoard to receive laptop screens (Windows/ Mac/Chrome) and mobile (iOS/Android) users' screens, photos, videos, annotations, and camera(s) that are using the vCastSender application.

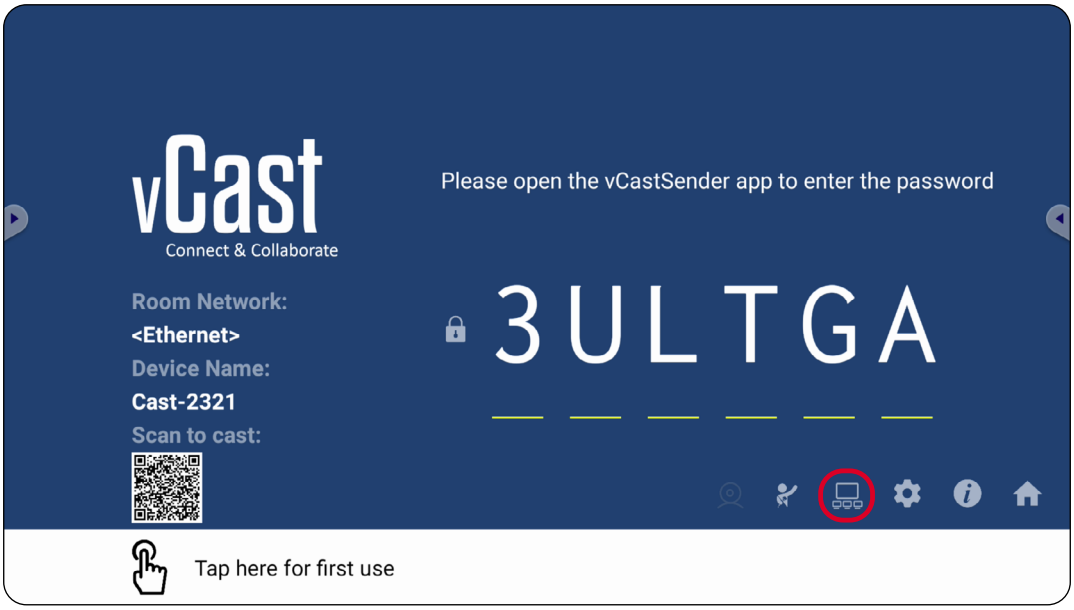


Network Information

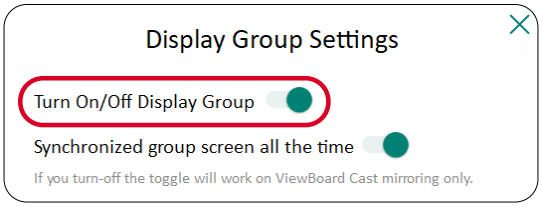
- ViewBoard® Cast software, laptops, and mobile devices can connect to both the same subnet and cross subnet by entering the on-screen PIN code.
- Connected devices will show up under **Device List** on the same subnet connection.
- If the device does not show up under **Device List**, users will need to key-in the on-screen PIN code.
- **Ports:**
  - » TCP 56789, 25123, 8121 & 8000 (Controlling message port & client device audio transfer)
  - » TCP 8600 (BYOM)
  - » TCP 53000 (Request share screen)
  - » TCP 52020 (Reverse control)
  - » TCP 52025 (Reverse control for ViewBoard Cast Button)
  - » TCP 52030 (Status sync)
  - » TCP 52040 (Moderator mode)
  - » UDP 48689, 25123 (Device searching and broadcast & client device audio transfer)
  - » UDP 5353 (Multicast search device protocol)
- **Port and DNS for Activation**:
  - » Port: 443
  - » DNS: https://vcastactivate.viewsonic.com
- **OTA Service**
  - » Server Port: TCP 443
  - » Server FQDN Name: https://vcastupdate.viewsonic.com

Display Group Settings

To adjust the Display Group Settings, select the Display Group icon located in the lower-right corner of the screen.

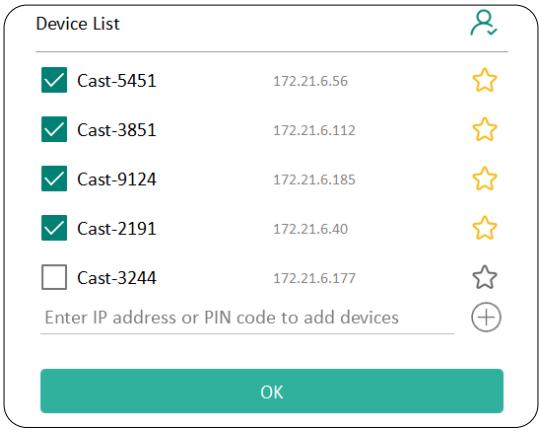


1. Toggle the "Turn On/Off Display Group" ON to enable the Display Group feature.



NOTE: Other preinstalled ViewBoard Cast devices in the same network will be listed.

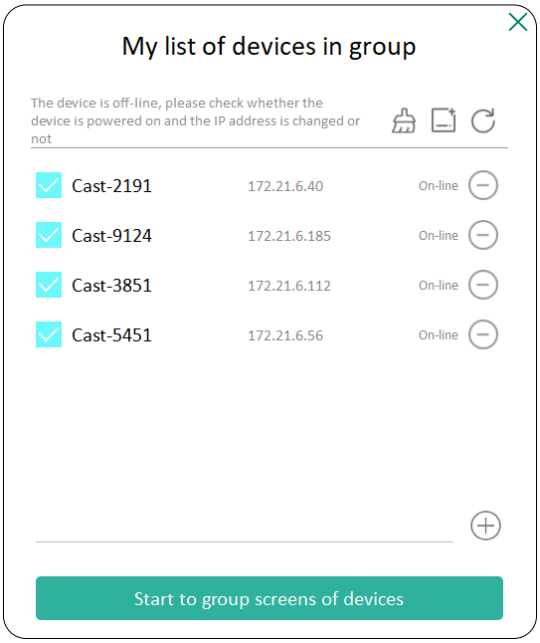
2. Select the devices you want to join the display group and select **OK** to save the settings.



NOTE:

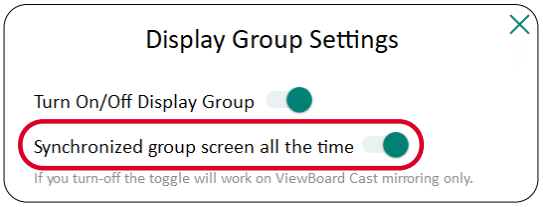
- If the devices you want to group are not listed, you can enter their respective IP address or connecting PIN code.
- The Display Group maximum device limit is six devices.

3. If you frequently connect to the same device, you can select the Star icon next to the device to add it to your frequently connected devices list, “My List of Devices in Group”, for easier Display Group setup and management.



Synchronized Group Screen All the Time

When the “Synchronized group screen all the time” function is toggled ON, it will display a synchronized group screen continuously. If it is toggled OFF, it will work on vCast mirroring only.



NOTE: Select the devices to group first, then toggle the “Synchronized group screen all the time” function ON to avoid interruption.

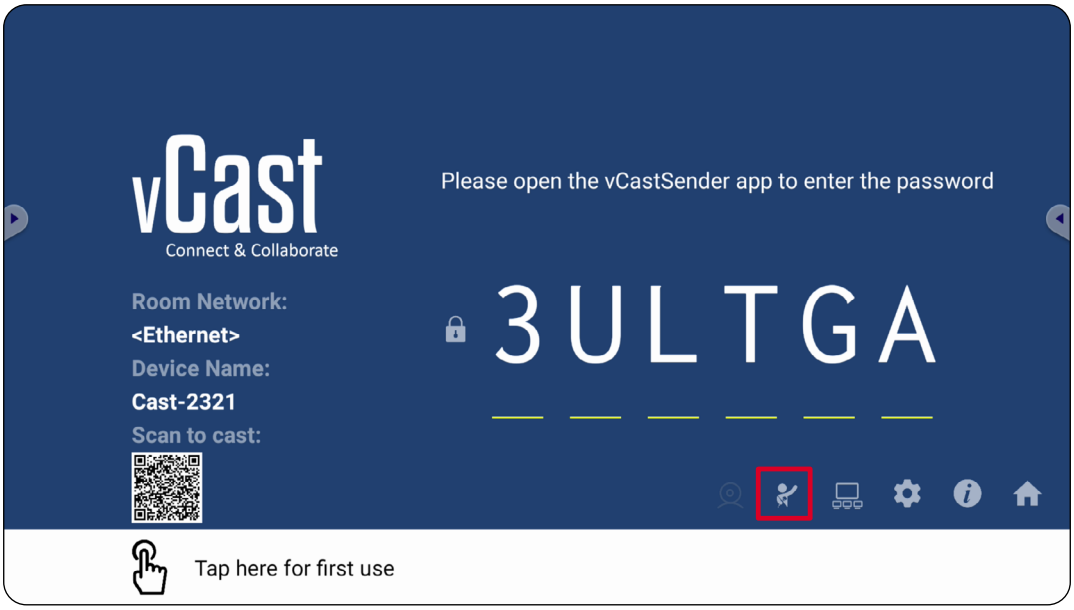
Share a Screen to the Display Group (One to Many Casting)

After confirming the above settings, you can share your screen to the main display, then the grouped client devices will be synced up to your screen.

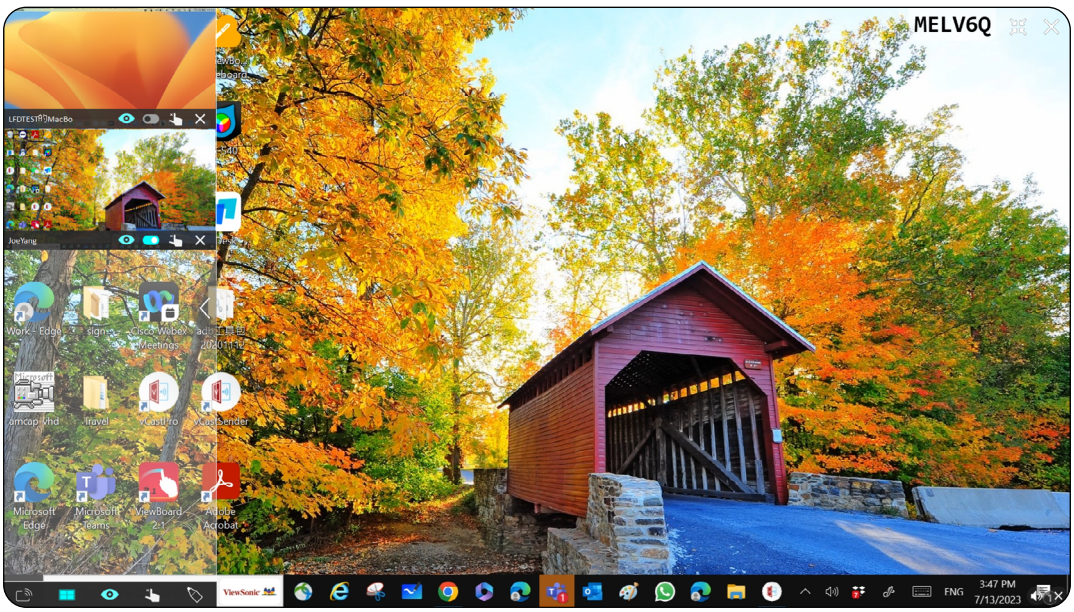


Moderator Mode

Moderator Mode allows the moderator to take control of the devices connected to the ViewBoard or display. To enter Moderator Mode, select the Moderator Mode icon located in the lower-right corner of the screen.

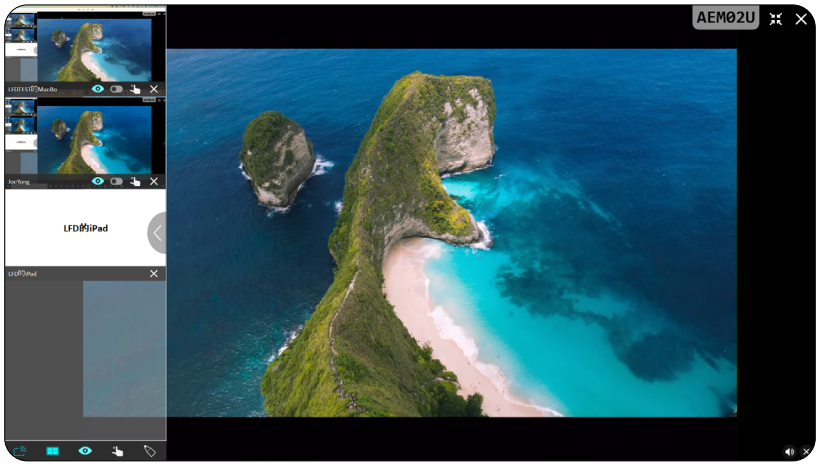


When enabled, the moderator can view a list of all connected screens in the left floating window and can preview each participant's screen and then select any of participant's screen and cast to the ViewBoard's or display's main screen for presentation. The moderator can also control each participant's screen, annotate on the ViewBoard or display, and remove unwanted participants by selecting the close icon (X).



Broadcast

When enabled, the ViewBoard's screen will be broadcasted to all of the participant's connected screens simultaneously. The participants can only view the presentation contents until the moderator disables the Broadcast function.



Multiple Screen Sharing

By default, vCast is set to allow multiple screen sharing, but can also be set to single screen sharing. To do this, the moderator can select the Multiple Screen Sharing icon to switch to single screen sharing.

Preview Screen

By default, vCast is set to let the moderator preview the participant's screen contents prior to sharing to the ViewBoard. Selecting the Preview Screen icon, the Moderator can switch to see the participant's name only.

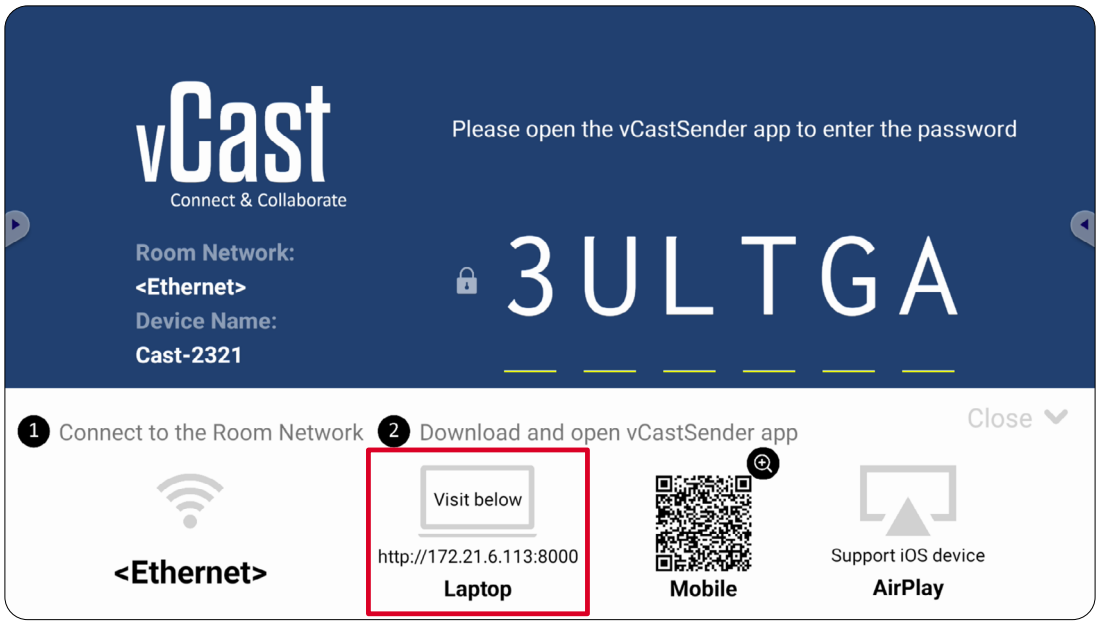
Touch

By default, participants can use touch for collaboration after connecting. The moderator can enable/disable the touch function of a participant by selecting the Touch icon in their window.

NOTE:

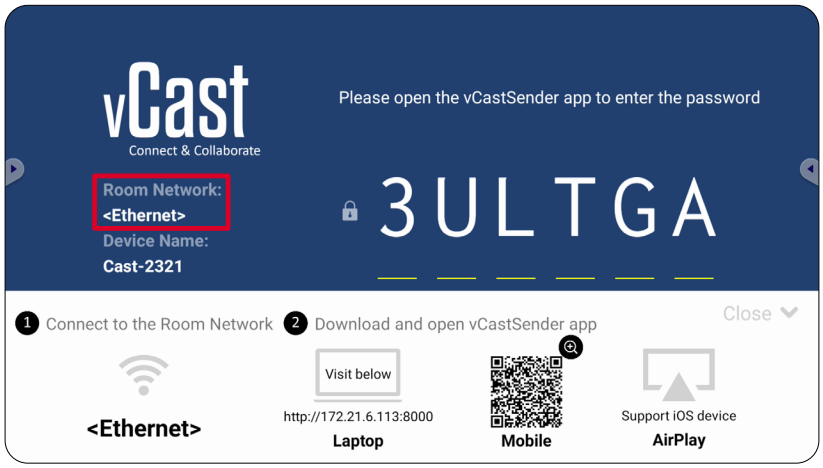
- Moderator Mode is supported on all vCastSender and AirPlay devices, but mobile devices are limited to a "preview" function. Additionally, mobile Android devices cannot cast sound out.
- When you cast your Windows/Mac/Chrome screen to a ViewBoard or display, the selected full screen unit will not be broadcasted back to your device to avoid repetitive screen casting.
- The active presenter can touch each of the participant's screens to remotely control casting devices.
- The number of multi-screen presenters on-screen depends on your Windows CPU processor performance and router specifications.

Casting from Windows, MacBook, and Chrome Devices



1. Ensure the client device (e.g., laptop) is connected to the same network as the ViewBoard.

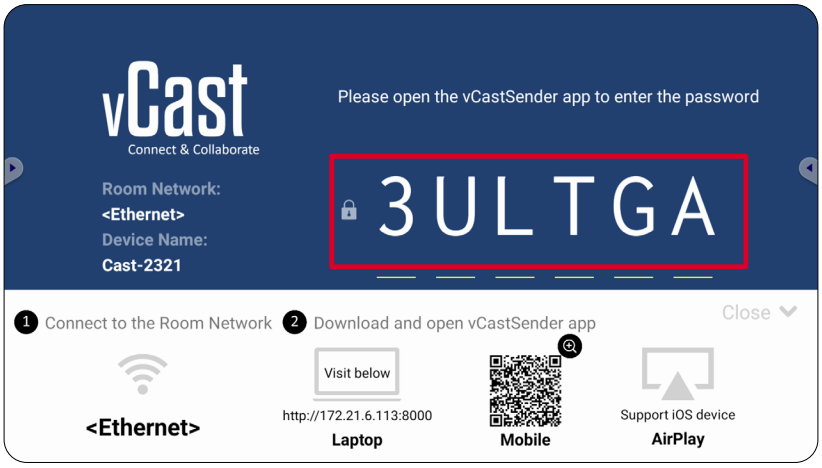
   NOTE: The network name can be found under **Room Network**.



2. On the client device, visit the address that is shown on the ViewBoard to download and install the vCastSender application.
3. After installing, launch the vCastSender application.

4. To connect to the ViewBoard, input the PIN code and click OK.

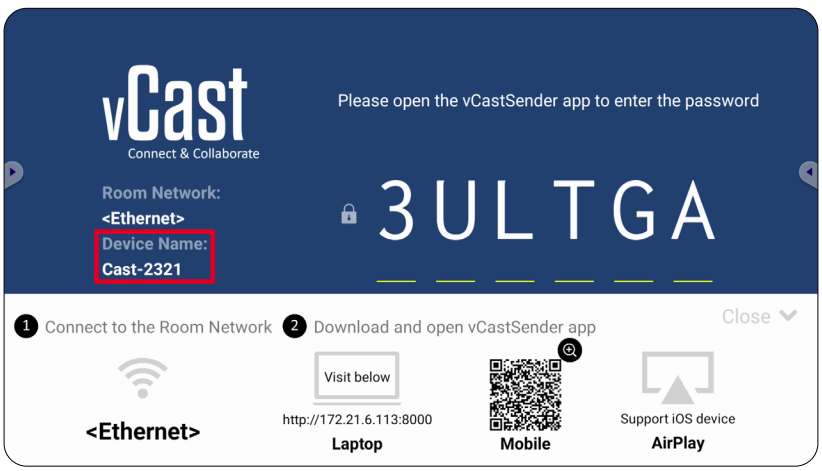
NOTE: The **PIN code** can be found as highlighted below:



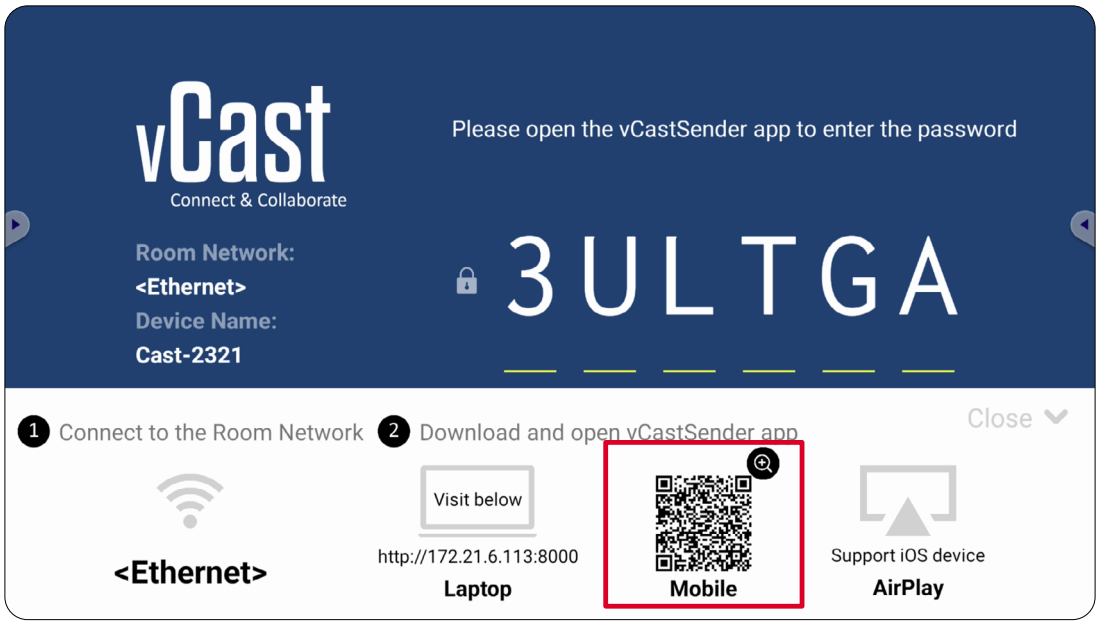
5. Additionally, you can connect to the ViewBoard by clicking **Device List** then the **Device Name** listed.



NOTE: The **Device Name** can be found as highlighted below:

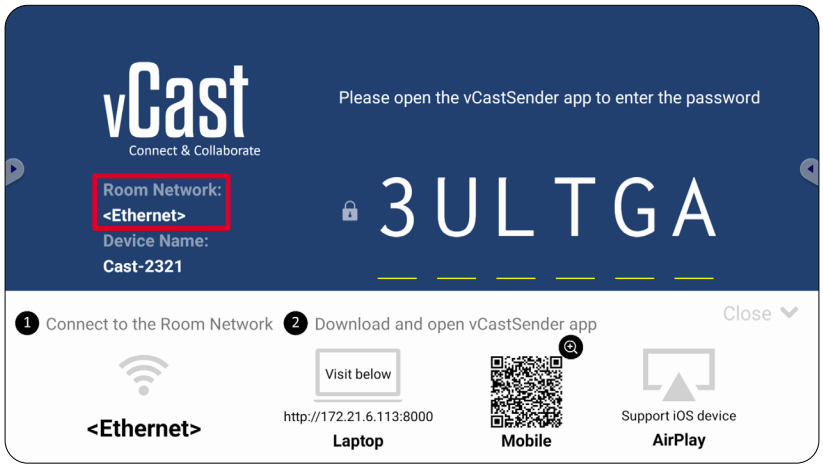


Casting from Android Devices



1. Ensure the client device (e.g., Android phone or tablet) is connected to the same network as the ViewBoard.

NOTE: The network name can be found under **Room Network**.



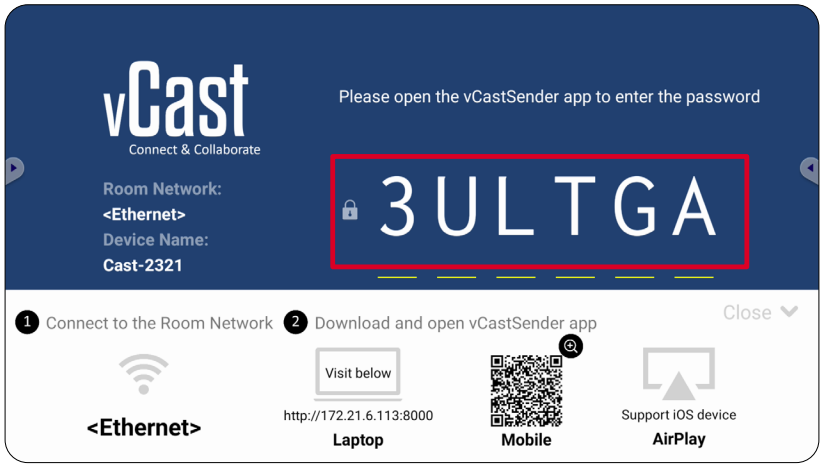
2. On the Android client device, scan the QR code shown on the ViewBoard to directly download the vCastSender application, or download the application from the Google Play Store.



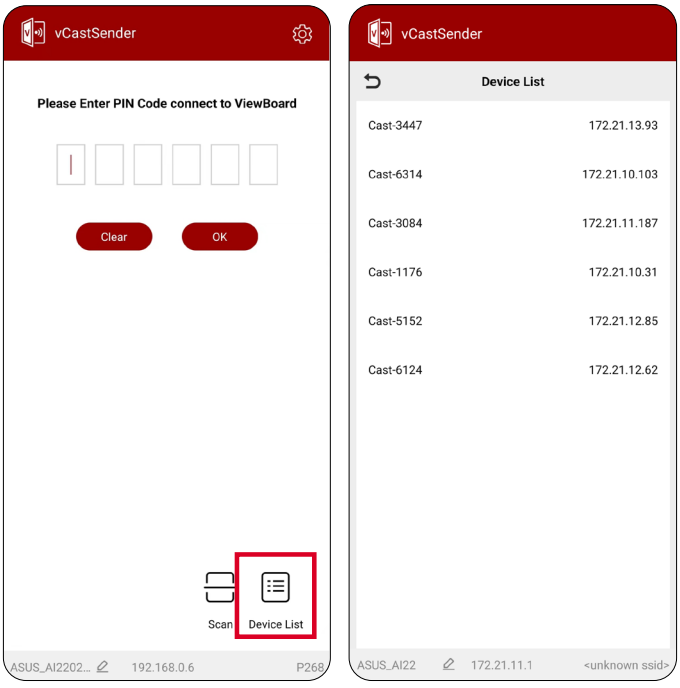
3. After installing, launch the vCastSender application.

4. To connect to the ViewBoard, input the PIN code and select **OK**.

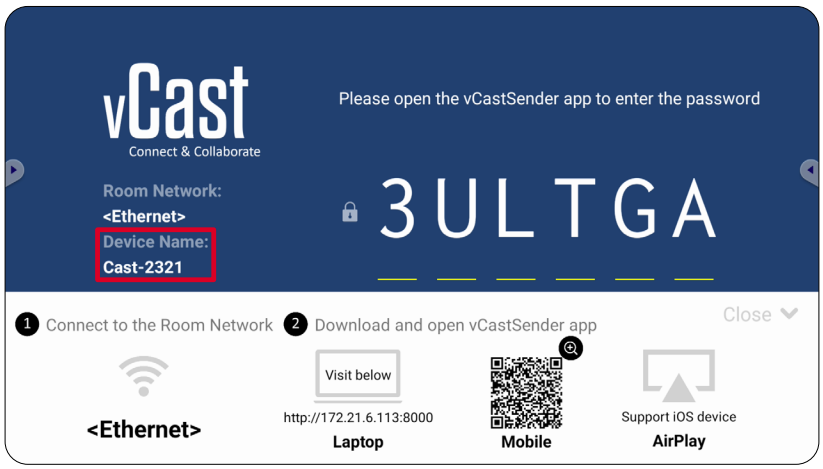
NOTE: The **PIN code** can be found as highlighted below:



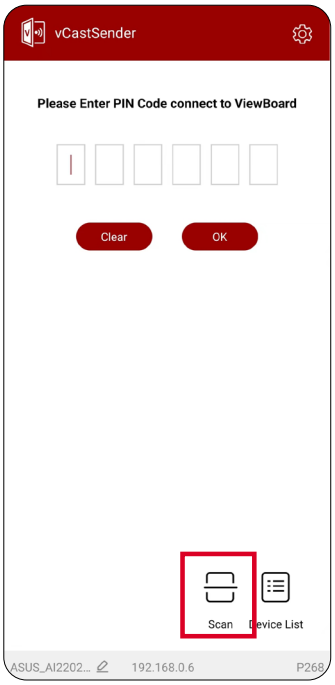
5. You can also connect to the ViewBoard by selecting **Device List** then the **Device Name** listed.

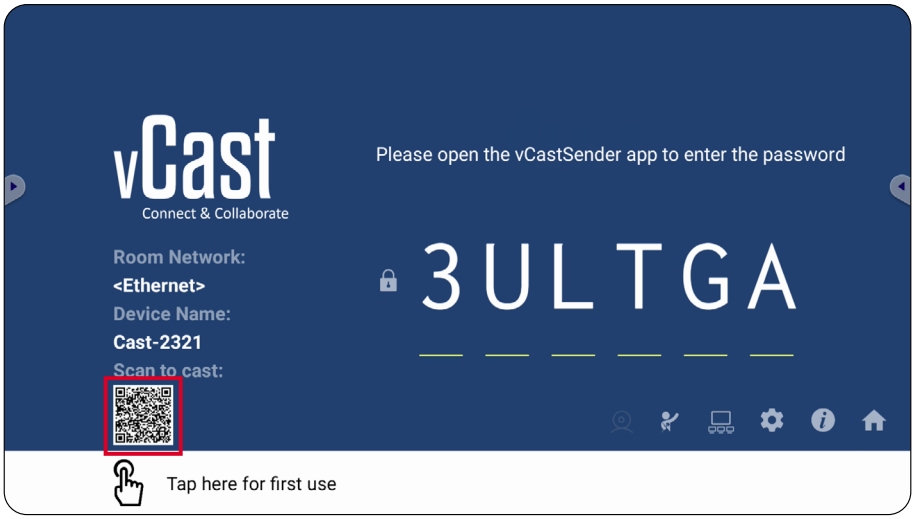


NOTE: The **Device Name** can be found as highlighted below:



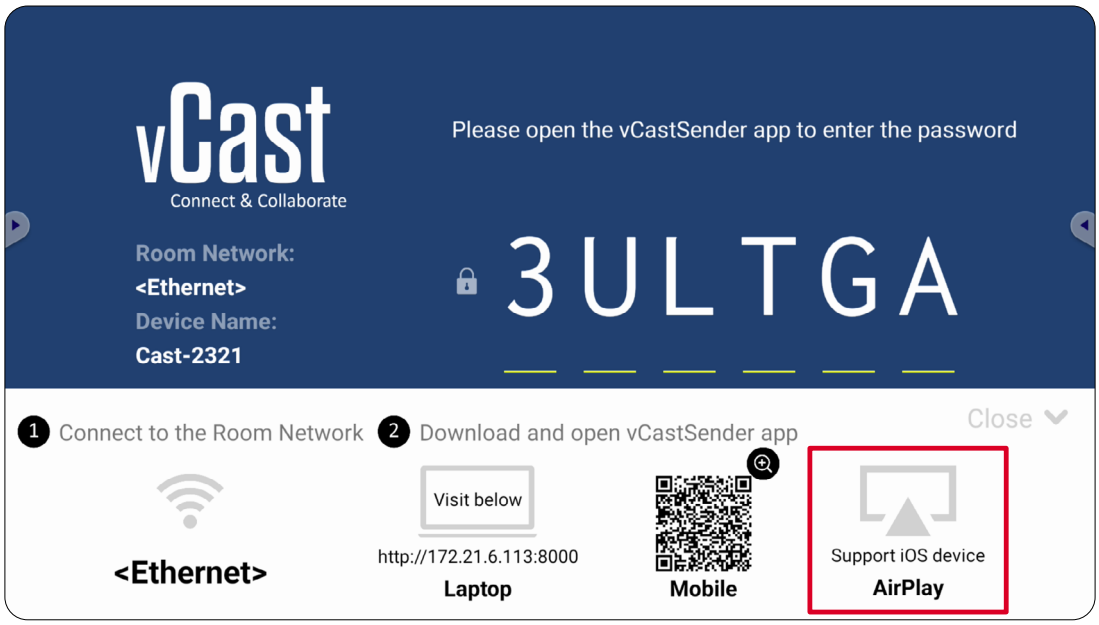
6. Additionally, you can connect to the ViewBoard or by selecting **Scan** then placing the on-screen QR code into the box to automatically connect.





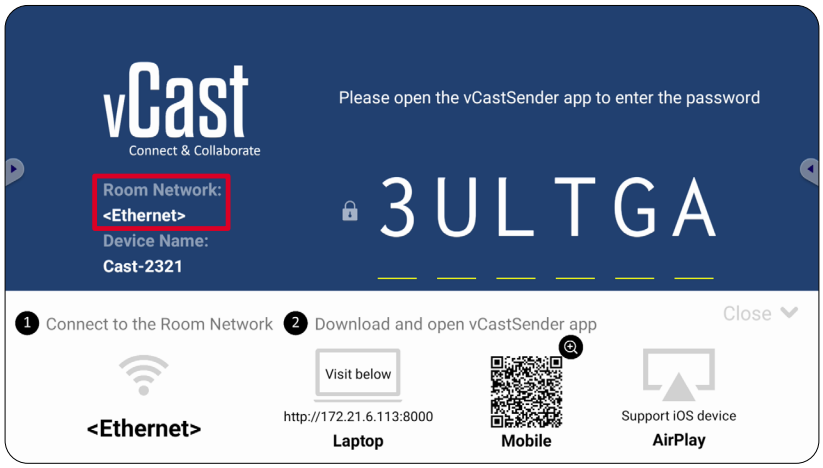
Casting from Apple iOS Devices

Apple AirPlay® is compatible with vCast for screen mirroring and content streaming under the same subnet environment only. An “AirPlay Password” will be generated on-screen for connection when using AirPlay to cast to a ViewBoard.



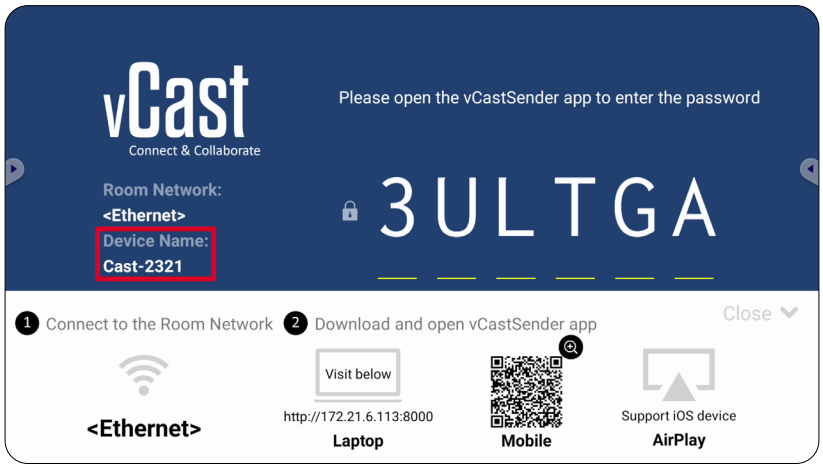
1. Ensure the client device (e.g., iPhone or iPad) is connected to the same network as the ViewBoard.

NOTE: The network name can be found under **Room Network**.

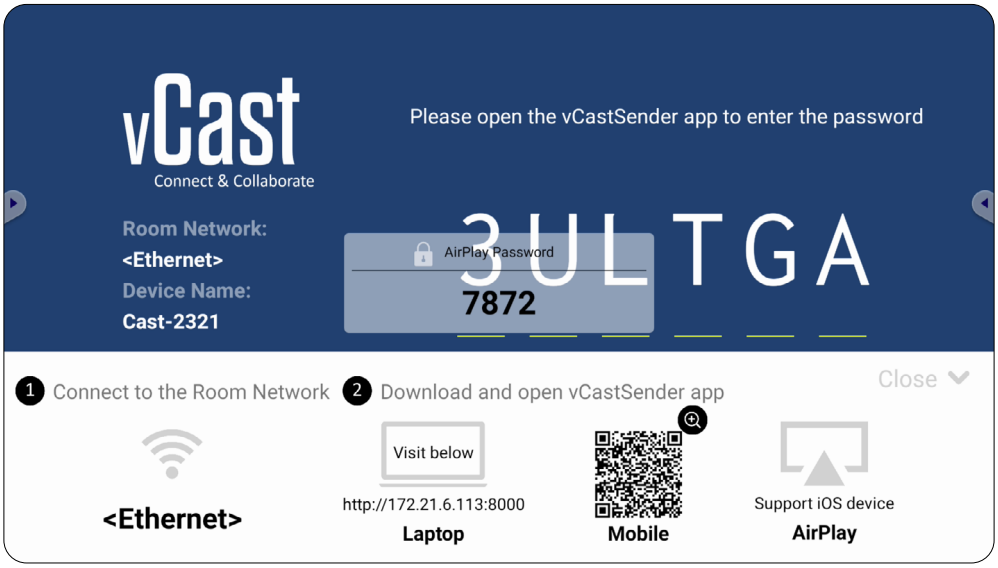


2. On the iOS client device, directly open AirPlay and select the **Device Name** of the ViewBoard to connect.

NOTE: The **Device Name** can be found as highlighted below:

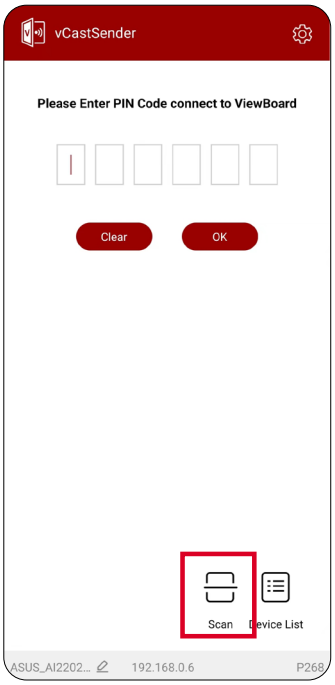


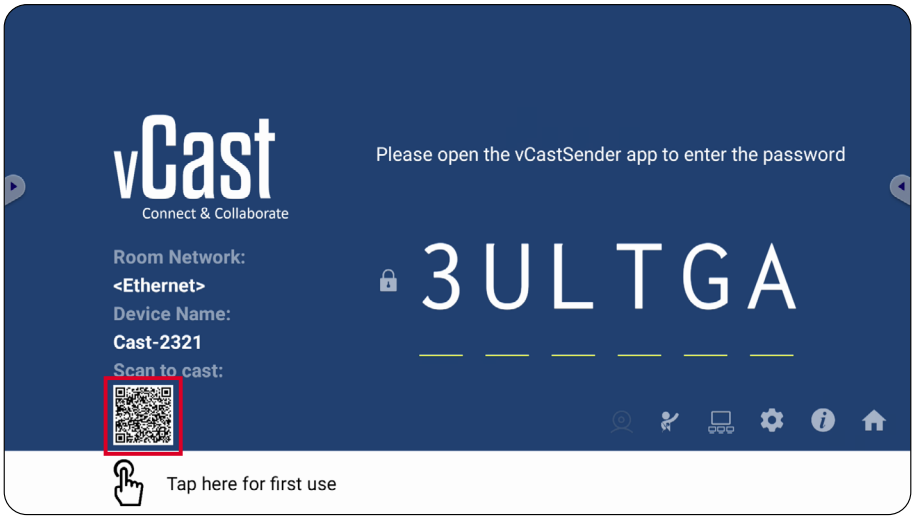
3. Input the generated on-screen **AirPlay Password** on the client device to connect.



NOTE: In a cross subnet environment, please download and connect with the vCastSender iOS application from the Apple App Store.

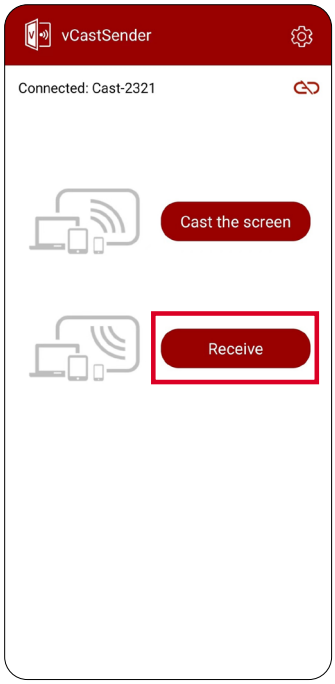
4. You can also connect to the ViewBoard by selecting **Scan** then placing the on-screen QR code into the box to automatically connect.

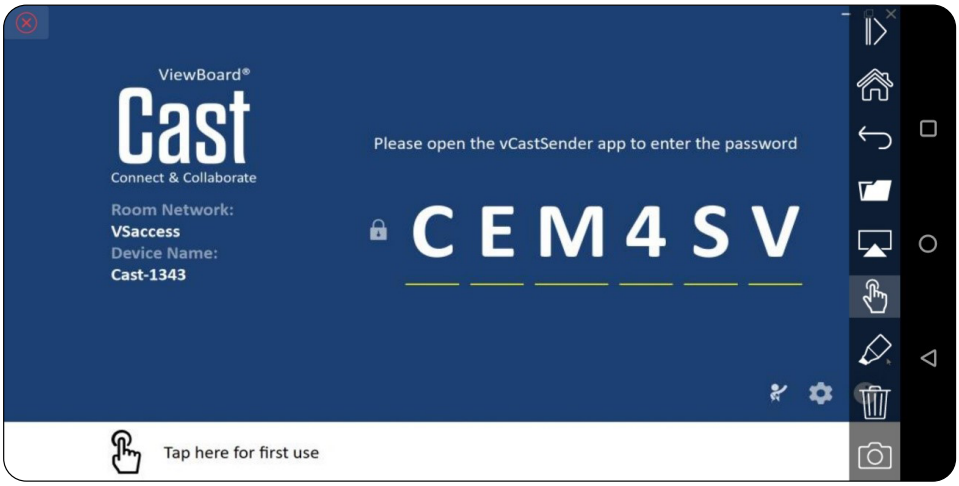




Connecting to a ViewBoard from a Mobile Device

Once connected, select **Receive**. The ViewBoard will appear on the mobile device with an on-screen toolbar. Users can interact with the ViewBoard with annotations, file sharing, etc.





Item		Description
	Toggle	Hide or display the toolbar.
	Home	Return to the Home interface.
	Return	Return to the previous operation.
	Folder	View or open the mobile device's files.
	Share	Cast the mobile device's screen to the connected ViewBoard or display.
	Touch	Remotely control the connected ViewBoard or display.
	Annotate	Make annotations, and adjust the pen color.
	Clear	Clear everything on screen.
	Camera	Send camera images to the connected ViewBoard or display.

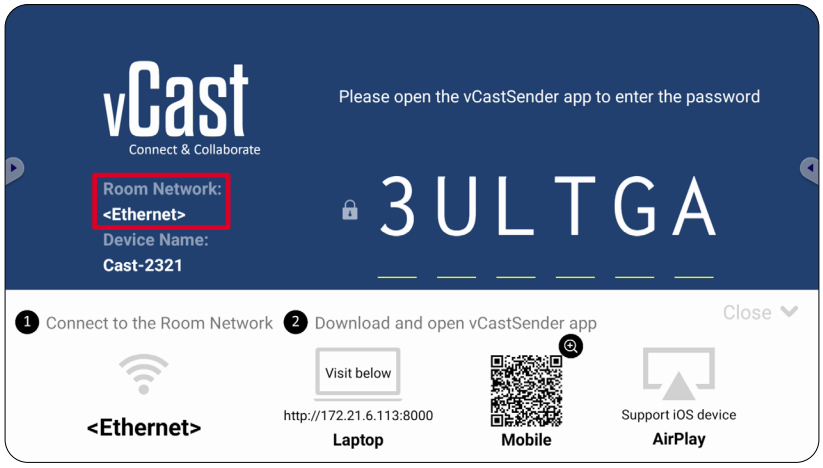
Casting with Chromecast

vCast supports native Chromecast screen sharing via the Chrome browser casting when the Chromecast feature is enabled.

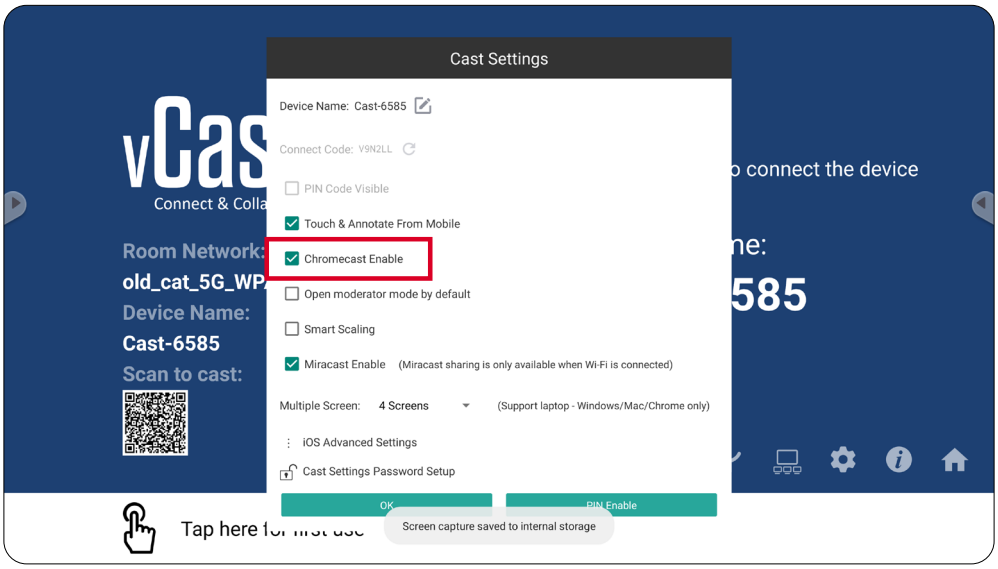
NOTE: Chromecast does not support password protection or multiple-screen casting.

1. Ensure the client device (e.g., laptop) is connected to the same network as the ViewBoard.

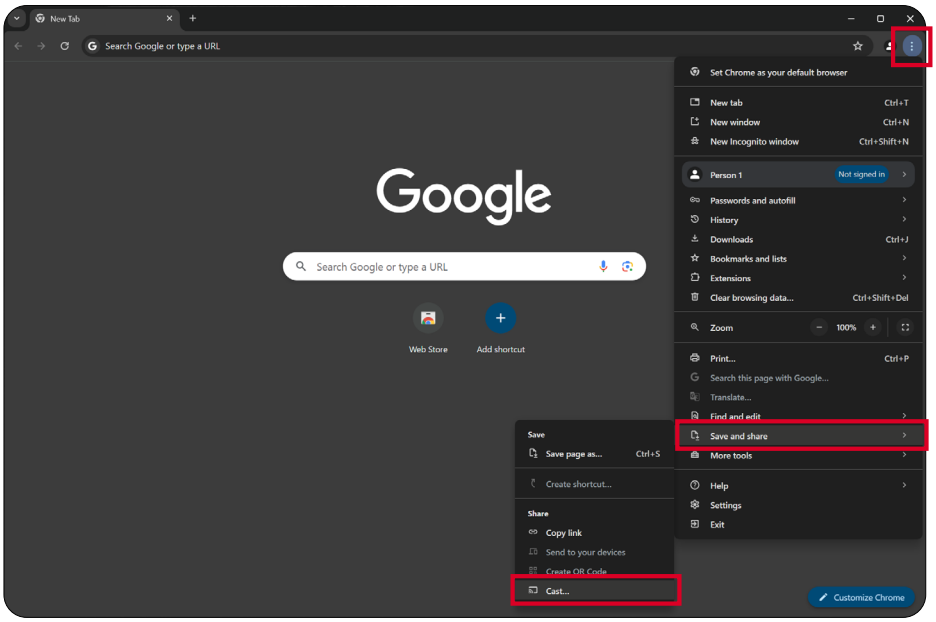
NOTE: The network name can be found under **Room Network**.

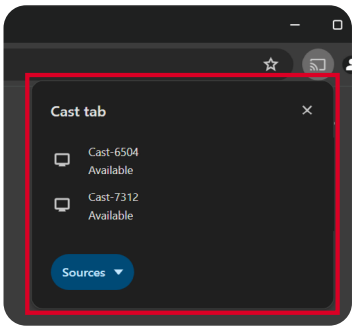


2. Ensure the **Chromecast Enable** checkbox is selected in the vCast settings.



3. In the Chrome browser, go to: **Settings** > **Save and share** > **Cast...** > Select the screen to cast to.





Casting with Miracast

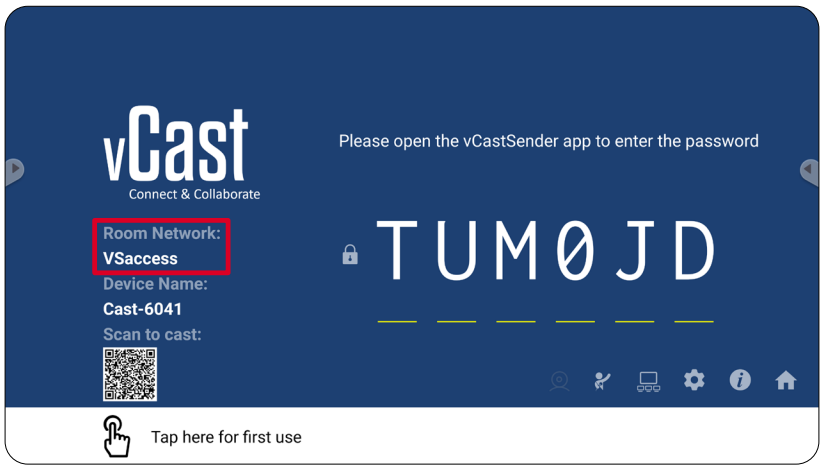
vCast supports native Miracast to cast content from Windows and Android devices to a ViewBoard when the Miracast feature is enabled.

NOTE:

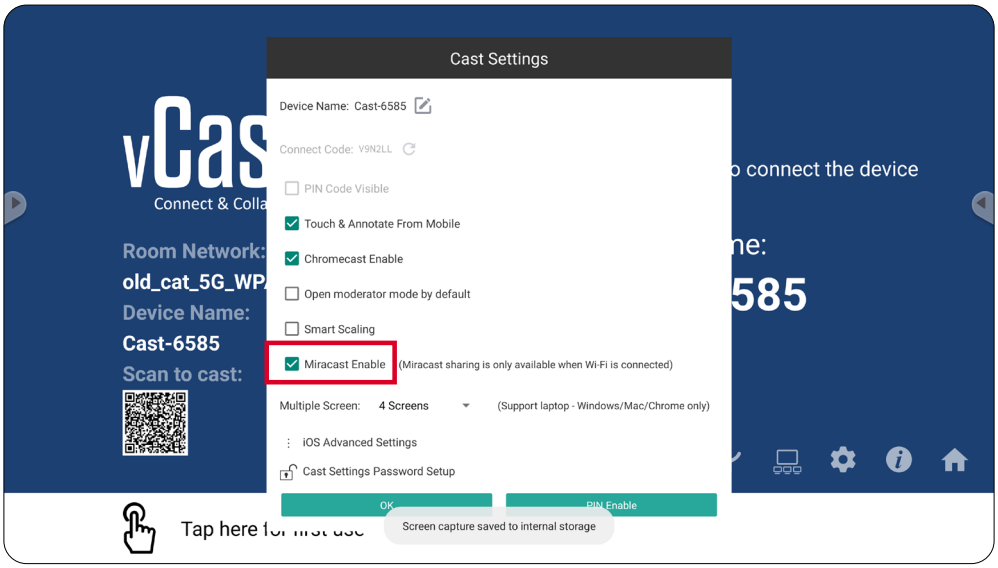
- Miracast does not support password protection or multiple-screen casting.
- Miracast sharing is only available over Wi-Fi.
- Miracast will automatically turn off after being idle for one hour.

1. Ensure the client device (e.g., laptop) is connected to the same network as the ViewBoard.

NOTE: The network name can be found under **Room Network**.



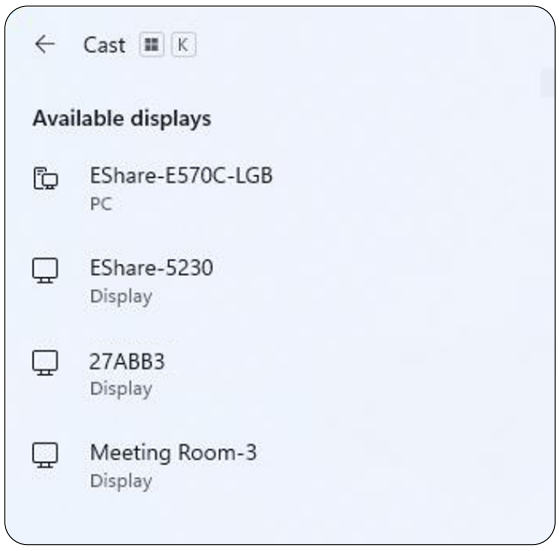
2. Ensure the **Miracast Enable** checkbox is selected in the vCast settings.



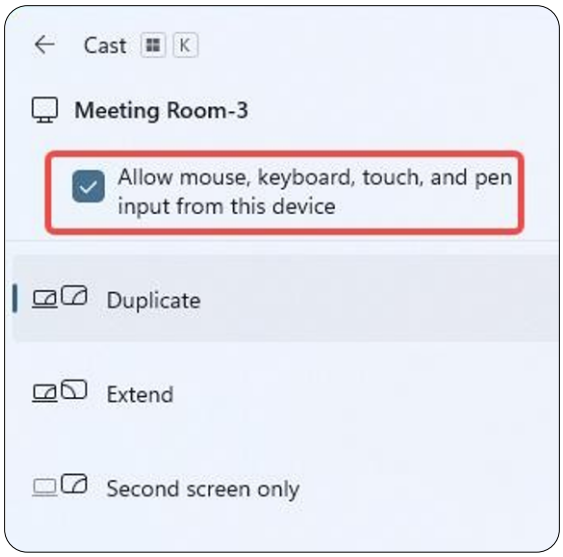
3. Please follow the below steps to cast:

For Windows devices:

1. On the Windows device, press Win + K and select the display to cast to.



2. Select the checkbox “Allow mouse, keyboard, touch, and pen input from the device” to enable the touch feedback feature.



For Android devices:

On the Android device, directly select Cast/Smart View/Wireless Projection then select the display to cast to.

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.

The protocol contains three command sections:

- Set-Function
- Get-Function
- Remote control pass-through mode

NOTE: Below, “PC” represents all the control units that can send or receive the RS-232 protocol command.

Description

RS-232 Hardware Specification

ViewSonic LFD communication port on the rear side:

1. Connector type: DSUB 9-Pin Male (female or 3.5 mm barrel connector)

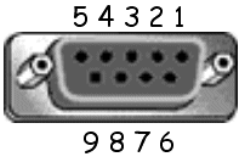
2. Use of crossover (null modem) cable for connection

3. Pin Assignment:

Male DSUB 9-Pin (preferred)



Female DSUB 9-Pin



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

3.5 mm barrel connector (alternative for limited space)



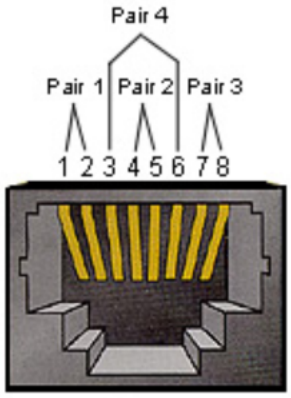
Item	Signal	Remark
Tip	TXD	Output from Display
Ring	RXD	Input to Display
Sleeve	GND	

LAN Hardware Specification

ViewSonic LFD communication port on the rear side:

1. Connector type: 8P8C RJ45

2. Pin Assignment:



Pin #	Signal	Remark
1	TX+	Output from Display
2	TX-	Output from Display
3	RX+	Input to Display
4	BI_D3+	For 1G case
5	BI_D3-	For 1G case
6	RX-	Input to Display
7	BI_D4+	For 1G case
8	BI_D4-	For 1G case
frame	GND	

RS-232 Communication Setting

- Baud Rate Select: 9600bps (fixed)
- Data bits: 8 bits (fixed)
- Parity: None (fixed)
- Stop Bits: 1 (fixed)

LAN Communication Setting

Type:	Ethernet
Protocol:	TCP/IP
Port:	5000 (fixed)
WOL Port:	9 (fixed) for UDP*3.2.0
Cross subnet:	No
Logon Credentials:	No

Command Message Reference

PC sends to LFD command packet followed by “CR”. Every time PC sends control command to Display, the Display shall respond as follows:

1. If the message is received correctly it will send “+” (02Bh) followed by “CR” (00Dh)

2. If the message is received incorrectly it will send “-” (02Dh) followed by “CR” (00Dh)

Protocol

Set-Function Listing

The PC can control the Display for specific actions. The Set-Function command allows you to control the Display behavior at a remote site through the RS-232 port. The Set-Function packet format consists of 9 bytes.

Set-Function Description:

Length:	Total Byte of Message excluding "CR"
LFD ID	Identification for each Display (01~98; default is 01) ID "**99**" means to apply the set command for all connected displays. Under such circumstances, only ID#1 display has to reply. The LFD ID can be set via the OSD menu for each Display.
Command Type	Identify command type, "s" (0x73h): Set Command "+" (0x2Bh): Valid command Reply "-" (0x2Dh): Invalid command Reply
Command:	Function command code: One byte ASCII code.
Value[1~3]:	Three bytes ASCII that defines the value.
CR	0x0D

Set-Function Format

Send: (Command Type="s")

Name	Length	ID	Command Type	Command	Value1	Value2	Value3	CR
Byte Count	1 Byte	2 Byte	1 Byte	1 Byte	1 Byte	1 Byte	1 Byte	1 Byte
Bytes order	1	2~3	4	5	6	7	8	9

Reply: (Command Type="+" or "-")

Name	Length	ID	Command Type	CR
Byte Count	1 Byte	2 Byte	1 Byte	1 Byte
Bytes order	1	2~3	4	5

NOTE: When PC applies command to all displays (ID=99), only the #1 set needs to reply by the name of ID=1.

Example 1: Set Brightness at 76 for Display (#02) and this command is valid

Send (Hex Format)

Name	Length	ID	Command Type	Command	Value1	Value2	Value3	CR
Hex	0x38	0x30 0x32	0x73	0x24	0x30	0x37	0x36	0x0D

Reply (Hex Format)

Name	Length	ID	Command Type	CR
Hex	0x34	0x30 0x32	0x2B	0x0D

Example 2: Set Brightness at 75 for Display (#02) and this command is NOT valid

Send (Hex Format)

Name	Length	ID	Command Type	Command	Value1	Value2	Value3	CR
Hex	0x38	0x30 0x32	0x73	0x24	0x30	0x37	0x35	0x0D

Reply (Hex Format)

Name	Length	ID	Command Type	CR
Hex	0x34	0x30 0x32	0x2D	0x0D

Set-Function Table

A. Basic Function

Set Function	Length	ID	Command	Command		Value Range	Comments
			Type (ASCII)	Code (ASCII)	Code (Hex)	(Three ASCII bytes)	
Power ON/OFF (standby)	8		s	!	21	000: STBY 001: ON	1. The Power-on via LAN control may work only under specific modes. See display UG for details. *3.1.1 2. “WOL by MAC address” maybe available as an alternative.*3.2.1
Input Select	8		s	“	22	000: TV 001: AV 002: S-Video 003: YPbPr 004: HDMI1 014: HDMI2 024: HDMI3 034: HDMI4 005: DVI 006: VGA1 016: VGA2 026: VGA3 007: Slot-in PC (OPS/SDM)/HDBT 008: Internal memory 009: DP 00A: Embedded/Main (Android)	1. No need for USB 2. For the case of two or more same sources, the 2nd digital is used to indicate the extension. 3. The HEX of 00A is 30 30 41.
Brightness	8		s	$	24	000 ~ 100 900: Bright down (-1) 901: Bright up (+1) *3.1.1	
Backlight *3.2.0	8		A	B	42	000 ~ 100	1. For Android platform whose main mode is controlled by backlight and the other sources are controlled by brightness. 2. Derived from Color calibration. *3.2.0
Power lock	8		s	4	34	000: Unlock 001: Lock	*See note in details
Volume	8		s	5	35	000 ~ 100 900: Volume down(-1) 901:Volume up(+1)	
Mute	8		s	6	36	000: OFF 001: ON (mute)	

Set Function	Length	ID	Command	Command		Value Range	Comments
Button lock	8		s	8	38	000: Unlock 001: Lock	*See note in details
Menu lock	8		s	>	3E	000: Unlock 001: Lock	*See note in details
Number *3.1.1	8		s	@	40	000~009	
Key Pad *3.1.1	8		s	A	41	000: UP 001: DOWN 002: LEFT 003: RIGHT 004: ENTER 005: INPUT 006: MENU/(EXIT) 007: EXIT	
Remote Control	8		s	B	42	000: Disable 001: Enable 002: Pass through	**Disable**: RCU will have no function **Enabled**: RCU controls normally **Pass through**: Display will bypass the RC code to connected device via the RS-232 port, but not react itself.
Restore default	8		s	~	7E	000	Recover to factory settings

NOTE:

1. Behavior at Lock Modes

Lock Mode	Behavior
Button Lock	1. Lock all buttons on the front panel and RCU, except for “Power”. 2. All the SET functions should be workable via RS-232, even the ones with according hot key in RCU like Mute,…etc.
MENU Lock	1. Lock the “MENU’ key of front panel and RCU. 2. The Factory and Hospitality modes should not be blocked for the model using MENU-combined key to enter these two modes. Alternative approach will be indicated separately if any limitation by model.
POWER Lock	1. Lock the “POWER” key on the front and RCU. 2. The SET_POWER ON/OFF should be workable via RS-232, but does not mean the POWER lock will be released under this case. 3. Can not be unlocked by reset in OSD setting. 4. Will auto AC power-on in power-lock. 5. Under power-lock, the set will not enter power saving when no PC signal and neither turn off when no other video signals after 15 minutes.
Remote Control Disable	Lock the RCU keys, but keep the front panel buttons workable.

2. Wake-on-LAN by MAC address as alternative for SET Power on

(Length=126 Bytes)

6 Bytes	6 Bytes (#1)	6 Bytes (#2)	...	6 Bytes (#16)	24 Bytes
0xFF FF ... FF	MAC address	MAC address	…	MAC address	0x00 00 … 00

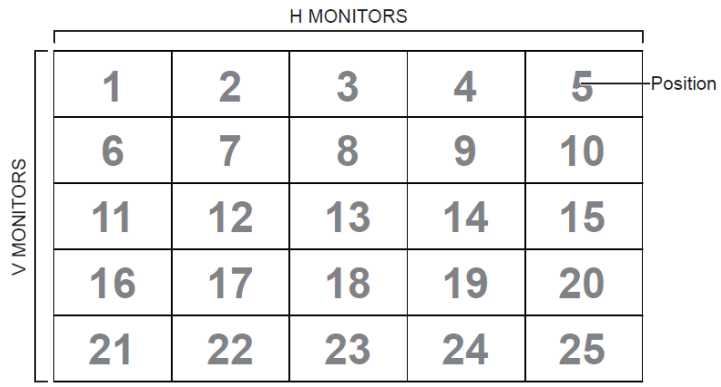
B. Optional Function

Set Function	Length	ID	Command	Command		Value Range	Comments
			Type (ASCII)	Code (ASCII)	Code (Hex)	(Three ASCII bytes)	
Contrast	8		s	#	23	000 ~ 100	
Sharpness	8		s	%	25	000 ~ 100	
Color	8		s	&	26	000 ~ 100	
Tint	8		s	‘	27	000 ~ 100	
Backlight On_Off	8		s	(	29	000: OFF 001: ON	
Color mode	8		s	)	29	000: Normal 001: Warm 002: Cold 003: Personal	
Surround sound	8		s	-	2D	000: OFF 001: ON	
Bass	8		s	.	2E	000 ~ 100	
Treble	8		s	/	2F	000 ~ 100	
Balance	8		s	0	30	000 ~ 100	050 is central
Picture Size	8		s	1	31	000: FULL (16:9) 001: NORMAL (4:3) 002: REAL (1:1) *3.1.0	
OSD language	8		s	2	32	000: English 001: French 002: Spanish	Could be extended for more supported languages by model
PIP-Mode	8		s	9	39	000: OFF 001: PIP(POP) 002: PBP	
PIP-Sound select	8		s	:	3A	000: Main 001: Sub	
PIP-Position	8		s	;	3B	000: Up 001: Down 002: Left 003: Right	
PIP-Input	8		s	7	37 *2.9	000: TV 001: AV 002: S-Video 003: YPbPr 004: HDMI1 014: HDMI2 024: HDMI3 034: HDMI4 005: DVI 006: VGA1 016: VGA2 026: VGA3 007: Slot-in PC (OPS/SDM)/HDBT 008: Internal memory 009: DP 00A: Embedded/ Main (Android)	Value range is same as SET-Input select

Set Function	Length	ID	Command	Command		Value Range	Comments
Tiling-Mode	8		s	P	50	000: OFF 001: ON	(for video wall)
Tiling-Compensation	8		s	Q	51	000: OFF 001: ON	(for video wall) Bezel width compensation
Tiling-H by V Monitors	8		s	R	52	01x~09x: H 0x1~0x9: V	(for video wall) 1. 2nd digital for H monitors 2. 3rd digital for V monitors
Tiling-Position	8		s	S	53	001~025	(for Video wall) Copy the screen of Position# to identified display
Date: Year	8		s	V	56	Y17~Y99	Last 2 digits (20)17~(20)99
Date: Month	8		s	V	56	M01~M12	2 digits
Date: Day	8		s	V	56	D01~D31	2 digits
Time: Hour	8		s	W	57	H00~H23	24-hr format. 2 digits.
Time: Min	8		s	W	57	M00~M59	2 digits
Time: Sec	8		s	W	57	S00~S59	2 digits

NOTE:

1. Tiling definition of H Monitors, V Monitors, and Position



2. Set Date example

Date: 2017-3/15

Send: 0x 38 30 31 73 56 59 31 37 0D (“Y17”)

Send: 0x 38 30 31 73 56 4D 30 33 0D (“M03”)

Send: 0x 38 30 31 73 56 44 31 35 0D (“D15”)

3. Set Time example

Time: 16:27:59

Send: 0x 38 30 31 73 57 48 31 36 0D (“H16”)

Send: 0x 38 30 31 73 57 4D 32 37 0D (“M27”)

Send: 0x 38 30 31 73 57 53 35 39 0D (“S59”)

Get-Function Listing

The PC can interrogate the LFD for specific information. The Get-Function packet format consists of 9 bytes which is similar to the Set-Function packet structure. Note that the “Value” byte is always = 000.

Get-Function Description:

Length:	Total Byte of Message excluding “CR”.
TV/DS ID	Identification for each of TV/DS (01~98; default is 01).
Command Type	Identify command type, “g” (0x67h) : Get Command “r” (0x72h) : Valid command Reply “-“ (0x2Dh) : Invalid command Reply
Command:	Function command code: One byte ASCII code.
Value[1~3]:	Three bytes ASCII that defines the value.
CR	0x0D

Get-Function Format

Send: (Command Type=“g”)

Name	Length	ID	Command Type	Command	Value1	Value2	Value3	CR
Byte Count	1 Byte	2 Byte	1 Byte	1 Byte	1 Byte	1 Byte	1 Byte	1 Byte
Bytes order	1	2~3	4	5	6	7	8	9

Reply: (Command Type=“r” or “-”)

If the Command is valid, Command Type = “r”

Name	Length	ID	Command Type	Command	Value1	Value2	Value3	CR
Byte Count	1 Byte	2 Byte	1 Byte	1 Byte	1 Byte	1 Byte	1 Byte	1 Byte
Bytes order	1	2~3	4	5	6	7	8	9

If the Command is NOT valid, Command Type = “-”

Name	Length	ID	Command Type	CR
Byte Count	1 Byte	2 Byte	1 Byte	1 Byte
Bytes order	1	2~3	4	5

Example 1: Get Brightness from TV-05 and this command is valid. The Brightness value is 67.

Send (Hex Format)

Name	Length	ID	Command Type	Command	Value1	Value2	Value3	CR
Hex	0x38	0x30 0x35	0x67	0x62	0x30	0x30	0x30	0x0D

Reply (Hex Format)

Name	Length	ID	Command Type	Command	Value1	Value2	Value3	CR
Hex	0x38	0x30 0x35	0x72	0x62	0x30	0x36	0x37	0x0D

Example 2: Get Color from Display (#05), but the Color command is not supported by this model.

Send (Hex Format)

Name	Length	ID	Command Type	Command	Value1	Value2	Value3	CR
Hex	0x38	0x30 0x35	0x67	0x26	0x30	0x30	0x30	0x0D

Reply (Hex Format)

Name	Length	ID	Command Type	CR
Hex	0x34	0x30 0x35	0x2D	0x0D

Get-Function Table

A. Basic Function

Get Function	Length	ID	Command	Command		Response Range	Comments
			Type (ASCII)	Code (ASCII)	Code (Hex)	(Three ASCII bytes)	
Get-Brightness	8		g	b	62	000 ~ 100	
Get-Backlight *3.2.0	8		a	B	42	000 ~ 100	1. For Android platform whose main mode is controlled by backlight and the other sources are controlled by brightness. 2. Derived from Color calibration. *3.2.0
Get-Volume	8		g	f	66	000 ~ 100	
Get-Mute	8		g	g	67	000: OFF 001: ON (muted)	
Get-Input select	8		g	j	6A	000~ 100~	1. 1st digit for signal detection: 0 means “no signal”; 1 means “signal detected” 2. 2nd & 3rd digit: See Set-function table
Get-Power status: ON/ STBY	8		g	l	6C	001: ON 000: STBY	
Get-Remote control	S		g	n	6E	000: Disable 001: Enable 002: Pass through	Get RCU mode status
Get-Power lock	8		g	o	6F	000: Unlock 001: Lock	
Get-Button lock	8		g	p	70	000: Unlock 001: Lock	
Get-Menu lock	8		g	l	6C	000: Unlock 001: Lock	
Get-ACK	8		g	z	7A	000	This command is used to test the communication link
Get-Thermal	8		g	0	30	000~100: 0~+100 deg C -01~-99: -1~-99 deg C	
Get-Operation Time *3.2.0	8		g	1	31	000	1. Accumulated hours in 6-digit integer (000,001~ 999,999) *3.2.0 2. Can not be reset when FW update and Factory initiation *3.2.2 3. Reply in new 32-byte format *3.2.0
Get-Device name	8		g	4	34	000	Reply in new 32-byte format *3.2.0

Get Function	Length	ID	Command	Command		Response Range	Comments
Get-MAC address	8		g	5	35	000	(for the models with LAN) Reply in new 32-byte format *3.2.0
Get-IP address *3.2.0	8		g	6	36	000	(for the models with LAN) Reply in new 32-byte format *3.2.0
Get-Serial number *3.2.0	8		g	7	37	000	Reply in new 32-byte format *3.2.0
Get-FW version *3.2.0	8		g	8	38	000	Reply in new 32-byte format *3.2.0

NOTE:

1. Get Operation Hour example

Assumed the accumulated operation hour is 123,456 hrs

Send: 0x 38 30 31 67 31 30 30 30 0D (Get Operation hour)

Reply: 0x 32 30 31 72 31 31 32 33 34 35 36 00 00 … 00 00 0D

2. Get Device Name example

Assumed the device name is CDE-5500

Send: 0x 38 30 31 67 34 30 30 30 0D (Get Device Name)

Reply: 0x 32 30 31 72 34 43 44 45 2D 35 35 30 30 00 00 … 00 00 0D

Assumed the device name is “NMP-302#1”

Send: 0x 38 30 31 67 34 30 30 30 0D (Get Device Name)

Reply: 0x 32 30 31 72 34 4E 4D 50 2D 33 30 32 23 31 00 00 …00 00 0D

3. Get MAC address example

Assumed the MAC address is 00:11:22:aa:bb:cc

Send: 0x 38 30 31 67 35 30 30 30 0D (Get MAC add)

Reply: 0x 32 30 31 72 35 30 30 31 31 32 32 61 61 62 62 63 63 00 00…00 00 0D

4. Get IP address example

Assumed the IP address is 192.168.100.2

Send: 0x 38 30 31 67 36 30 30 30 0D (Get IP address)

Reply: 0x 32 30 31 72 36 31 39 32 2E 31 36 38 2E 31 30 30 2E 32 00 00…00 00 0D

5. Get Serial number example

Assumed the Serial number is ABC180212345

Send: 0x 38 30 31 67 37 30 30 30 0D (Get Serial number)

Reply: 0x 32 30 31 72 37 41 42 43 31 38 30 32 31 32 33 34 35 00 00…00 00 0D

6. Get FW version example

Assumed the FW version is 3.02.001

Send: 0x 38 30 31 67 38 30 30 30 0D (Get FW version)

Reply: 0x 32 30 31 72 38 33 2E 30 32 2E 30 30 31 00 00…00 00 0D

B. Optional Function

Get Function	Length	ID	Command	Command		Response Range	Comments
			Type (ASCII)	Code (ASCII)	Code (Hex)	(Three ASCII bytes)	
Get-Contrast	8		g	a	61	000 ~ 100	
Get-Sharpness	8		g	c	63	000 ~ 100	
Get-Color	8		g	d	64	000 ~ 100	
Get-Tint	8		g	e	65	000 ~ 100	
Get-Backlight On_Off	8		g	h	68	000: OFF 001: ON	
Get-PIP mode	8		g	t	74	000: OFF 001: PIP (POP) 002: PBP	
Get-PIP input	8		g	u	75	000 ~	See Set-input select
Get-Tiling Mode	8		g	v	76	000: OFF 001: ON	(for Video wall)
Get-Tiling Compensation	8		g	w	77	000: OFF 001: ON	(for Video wall) Bezel width compensation
Get-Tiling H by V monitors	8		g	x	78	01x~09x: H monitors 0x1~0x9: V monitors	(for Video wall) 1. 2nd digital for H monitors 2. 3rd digital for V monitors
Get-Tiling position	8		g	y	79	000: OFF 001~025	(for Video wall) Copy the screen of Position# to identified display
Get-Date: Year	8		g	2	32	Y00~Y00	Last 2 digits (20)17~(20)99
Get-Date: Month	8		g	2	32	M00~M00	2 digits
Get-Date: Day	8		g	2	32	D00~M00	2 digits
Get-Time: Hour	8		g	3	33	H00~H00	24-hr format. 2 digits
Get-Time: Min	8		g	3	33	M00~M00	2 digits
Get-Time: Sec	8		g	3	33	S00~S00	2 digits

NOTE:

1. Get Date example

Assumed the current date of display#01 as below:

Date: 2017-3/15

Send: 0x 38 30 31 67 32 59 30 30 0D (Get Date:Year)
Reply: 0x 38 30 31 72 32 59 31 37 0D (“Y17”)

Send: 0x 38 30 31 67 32 4D 30 30 0D (Get Date:Month)
Reply: 0x 38 30 31 72 32 4D 30 33 0D (“M03”)

Send: 0x 38 30 31 67 32 44 30 30 0D (Get Date:Day)
Reply: 0x 38 30 31 72 32 44 31 35 0D (“D15”)

2. Get Time example

Assumed the current time of display#01 as below:

Time: 16:27:59

Send: 0x 38 30 31 67 33 48 30 30 0D (Get Time:Hour)
Reply: 0x 38 30 31 72 33 48 31 36 0D (“H16”)

Send: 0x 38 30 31 67 33 4D 30 30 0D (Get Time:Min)
Reply: 0x 38 30 31 72 33 4D 32 37 0D (“M27”)

Send: 0x 38 30 31 67 33 53 30 30 0D (Get Time:Sec)
Reply: 0x 38 30 31 72 33 53 35 39 0D (“S59”)

3. Get RS232 version example

Assumed the version is 3.0.1

Send: 0x 38 30 31 67 36 30 30 30 0D (Get RS232 version)
Reply: 0x 38 30 31 72 36 33 30 31 0D (“301”)

C. Auto Reply *3.2.1

The display will send out the updated data/status automatically without GET query from the host whenever the following data/status is changed by the user through any of the available ways like: remote control unit, front control panel keys, or touch screen.

- Power On/Off
- Input Select
- Brightness
- Backlight
- Volume
- Mute On/Off

Remote Control Pass-through Mode

When the PC sets the Display to Remote Control Pass through mode, the Display will send a 7-byte packet (followed by “CR”) in response to remote control unit (RCU) button activation.

In this mode the RCU will have no effect on the Display function. For example: “Volume+” will not change the volume of the Display, but instead only send the “Volume+” code to the PC over the RS-232 port.

IR Pass Through-Function format

Reply: (Command Type=“p”)

Name	Length	ID	Command Type	RCU Code1 (MSB)	RCU Code2 (LSB)	CR
Byte Count	1 Byte	2 Byte	1 Byte	1 Byte	1 Byte	1 Byte
Bytes order	1	2~3	4	5	6	7

Example 1: Remote Control Pass-through when “VOL+” key is pressed for Display (#5)

Send (Hex Format)

Name	Length	ID	Command Type	RCU Code1 (MSB)	RCU Code2 (LSB)	CR
Hex	0x36	0x30 0x35	0x70	0x31	0x30	0x0D

Key	Code (HEX)	Basic *3.1.1	Optional *3.1.1
1	01	V	
2	02	V	
3	03	V	
4	04	V	
5	05	V	
6	06	V	
7	07	V	
8	08	V	
9	09	V	
0	0A	V	
-	0B		V
RECALL (LAST)	0C		V
INFO (DISPLAY)	0D		V
	0E		
ASPECT (ZOOM, SIZE)	0F		V
VOLUME UP (+)	10	V	
VOLUME DOWN (-)	11	V	
MUTE	12	V	
CHANNEL/PAGE UP (+)/ BRIGHTNESS+	13		V
CHANNEL/PAGE DOWN (-)/ BRIGHTNESS-	14		V
POWER	15	V	
SOURCES (INPUTS)	16	V	
	17		
	18		
SLEEP	19		V
MENU	1A	V	
UP	1B	V	
DOWN	1C	V	
LEFT (-)	1D	V	
RIGHT (+)	1E	V	
OK (ENTER, SET)	1F	V	
EXIT	20	V	
	21		
	22		
	23		
	24		
	25		
	26		
	27		
	28		
	29		

Key	Code (HEX)	Basic *3.1.1	Optional *3.1.1
	2A		
	2B		
RED (F1)	2C		V
GREEN (F2)	2D		V
YELLOW (F3)	2E		V
BLUE (F4)	2F		V

NOTE:

1. This IR-pass-through code is different from the RCU key code.

2. Special control sequence for POWER key under IR-pass through mode.

2-1. When Display is OFF and receives the IR POWER code: Display will turn itself ON, then forward the POWER code to the host via RS-232.

2-2. When Display is ON and receives the IR POWER code: Display will forward the POWER code to the host via RS-232, then turn OFF itself.

2-3. When SET-POWER LOCK is enabled, the Display will not respond to POWER key pressing.

3. The VOLUME UP and VOLUME DOWN code will repeatedly output when you press and hold the keys.

Appendix

Display Modes

DisplayPort

Resolution	Refresh Rate (@)
640 x 480	60, 67, 72 Hz
800 x 600	56, 60, 72, 75 Hz
832 x 624	75 Hz
1024 x 768	60, 70, 75 Hz
1152 x 864	75 Hz
1152 x 870	75 Hz
1280 x 720	60 Hz
1280 x 960	60 Hz
1280 x 1024	60, 75 Hz
1360 x 768	60, 85 Hz
1366 x 768	60 Hz
1440 x 900	60 Hz
1600 x 1200	60 Hz
1680 x 1050	60 Hz
1920 x 1080	60 Hz
1920 x 1200	60 Hz
3840 x 2160	25, 30, 50, 60 Hz

HDMI

Resolution	Refresh Rate (@)
640 x 480	60, 67, 72, 75 Hz
800 x 600	56, 60, 72, 75 Hz
832 x 624	75 Hz
1024 x 768	60, 70, 75 Hz
1152 x 864	75 Hz
1152 x 870	75 Hz
1280 x 720	60 Hz
1280 x 960	60 Hz
1280 x 1024	60, 75 Hz
1360 x 768	60, 85 Hz
1366 x 768	60 Hz
1440 x 900	60 Hz
1600 x 1200	60 Hz
1680 x 1050	60 Hz
1920 x 1080	60 Hz
1920 x 1200	60 Hz
3840 x 2160	25, 30, 50, 60 Hz

USB Type C

Resolution	Refresh Rate (@)
640 x 480	60, 67, 72 Hz
800 x 600	56, 60, 72, 75 Hz
832 x 624	75 Hz
1024 x 768	60, 70, 75 Hz
1152 x 864	75 Hz
1152 x 870	75 Hz
1280 x 720	60 Hz
1280 x 960	60 Hz
1280 x 1024	60, 75 Hz
1360 x 768	60, 85 Hz
1366 x 768	60 Hz
1440 x 900	60 Hz
1600 x 1200	60 Hz
1680 x 1050	60 Hz
1920 x 1080	60 Hz
1920 x 1200	60 Hz
3840 x 2160	25, 30, 50, 60 Hz

VGA

Resolution	Refresh Rate (@)
640 x 480	60, 67, 72 Hz
800 x 600	56, 60, 72, 75 Hz
832 x 624	75 Hz
1024 x 768	60, 70, 75 Hz
1152 x 864	75 Hz
1152 x 870	75 Hz
1280 x 720	60 Hz
1280 x 960	60 Hz
1280 x 1024	60, 75 Hz
1360 x 768	60, 85 Hz
1366 x 768	60 Hz
1440 x 900	60 Hz
1600 x 1200	60 Hz
1680 x 1050	60 Hz
1920 x 1080	60 Hz
1920 x 1200	60 Hz

HDMI Out

Resolution	Refresh Rate (@)
720 x 480	60 Hz
1920 x 1080	60 Hz
3840 x 2160	60 Hz

Troubleshooting

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

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.
Unsupported format	**1.** Choose auto adjust. **2.** Adjust clock and phase settings.

Touch Function

Problem or Issue	Possible Solutions
Touch function does not work	**1.** Check that drivers are installed correctly. **2.** Reinstall driver(s). **3.** Check setup and align it. **4.** Check whether the touch pen is working properly.

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.

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.

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.

Industry Canada Statement

CAN ICES (B) / NMB (B)

CE Conformity for European Countries

CE The device complies with the EMC Directive 2014/30/EU and 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:

- 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.

ENERGY STAR Statement

ENERGY STAR is a U.S. Environmental Protection Agency voluntary program that helps businesses and individuals save money and protect our climate through superior energy efficiency. Products that earn the ENERGY STAR prevent greenhouse gas emissions by meeting strict energy efficiency criteria or requirements set by the U.S. Environmental Protection Agency.

As an ENERGY STAR Partner, ViewSonic is determined to meet the Energy star Guidelines and mark all certified models with the ENERGY STAR logo.

The following logo appears on all ENERGY STAR-certified models:



NOTE: The power management features significantly reduce energy consumption when the product is not in use. Power management allows the device to automatically enter a low power “sleep” mode after a defined period of inactivity. And the power management features also enter Sleep Mode or Off Mode within 5 minutes of being disconnected from a host computer. Please note any change in energy settings will increase energy consumption.

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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As an ENERGY STAR® partner, ViewSonic® Corporation has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.

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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® Smart White Board

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® Smart White Board

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 Juarez 284 local 2 Col. Bugambilias C.P: 83140 Tel: 01-66-22-14-9005 E-Mail: disc2@hmo.megared.net.mx	***Villahermosa:*** Compumantenimietnos 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
Puebla, Pue. (Matriz): RENTA Y DATOS, S.A. DE C.V. Domicilio: 29 SUR 721 COL. LA PAZ 72160 PUEBLA, PUE. Tel: 01(52).222.891.55.77 CON 10 LINEAS E-Mail: datos@puebla.megared.net.mx	***Veracruz, Ver.:*** CONEXION Y DESARROLLO, S.A DE C.V. Av. Americas # 419 ENTRE PINZÓN Y ALVARADO Fracc. Reforma C.P. 91919 Tel: 01-22-91-00-31-67 E-Mail: gacosta@qplus.com.mx
Chihuahua: Soluciones Globales en Computación C. Magisterio # 3321 Col. Magisterial Chihuahua, Chih. Tel: 4136954 E-Mail: Cefeo@soluglobales.com	***Cuernavaca:*** Compusupport de Cuernavaca SA de CV Francisco Leyva # 178 Col. Miguel Hidalgo C.P. 62040, Cuernavaca Morelos Tel: 01 777 3180579 / 01 777 3124014 E-Mail: aquevedo@compusupportcva.com
Distrito Federal: QPLUS, S.A. de C.V. Av. Coyoacán 931 Col. Del Valle 03100, México, D.F. Tel: 01(52)55-50-00-27-35 E-Mail : gacosta@qplus.com.mx	***Guadalajara, Jal.:*** SERVICRECE, S.A. de C.V. Av. Niños Héroes # 2281 Col. Arcos Sur, Sector Juárez 44170, Guadalajara, Jalisco Tel: 01(52)33-36-15-15-43 E-Mail: mmiranda@servicrece.com
Guerrero Acapulco: GS Computación (Grupo Sesicomp) Progreso #6-A, Colo Centro 39300 Acapulco, Guerrero Tel: 744-48-32627	***Monterrey:*** Global Product Services Mar Caribe # 1987, Esquina con Golfo Pérsico Fracc. Bernardo Reyes, CP 64280 Monterrey N.L. México Tel: 8129-5103 E-Mail: aydeem@gps1.com.mx
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Tijuana: STD Av Ferrocarril Sonora #3780 L-C Col 20 de Noviembr Tijuana, Mexico	***FOR USA SUPPORT:*** ViewSonic® Corporation 381 Brea Canyon Road, Walnut, CA. 91789 USA Tel: 800-688-6688 E-Mail: http://www.viewsonic.com


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