

# **IFP32-2 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 in the upper right corner of our website. "Antes de operar su equipo lea cu idadosamente las instrucciones en este manual"

Model No. VS18471/VS18472/VS18473 P/N: IFP6532-2/IFP7532-2/IFP8632-2

## Thank you for choosing ViewSonic®

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

Once again, thank you for choosing ViewSonic<sup>®</sup>!

# **Safety Precautions**

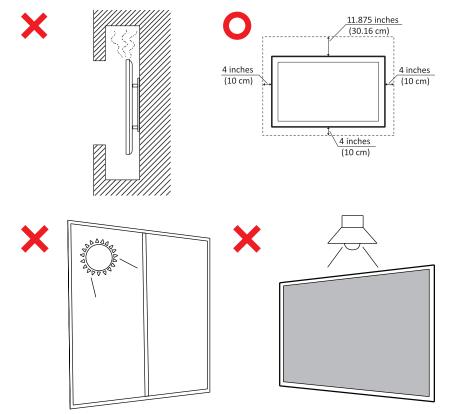
Please read the following **Safety Precautions** before you start using the device.

- 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 on page 123.
- 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<sup>®</sup>. It is dangerous to continue using the device.
- The device is a monitor with an LED backlight intended for general office use.
- Do not attempt to circumvent the safety provisions of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade and the third prong are provided for your safety. If the plug does not fit into your outlet, obtain an adapter and do not attempt to force the plug into the outlet.
- When connecting to a power outlet, DO NOT remove the grounding prong. Please ensure grounding prongs are NEVER REMOVED.
- Protect the power cord from being treaded upon or pinched, particularly at the plug, and at the point where it emerges from the equipment. Ensure that the power outlet is located near the equipment so that it is easily accessible.

- Only use attachments/accessories specified by the manufacturer.
- When a cart is used, use with caution when moving the cart/equipment combination to avoid injury from tipping over.



- Disconnect the power plug from the AC outlet if the device is not being used for a long period of time.
- Place the device in a well-ventilated area. Do not place anything on the device that prevents heat dissipation. Also, avoid any direct lighting.



- 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

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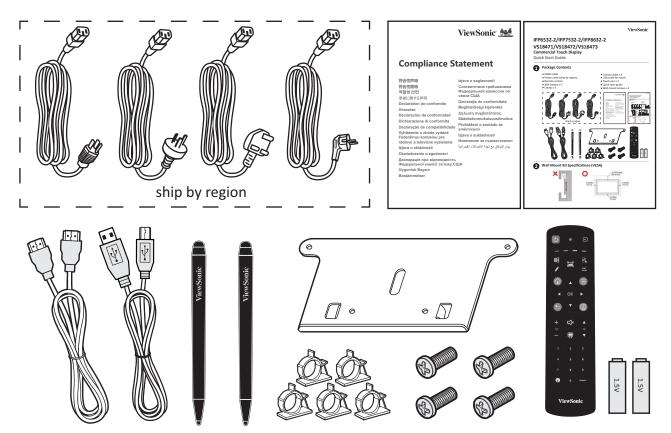
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## Introduction

### **Package Contents**

- HDMI cable (3m)
- Power cable (ship by region)
- Remote control
- AAA battery x 2

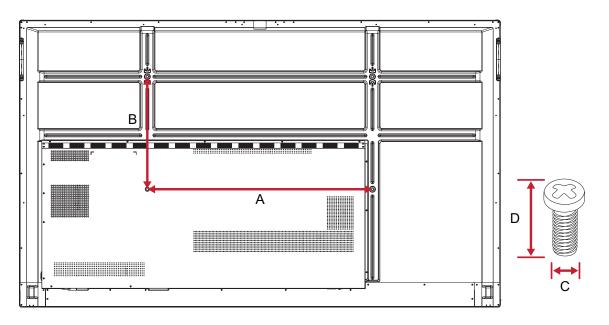
- USB cable for touch control (3m)
- Touch Pen x 2
- Quick Start Guide
- Wall mount screws x 4



**NOTE:** The power cord and video cables included in your package may vary depending on your country. Please contact your local reseller for more information.

## Wall Mount Kit Specifications (VESA)

**NOTE:** Please follow the instructions in the wall mount installation guide to install your wall mount or mobile mount bracket. If attaching to other building materials, please contact your nearest dealer.

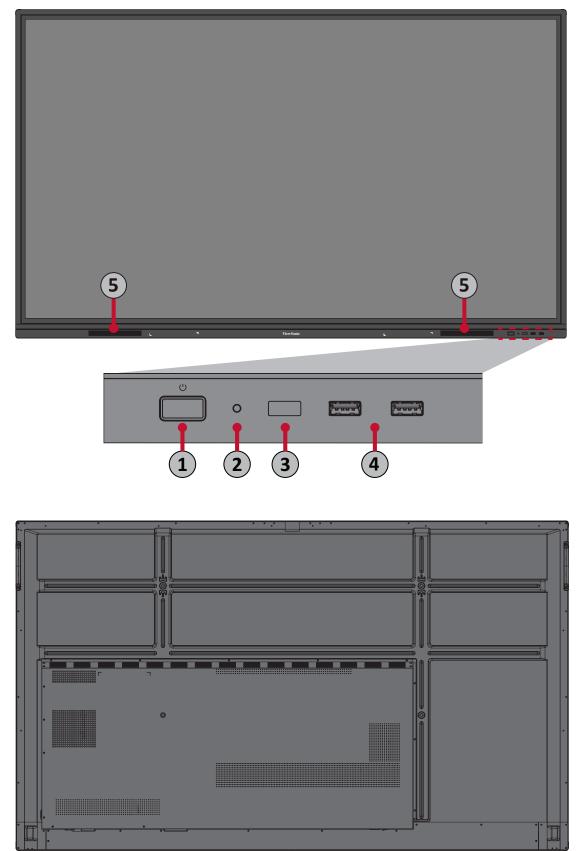


Model	VESA Spec. (A x B)	Standard Screw (C x D)	Quantity
IFP6532-2 - 65"	600 x 400 mm	M8 x 25 mm	4
IFP7532-2 - 75"	800 x 400 mm	M8 x 25 mm	4
IFP8632-2 - 86"	800 x 600 mm	M8 x 25 mm	4

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

### **Product Overview**





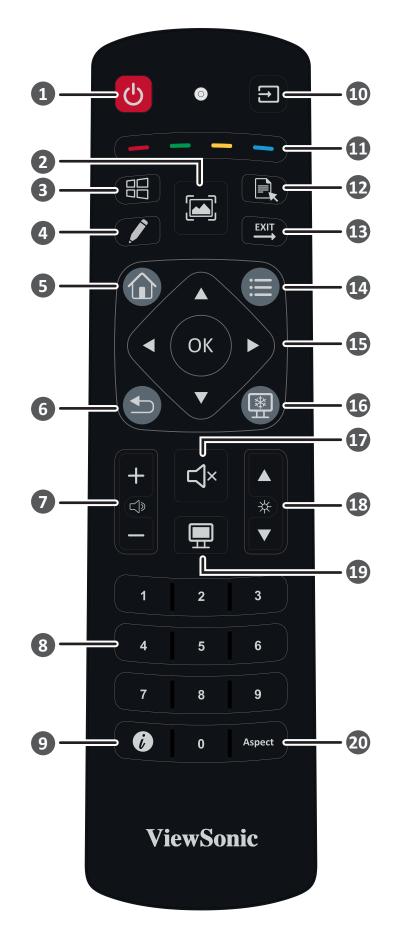
Number	Item	Description
1		<ul> <li>Power button</li> <li>Turn on/off the device</li> <li>Tap to enter Energy Saving mode</li> <li>Press and hold for at least two (2) seconds to enter Standby mode</li> </ul>
2	0	Ambient light sensor
3		Remote control IR sensor
4	USB	USB 2.0. Smart USB port for PC, HDMI, VGA, and ViewBoard input signals.
5		Speaker

#### I/O Panel

Lower Right Side HDMI 1 HDMI 2 Camera USB LAN тоисн RS232 AUDIO OUT 0 ø 5 6 3 1 4 3 **Bottom Left** I X I 9 8 **Bottom Right** AUDIO IN VGA 0 Ô 10 11 **Bottom Center** 0 0 12

Number	Port	Description	
1	PC Slot	Slot for adding optional PC module.	
2	HDMI 1/2	High definition input; connect to PC with HDMI output, set-top box, or other video device.	
3	USB 2.0	Connect USB devices such as hard disks, keyboard, mouse, etc. [ 5V dc/0.5A ]	
4	LAN	Standard RJ45 (10M/100M for PC; 10M/100M for ViewBoard) Internet connection interface.	
4	LAN	<b>NOTE:</b> This network port is used for the Embedded Player and slot-in PC.	
5	Touch	Touch signal output to external PC.	
6	RS-232 Serial interface; used for mutual transfer of data between devices.		
7	Audio Out	Audio output to an external speaker.	
8	8 AC Switch Turn on/off AC power supply "I" = Power on, "O" = Power off		
9	AC IN	AC IN AC power input.	
10	Audio In	External computer audio input.	
11	VGA	External computer video input.	
12	Wi-Fi Module Slot	Slot for adding optional Wi-Fi module (VB-WIFI-002).	

#### **Remote Control**



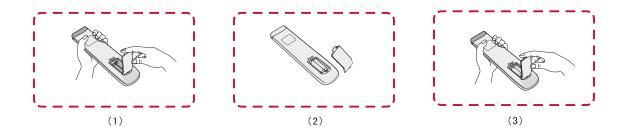
Number	Description	
1	Power on/off	
2	Screen capture	
3	[PC <sup>1</sup> ] Windows button	
4	Startup writing	
5	Back to the Embedded player Home Screen	
6	Back / Return to previous page	
7	Increase / Decrease volume	
8	Numeric Keypad	
9	Information	
10	Input source selection	
11	Media control buttons: » Red - Play / Pause » Green - Stop » Yellow - Forwards » Blue - Backwards	
12	[PC <sup>1</sup> ] <i>Menu</i> button	
13	[PC <sup>1</sup> ] Exit dialog box	
14	Settings menu	
15	Up / Down / Left / Right OK	
16	Freeze screen	
17	Mute / Unmute	
18	Increase / Decrease Brightness	
19	Blank screen	
20	Adjust Aspect Ratio	

<sup>1</sup> All computer-related function keys are not available without a slot-in computer.

#### **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.



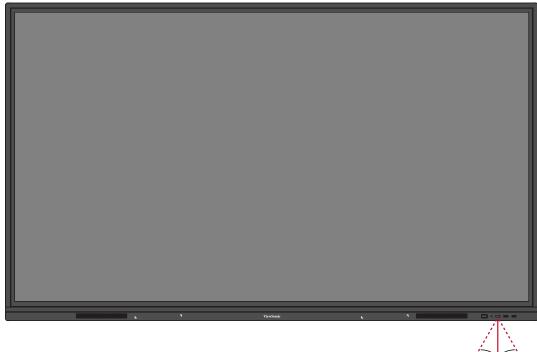
**WARNING:** There is a risk of explosion if batteries are replaced with the incorrect type.

#### 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.



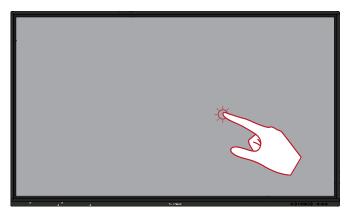


#### **Using Gestures**

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.

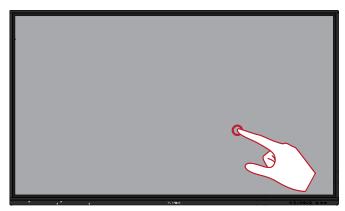
#### Select and Deselect an Object (Clicking)

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



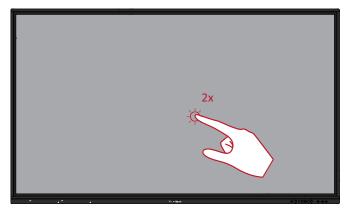
#### **Display Menu Options (Right-Clicking)**

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



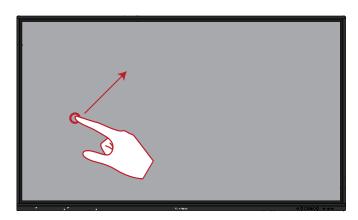
#### **Double-Clicking**

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



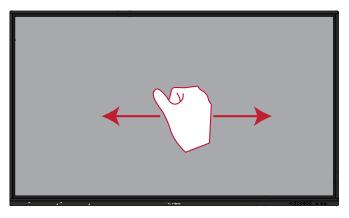
#### Moving an Object

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



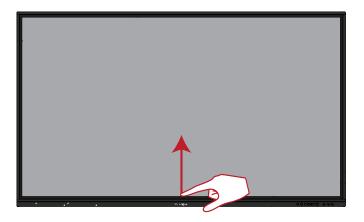
#### **Erasing Digital Ink**

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



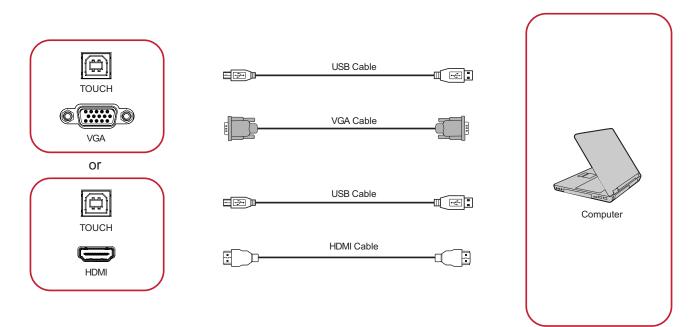
#### Swipe Up for General Settings

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



## **Making Connections**

## **Connecting External Devices and Touch Connection**



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

#### **HDMI** Connection

To connect via HDMI:

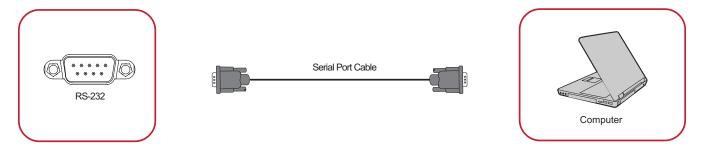
- **1.** Connect an HDMI cable from your external device to the **HDMI** port on the ViewBoard.
- **2.** Connect a USB cable to the external device from the **TOUCH** port of the ViewBoard.

#### **VGA** Connection

To connect via VGA:

- **1.** Connect a VGA cable from your external device to the **VGA** port on the ViewBoard.
- Connect a USB cable to the external device from the TOUCH port of the ViewBoard.

#### **RS-232** Connection



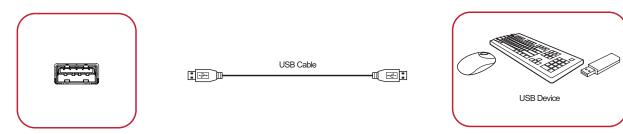
When you use a RS-232 serial port cable to connect your display to an external computer certain functions can be controlled remotely by the PC, including Power On/Off, Volume adjustment, Input select, Brightness, and more.

#### **USB and Networking Connections**

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

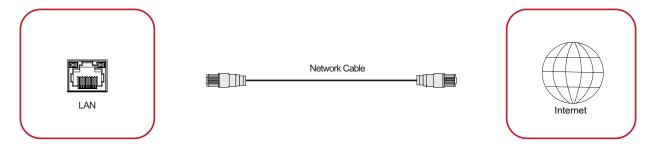
#### **USB** Peripherals

Plug the USB device cable into the **USB** port.

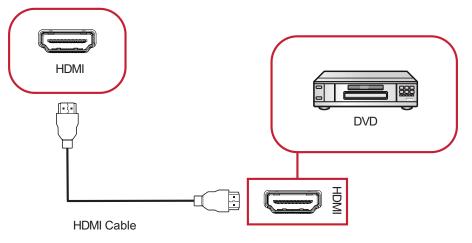


#### Networking and Modem cables

Plug the network cable into the LAN port.



#### **Media Player Connection**



To connect to a media player:

- Connect the HDMI cable to the HDMI ports 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 **U** Power button on the right-hand side of 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 both Audio In and Audio Out.

#### <u>Audio In</u>

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.

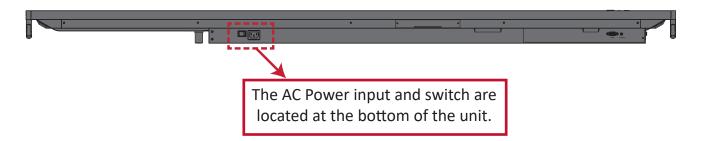
#### Audio Out

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.

## **Using Your ViewBoard**

## Powering On/Off your ViewBoard

**1.** Ensure the power cord is connected, plugged into a power outlet, and the power switch is in the "On" position.

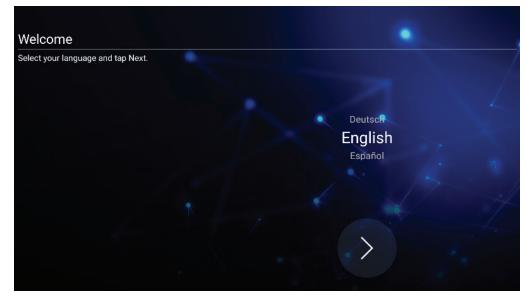


- **2.** Press the **U Power** button to turn on the ViewBoard.
- **3.** To turn the ViewBoard off, press and hold the **U** Power button.

## **Initial Launch Setup**

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

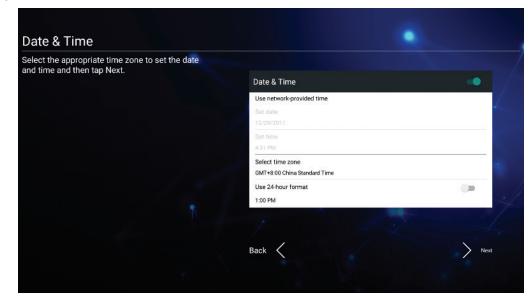
#### 1. Select your Language:



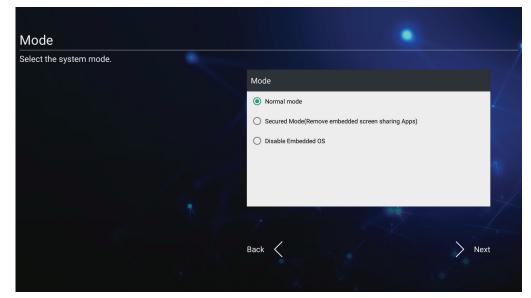
#### **2.** Setup and verify your LAN connection:

Ethernet		
To verify LAN connected and then tap Next.		
	Ethernet	
	Local Network Setting	2
	O DHCP	
	Static IP	
		2
		24
	,	
A.	Back	> Next
*		

3. Select your Time Zone to set the Date and Time:



4. Select your preferred System Mode:



5. Accept or Decline the Privacy and Copyright Protection Terms.



### vLauncher - Customizable Welcome Screen



#### vLauncher Message

Both the vLauncher **Title** and **Subtitle** can be customized by tapping on them.



Additionally, a password can be set by tapping on **Set Password**.

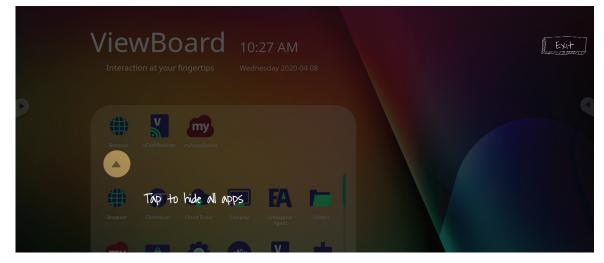
ViewBoard	04:58	
Interaction at your fingertips	Edit vLauncher message	×
Image: Wight of the sector	Title ViewBoard Subtitle Interaction at your fingertips Set password	
Å	Cor	ıfirm

#### **Applications**

Installed applications can all be found on the welcome screen. To view all applications tap on the **Down Arrow**.

	ViewBoard 10:27 AM Interaction at your fingertips Wednesday 2020-04-08	Exit
•	Image: Ward of the second s	
	Tap to show all apps	

To hide the application drawer tap the **Up Arrow**.



To add a shortcut to an application, tap, hold, and drag up the icon.



To remove an application shortcut, tap, hold, and drag the icon down.



## **Toolbar**

Toolbar trigger icons are on the edge of the ViewBoard launcher providing access to your tools.



To launch a tool:

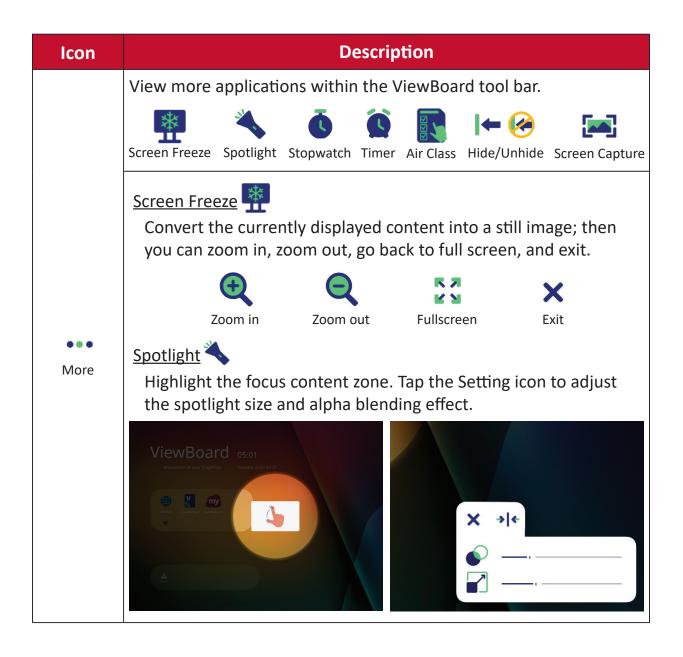
- **1.** Tap a Toolbar trigger icon.
- 2. Tap on your desired tool icon.

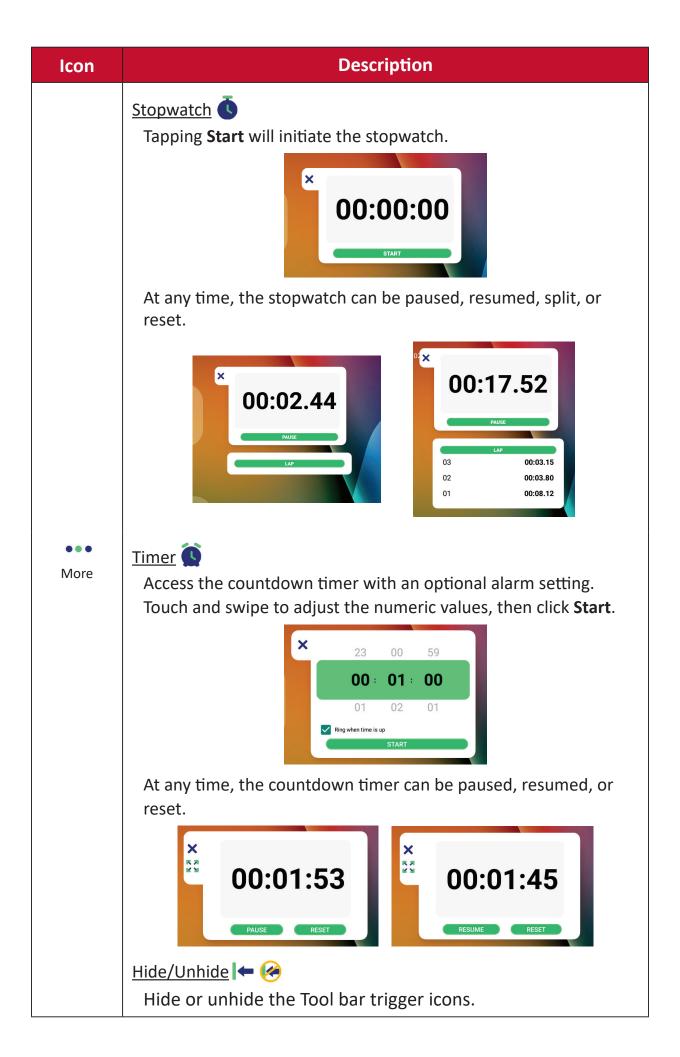


**NOTE:** The default toolbar setting is to be available for all input sources; however, users can go to: Settings > Preference > Toolbar setting to adjust the options: (1) available for all input sources, (2) hide the toolbar for all input sources.

lcon	Description
<b>S</b> Back	Return to the previous operation screen. <b>NOTE:</b> Only for the Embedded Player source.
Home	Return to the Home Screen of the Embedded Player.
Recent	Display all embedded applications that are currently being used.
App	View all installed applications.
myViewBoard	Launch the myViewBoard software.
Recorder	Record, view, and save the on-screen content.

lcon	Description
Draw	Access the pen, highlighter, clear, and save options.
	Pen Highlighter Eraser Undo
	CleanSaveExit
	Pen Annotate the overlay of any input source with black, white, yellow, orange, red, pink, green, or blue ink. <b>NOTE:</b> The default pen setting supports up to 10-point writing.
	<ul> <li><u>Highlighter</u></li> <li>Mark and highlight with yellow, grey, gold, orange, red, pink, green or blue ink.</li> <li><b>NOTE:</b> The default highlighter setting supports up to 10-point marking.</li> </ul>
	<u>Eraser</u> Selectively remove the digital ink on the screen.
	Undo Undo the previous action.
	Redo Redo the previous action.
	<u>Clean</u> Clears all the digital ink on the screen.
	Save Save the screen image and any annotations.
	Exit Close the drawing tool.

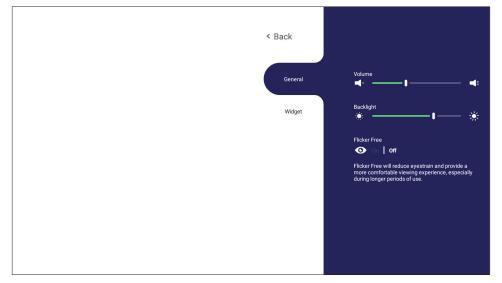




lcon	Description
••• More	Air Class Interactive teaching tool for classroom usage. Screen Capture Take a screenshot of the current screen.
Settings	Access the General Settings.

# **On-Screen Display (OSD) Menu**

Access General Settings, Input Settings, and Widgets through the OSD Menu.



ViewBoard has two options for opening the OSD Menu:

#### **Option 1**

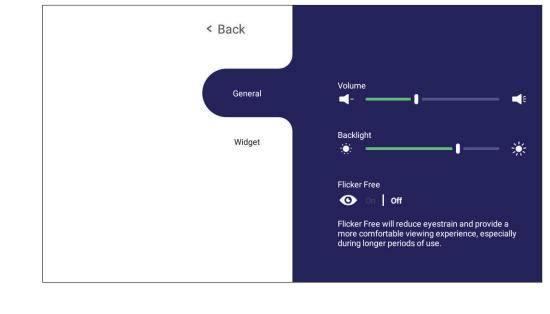
#### Long press anywhere in the vLauncher background.



**Option 2** Press the **INPUT** button on the remote control.



# **General Settings**





To adjust the Backlight and enable/disable Flicker Free:

- **1.** Press **INPUT** on the remote control or long press the vLauncher background and touch **General** on-screen (if needed) to display the **General Settings** menu.
- 2. Drag the brightness slider directly to adjust the backlight value, and/or touch On or Off to enable/disable the function.
- **3.** Press **BACK** on the remote control, or touch a blank area outside of the menu to exit.



#### To adjust the Volume:

- **1.** Press **INPUT** on the remote control or long press the vLauncher background and touch **General** on-screen (if needed) to display the **General Settings** menu.
- 2. Drag the volume slider directly to adjust the value.
- **3.** Press **(Mute)** on the remote control to enable or disable the mute function.
- **4.** Press **BACK** on the remote control, or touch a blank area outside of the menu to exit.

## **Input Settings**

< Back		
General	PC	
Input	ViewBoard	
mpar	номіт	
	HDMI2	
	VGA	

#### To select an Input Source:

- **1.** Press **INPUT** on the remote control, press the setting button (2) on the front panel, or press the setting icon from the toolbar to display the **Input Settings** menu.
- **2.** Press  $\nabla/\Delta/\langle/\rangle$  to select the input source you want.

**NOTE:** PC source will only display when the slot-in computer is connected.

- **3.** Press **ENTER** on the remote control, or touch the input source.
- **4.** Press **BACK** on the remote control, or touch a blank area outside of the menu to exit.
  - **NOTE:** To adjust the settings of an input source, touch the setting icon next to the highlighted input source.



# Widget

**NOTE:** Only available for the Embedded Player source.

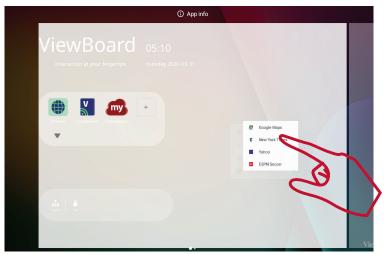


To add a widget to the vLauncher welcome screen:

**1.** Long press the vLancher background via touch to launch the OSD Menu.



- 2. Select Widget.
- **3.** Touch and hold the desired widget.
- **4.** Drag the widget onto the vLauncher background.



# Settings - HDMI & VGA Input Source

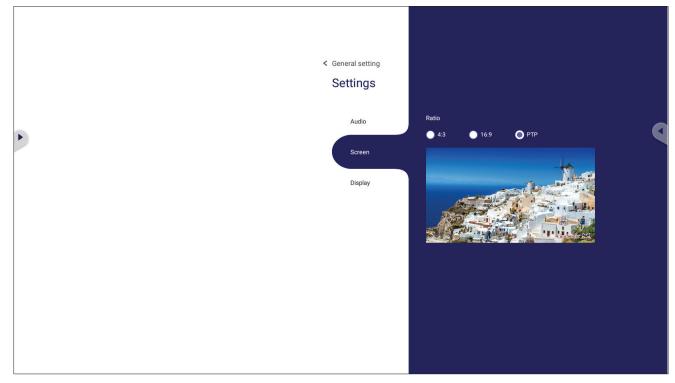
Press **MENU** on the remote control or select the setting icon next to the input source in **Input Settings** to launch the **Settings** menu. Settings include: **Audio**, **Screen**, **Display**.

### **Audio Settings**



- **1.** Press  $\mathbf{\nabla}$  on the remote control and select the **Audio** menu.
- **2.** Press  $\nabla/\Delta/\langle/\rangle$  on the remote control or directly touch the option to select it.
- **3.** Adjust the Volume, Bass, Treble, and Balance directly by touching and adjusting each value, or with the remote control by pressing **ENTER** to adjust the option.
- **4.** Touch the Mute slider directly to enable/disable mute, or press **□★**(**Mute**) on the remote control.
- **5.** Press **BACK** on the remote control, or touch a blank area outside of the menu to exit.

### **Screen Settings**



- **1.** Press  $\mathbf{\nabla}$  on the remote control and select the **Screen** menu.
- **2.** Press  $\nabla/\Delta/\langle/\rangle$  on the remote control or directly touch the option to select it.
- **3.** Adjust your preference by touching each value directly, or with the remote control by pressing **ENTER**.
- **4.** Press **BACK** on the remote control, or touch a blank area outside of the menu to exit.

# **Display Settings**

General Settings	
Settings	
Audio	Mode
Screen	Standard Meeting Class Custom Brightness 50 -
Display	Contrast 50 – <b>– – – – – – – – – – – – – – – – – –</b>
	Sharpness 50 –
	Color temperature
	Standard O Cold O Warm O Filter

- **1.** Press  $\mathbf{\nabla}$  on the remote control and select the **Display** menu.
- **2.** Press  $\nabla/\Delta/\langle/\rangle$  on the remote control or directly touch the option to select it.
- **3.** Adjust the Brightness, Contrast, Hue, and Sharpness directly by touching and adjusting each value, or with the remote control by pressing **ENTER** to adjust the option.
- **4.** Drag the blue light slider directly to adjust the blue light value.



**5.** Press **BACK** on the remote control, or touch a blank area outside of the menu to exit.

# Low Blue Light Filter and Eye Health

The Blue Light Filter 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 (1) 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

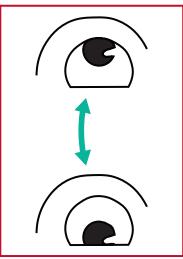
While taking breaks, users can further reduce eye strain and dryness by focusing on objects that are further away from them for 10-15 seconds, then gaze at something up close for 10-15 seconds. Repeat this up to 10 times. This exercise reduces the risk of your eyes' focusing ability to "lock up" after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

#### **Eye and Neck Exercises**

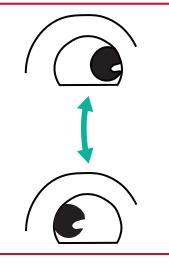
#### Eye Exercises

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

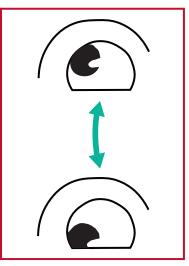
#### Exercises for the eyes



(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

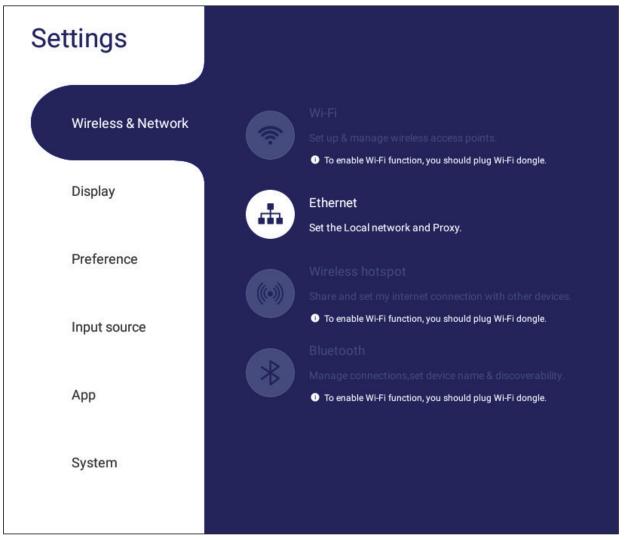
Neck exercises can also help minimize eye strain. Relax your arms and let them hang at your sides, bend forward slightly to stretch the neck, turn your head to the right and to the left. Repeat as many times as needed.

# Settings - Embedded Player

When the ViewBoard is in the Embedded Player input source, press **MENU** on the remote control or tap the setting icon next to the input source in the On-Screen Display (OSD) Menu's Input Settings to enter the **Settings** menu.

## Wireless & Network

Check current network connection status, set up and manage Wi-Fi, Ethernet, Bluetooth, and VPN, and establish a Wireless hotspot.



#### NOTE:

- Wi-Fi, Wireless hotspot and Bluetooth settings will appear when LB-WIFI-001(optional) has been installed.
- Ethernet will disable automatically when Wi-Fi is enabled. Wi-Fi will disable automatically when Ethernet is enabled. Wi-Fi will disable when Wireless hotspot is enabled.
- The device cannot connect to the Internet when Wireless hotspot is enabled.

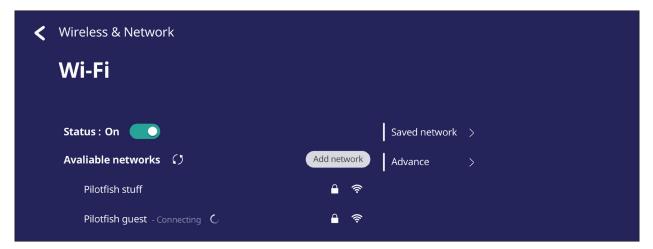
### Wi-Fi

Setup and manage wireless access points.

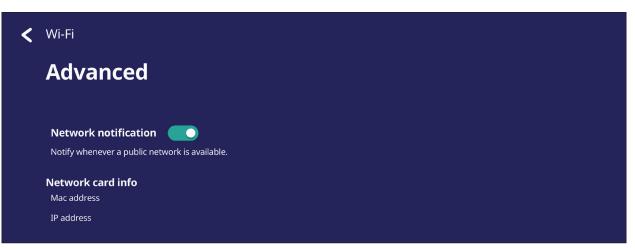
• Tap the toggle button to turn Wi-Fi **On** or **Off**.

Wireless & Network	
Wi-Fi	
Status : Off	Saved network >
To see available networks, turn Wi-Fi on.	Advanced >

• Once **On**, you can: **Add a Network**, view **Saved Networks**, **Refresh** the network list, or view **Advanced** settings.



• In Advanced settings, you can toggle Network notifications On or Off and view Network card info.



### Ethernet

Set the local network and proxy.

• Tap the drop down menu to connect/disconnect the Ethernet.

Wireless & Network	
Ethernet	
Status : Disconnected	Advanced >
Local network	

• You can adjust Local network and Proxy settings as well.

K Wireless & Network				
Etherne	t			
Status : Connect	ted		Advanced >	
	Static IP DHCP Static IP Off DNS 1 DNS 2 Set up	192.168.0.30 168.95.1.1	Ţ	

• Tap Advanced to view Network card info and toggle Network auto reconnect.

< Ethernet
Advanced
<b>Network auto reconnect C</b> Known networks will be joined automatically.If no known networks are available,you will have to manually select a network.
Network card info
Network card info Mac address : 50:3e:aa:4d:96:32

### Wireless Hotspot

Set and share my internet connection with other devices.

• Tap the toggle button to turn Wireless hotspot On or Off.

Wireless & Network	
Wireless hotspot	
Status : On	
<b>Device:</b> AndroidAP WPA2 PSK portable Wi-Fi hotspot	
Set up	

• Tap Set up to set the Network name, Security, and Password.

ø
er,
er,

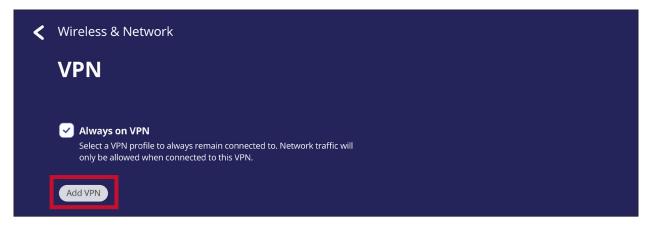
#### VPN

#### Setup and manage Virtual Private Networks.

K Wireless & Network		
VPN		
Always on VPN Select a VPN profile to always rem only be allowed when connected	nain connected to. Network traffic will to this VPN.	
Add VPN		
VPN name - Connected L2TP/IPSec PSK	Disconnected	
VPN name L2TP/IPSec PSK	Connect 💉 📋	

#### To create a VPN profile:

1. Go to: Settings > Wireless & Network > VPN and tap Add VPN.



2. Key in the Name.

Add VPN profile	
Name	
1	Ø
Туре	

**3.** Select the VPN **Type**.

Add VPN profile		
Name		
Туре		
PPTP 🔿		
РРТР		
L2TP/IPSec PSK		
L2TP/IPSec PSA		
IPSec Xauth PSK		
IPSec Xauth RSA		
IPSec Hybrid PSK		
Cancel save		

Choose to enable/disable PPP encryption (MPPE) and/or show Advanced options.

Server address	
	Ø
PPP enceyption(MPPE)	
Advanced options A	
DNS search domains	
	Ø
DNS servers	
0.0.0.0	Ø
Forwarding routes	
0.0.0/0	Ø
Cancel	Save

# Share

### SAMBA

The SAMBA Service provides file sharing via LAN. When the SAMBA Service is enabled, the user can explore the ViewBoard file system with a PC or mobile equipment.

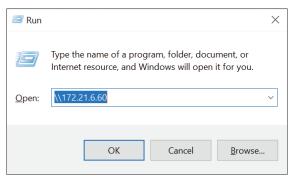
1. To access, go to: Settings > Share > SAMBA.



2. Tap the toggle button to enable the SAMBA Service, then set a password if needed.



- 3. Ensure the ViewBoard and client equipment are connected to the same network.
- Log in to the ViewBoard with the client equipment. Input the ViewBoard's IP address.



5. Key in the user name and password, then select OK (if necessary).

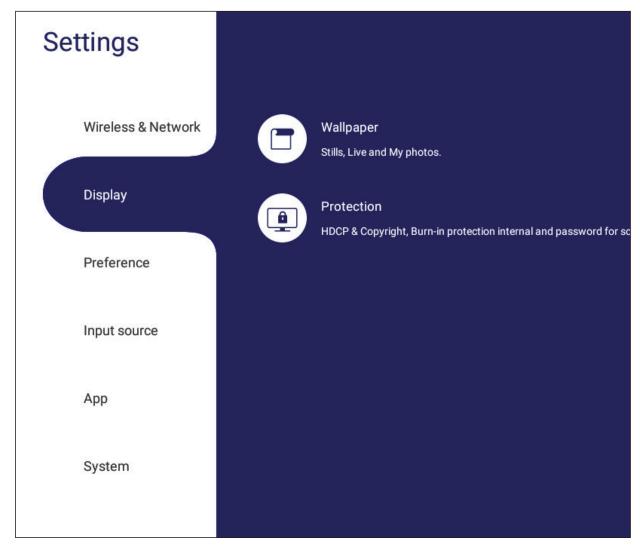
Windows Security	×	
Enter network credentials		
Enter your credentials to connect to: 172.21.6.60		
User name		
Password		

**6.** After a successful log in, the ViewBoard files will be available.

$\leftarrow \rightarrow \ \cdot \ \uparrow  \diamondsuit$	> Ne	twork > 172.21.6.60	v ت	Search 172.21.6.60	Q
📌 Quick access	*	share			
🖊 Downloads	*				
Documents	*				
Pictures	*				

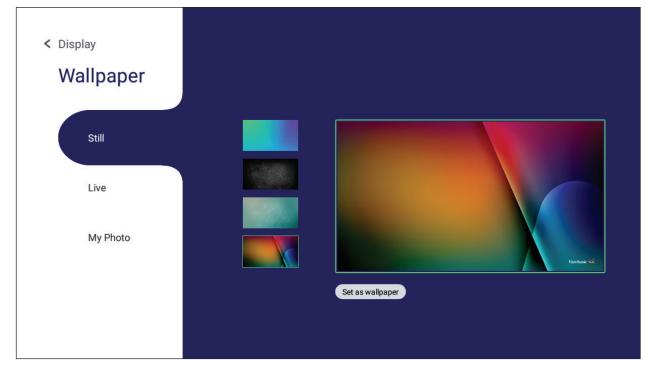
# Display

Adjust the Wallpaper, Theme, Display ID, and Protection settings.



## Wallpaper

Users can change their wallpaper with default images (both still and live), or



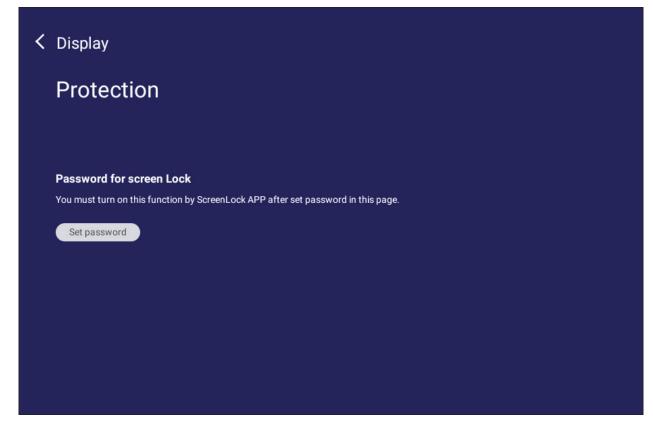


use their own by tapping **My Photo** and selecting the image file.

< Display								
Wallpaper								
				s	elect File			
Still	Brow					_		
Live		Storage	Alarms	DCIM	Download	Logs	Movies	Music
My Photo			Notes	Notifications	Pictures	Podcasts	Ringtones	vCast
		USB1					greece	
			Cancel				ОК	

#### Protection

#### Set a **Password for Screen Lock**.

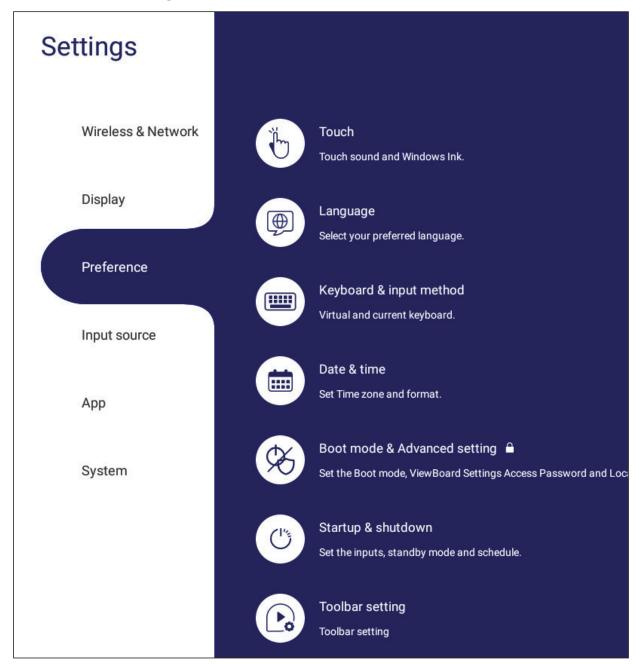


• To set up a password for screen lock, tap **Set Password** and enter the desired password.

Set up password
Confirm password
Must between 6-12 characters. Require Letter, Number and Symbol.
New password
Cancel Confirm

## Preference

View and adjust Touch, Language, Keyboard & Input, Date & Time, Boot, and Start up & Shut down settings.



### Touch

Adjust Touch Settings and toggle Touch Sounds and Windows Ink On/Off.

Touch			
Touch sounds			
Windows Ink 🗾			

#### Language

Adjust and choose the preferred language from the available languages.



### Keyboard & Input Method

Enable/disable the visual keyboard and/or change the default input method.

Keyboard & input method				
Show visual keyboard 🛛 💽				
Current keyboard				
Google Pinyin keyboard – Chinese	Settings			
Player Keyboard (AOSP)	Settings			

• Tap on **Settings** to adjust the advanced keyboard settings.

Google Pinyin Keyboard settings			
Sound on keypress			
Player Keyboard se	ttings		
Language	>		
English(US)			
Preference			
Auto-capitalzation			
Capitalize the first word of each sentence			
Sound of keypress			
Appearance & Layput			
Enable spilt keyboard 🗾			
Advanced			
Keypress sound volume Use default			
	+		
Key long press delay Use default			
	+		

## Date & Time

Set the system time and format.

Date	& Time			
	c date & time 🛛 💽			
	provided time.			
2019/06/3	0 23:00			
	e 0 Australian Western Standard <sup>-</sup> urs formet	Time 🗸		
Data form	at			
02/01/	2019 💿 01/02/2019	0 2019/01/02		

Item	Description
Automatic Date & Time	When enabled, the ViewBoard will automatically synchronize the date and time via the Internet.
Time Zone	Select the appropriate time zone.
Time Format	Choose from 12-hour or 24-hour time format. Simply toggle 24-hour format On/Off.
Date Format	Select from the available date formats.

### **Boot Mode**

Adjust the preferred boot up mode and set/reset a password.

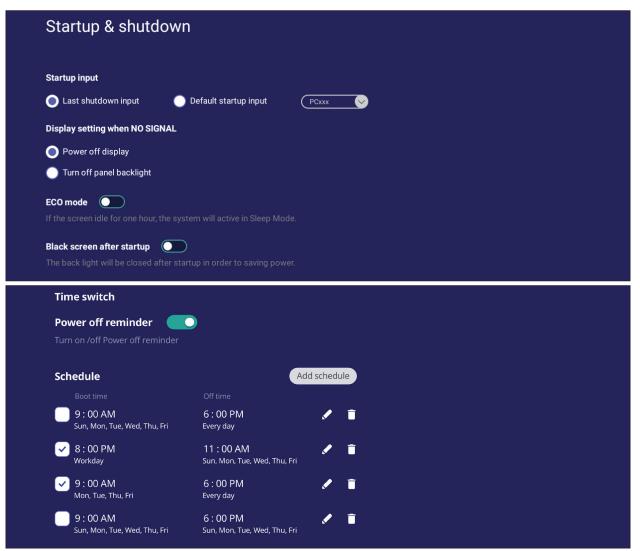
Boot mode & Advanced setting
Normal mode It launches startup programs, fires up all the services configured to start, and loads the hardware drivers you have installed.
Secured mode      It will remove embedded screen sharing     Apps(EX:V-Cast,E-Airplay and Chrome Castetc)
Disable embedded OS     The Embedded OS will be disabled after reboot.
ViewBoard Settings Access Password
Allow lock/unlock the ViewBoard Settings
Password for protection Bootmode & Viewboard Settings app 🔒 Reset password
Local File Protections Policy
For protect the personal file, the local storage file in Folder app will be deleted automatically that the time of your choice.
O Always keep file(s)
🔵 Delete after 1 Day
🔵 Delete after 1 Hour
Delete immediately
Color correction
Monochromacy
Deuteranomaly (red-green)
Protanomaly (red-green)
Tritanomaly (blue-yellow)
Non-ViewBoard OS mode Side tool Bar Setting
Set side tool bar on/off for non-ViewBoard OS mode

Reset ViewBoar	d
----------------	---

Item	Description
Normal Mode	The embedded screen sharing Apps will run normally.
Secured Mode	The embedded screen sharing Apps will be removed.
Disable Embedded OS	The system will automatically reboot, and then the Embedded OS will not appear.
ViewBoard Settings Access Password	Toggle to lock/unlock the ViewBoard Settings.
Password for Protection	Modify the Boot mode and ViewBoard Settings entry password.
Local File Protection Policy	Choose how long to keep local storage files in the Folder app.
Color Correction	Color correct the ViewBoard display screen.
Non-ViewBoard OS Mode Side Toolbar Setting	Enable the side toolbar for non-ViewBoard OS.
Reset ViewBoard	Rest the ViewBoard to its factory default settings.

#### **Startup & Shutdown**

Set the Startup Input, Standby Mode, EnergyStar Mode, Black Screen After Startup, Power off Reminder timer and Schedule settings.



Item	Description
Startup Input	Adjust the Startup Input preference.
Display Setting when No Signal	Decide what happens to the display when there is no signal for HDMI, PC, or VGA sources.
ECO Mode	Enable to automatically initiate <i>ECO Mode</i> when the screen is idle for one hour.
Black Screen After Startup	When enabled, the ViewBoard will turn off the backlight automatically after booting up.
Time Switch Power Off Reminder	When enabled, the ViewBoard will turn off without any reminder after the scheduled off time.
Schedule	Schedule a Boot and Shut off time.

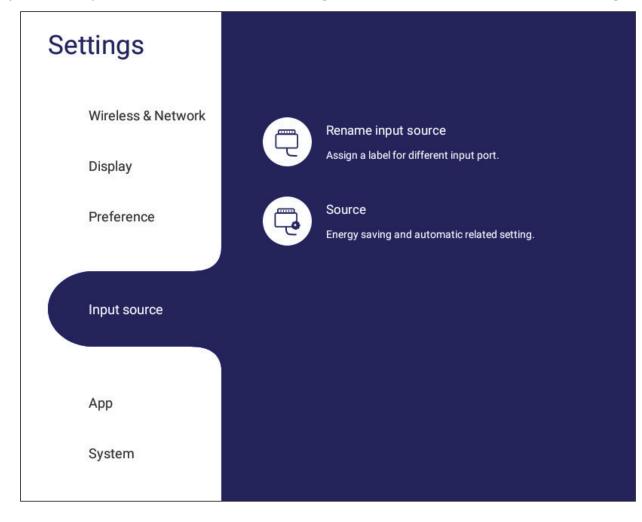
### **Toolbar Setting**

Adjust the Side toolbar settings.



## **Input Source**

Adjust the input source names and settings, as well as the side tool bar settings.



### **Rename Input Source**

Set labels for each input source that will be easily recognized when displayed.

Rename ir	nput source			
Set a label by yourself easier.	f that can recognize the different inp	out port more		
Source	Showing name			
PC	PC			
ViewBoard	ViewBoard			
HDMI1	HDMI1			
HDMI2	HDMI2			
VGA	VGA			

### Source

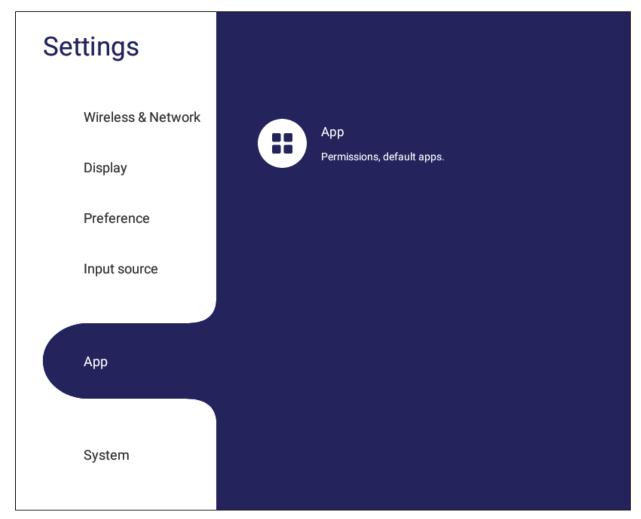
Toggle Wake up by active source, Signal auto search, and HDMI CEC and select Input port auto switch.

Source	9				
Wake up by	active source				
The screen wil	l be turn on automa	tically after plugging in H	IDMI cable when the so		
Signal auto	search 💽				
The signal will	be searched autom	natically after plugging in			
Input port au	uto switch				
The original s	signal will be swit	ched automatically aft	ter plugging a new c	able.	
🔘 On	Off	🔵 Manual selecti	ion		
Energy savir	ng				
There is no sig	nal within in set tin	ne,the power will be turne	ed off.		
5 Mins 🗸					

Item	Description
Wake up by Active Source	The screen will turn on automatically after plugging in an HDMI cable when the screen is off.
Signal Auto Search	When enabled, if the current source does not have a signal, the ViewBoard will automatically search for an input source.
Input Port Auto Switch	The original signal will automatically switch to a new cable after it's plugged in.
Energy Saving	Set a time period to power off if no signal is detected.

# Арр

The user can view App information and force stop, uninstall, move to USB storage, clear data, clear cache, and clear defaults.

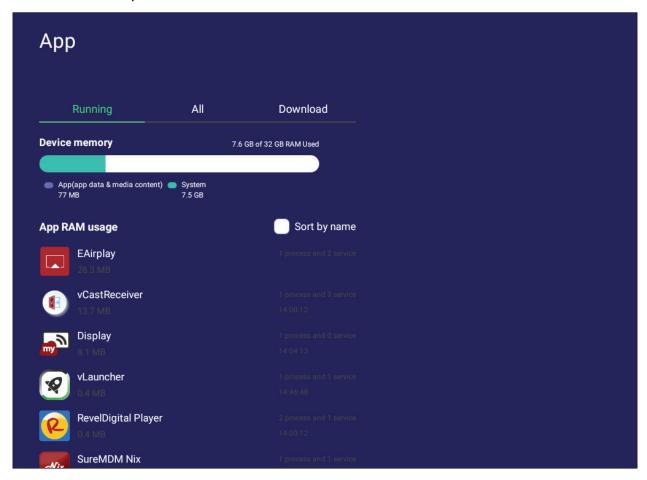


#### NOTE:

- Pre-loaded apps cannot be uninstalled.
- Not all apps support the move to USB storage feature.
- Not all apps support Clear Defaults.

### APP

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



• By tapping on a running application, you can see more information, stop, or report the application.

App info									
VCastRe Version v2.1				Disable	Force st	op			
Notification									
Notification Turn off notificat	ion may mis	s importa	ant alert	and upd					
	ion may mis	s importa	nt alert	and upd					
Turn off notificat	ion may mis 13.7 MB		nnt alert	and upd					
Turn off notificat Storage				and upd					
Turn off notificat <b>Storage</b> Total	13.7 MB			and upd					
Turn off notificat <b>Storage</b> Total App	13.7 МВ 0 КВ			and upd					

• Selecting All, Download, or USB storage will list all installed applications.

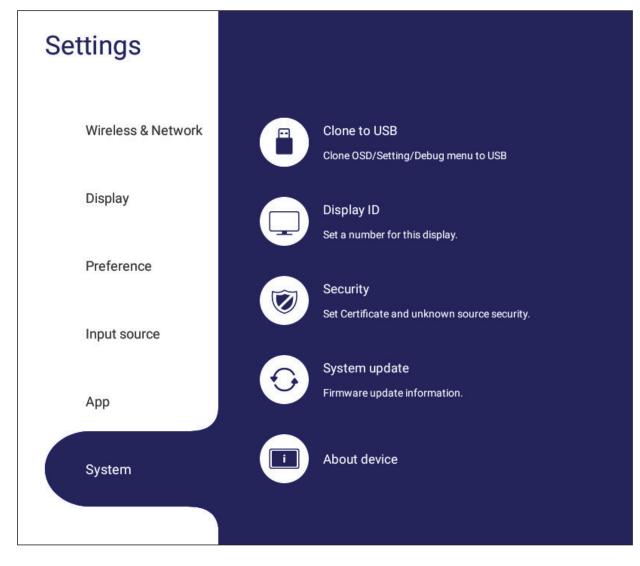
А	vpp		
	Running	All	Download
F	Reset app preferences		Sort by name
	EAirplay 28.3 MB		
	vCastReceiver		
-	Display 8.1 MB		
<b>Billio</b>	CCast 2.2 MB		
6	V auncher		

• Tapping on any application will display further information and options.

App info		
vCastRe Version v2		Disable Force stop
Notification (		
Turn off notificat	ion may miss	s important alert and updates.
Storage		
Total	13.7 MB	Clear data
Арр	0 KB	
USB storage app	0 KB	
Data	13.7 MB	
USB storage data	0 KB	
Cache		
Cache data	0 KB	Clear Cache data
Launch by defa	ult	
No defaults set.		Clear default

# System

View and adjust Storage, Security, System Update, and About device settings.



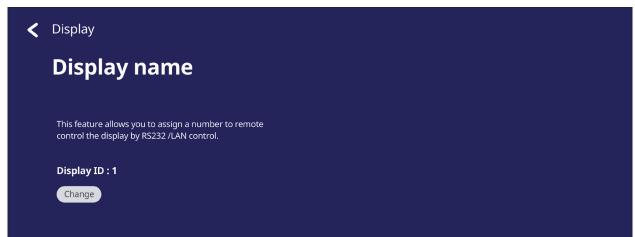
# **Clone to USB**

Copy settings to an external USB drive.

Wire Select the settings to copy	
& Ne Copy from	xx.x GB free.
Shari 🗸 OSD	
Setting	
Displ	USB
Debug Menu	/Setting/Debug menu to USB
Prefe Copy as	
L	
Exter inpul Copy to	
	ate and junknow source security.
USB 2	update
USB 3	update information.
Syste Cancel OK	
Cancel	evice

## **Display ID**

Assign a number to remote control the display by RS-232/LAN.



• To assign or change the Display ID, tap **Change** and input a number.

<	Display					
	Display	nam	e			
	This feature allows you to assign a number to remote					
	control the display b					
	Display ID :	Imber from 1	to 99.			
	Save Cancel					
		1	2 ABC	3 DEF		
		<b>4</b> GHI	5 <sub>JKL</sub>	6 мио		
		7 pors	8 TUV	9 <sub>wxyz</sub>		
		×	0.	>		

**NOTE:** The Display ID is for RS-232 users, and the range is 01~99.

#### Security

Review **Certificate**, **Trusted Credential** storage, and **Unknown sources** install settings.



• Tap on Install certificate from storage to add additional certificates.

<b>&lt;</b> System				
Secu	rity			
	Selec	ct File		
Storage DISK_IMG	2019-03-26 2019-04-17 201	119-04-25 JJVEo1png		
	Download			
	Cancel		ОК	

• Selecting Clear Credentials will remove all manually installed credentials.

Certificate Clear credentials	
This action will remove all credentials which are manual installed. Are you sure to remove all ?	
Unknown a Cancel Confirm	
Allow installation of apps from unknown sources	

**NOTE:** Pre-loaded credentials cannot be cleared.

• Under Trusted Credentials view and edit all trusted and installed CA certificates.

iecurity	
<b>Frusted credenti</b>	al
System	Manual installed
AC Cameefirma S.A Security info Chambers of Commerce Root - 2008	
AC Cameefirma S.A Security info Chambers of Commerce Root - 2008	
AC Cameefirma S.A Security info Chambers of Commerce Root - 2008	
AC Cameefirma S.A Security info Chambers of Commerce Root - 2008	

• Tapping on a credential will provide more detailed information.



• Allow the installation of applications from unknown sources by selecting the box under **Unknown source security**.



**NOTE:** Apps from unknown sources may not be compatible or work properly.

# System Update

The ViewBoard automatically searches for software updates whenever connected to the Internet (OTA). With just one click, users can update their version of ViewBoard software.

System Update	
(	UPDATE  Schedule SET SCHEDULE
	JAL UPDATE

Item	Description
Auto Update	When the display is off, the system will automatically check for a new version. If a new version is found, the system will automatically update. After the update is complete, the system will turn off.
Schedule	Set the update time.
Manual Update	Update the software manually.

## **About Device**

Display Embedded Player information, Legal information, and Asset Tagging.

<b>&lt;</b> Setting			
About o	device		
Asset tagging	:Pilotfish 00-372 Edit	egal nformation	>
Model number	IFF8650		
Player version	5.1.1		
Kernel version	3.10.0_s5 rel@lip #1 Tue Dec 11 13:06:21 CST 2018		
Build number	LMY49J release-key		

• By selecting **Edit**, the asset information can be adjusted.

<	Setting		
	About device		
	Asset tagging : Embeded player 🛛 Save Cancel Legal inform	nation	>
		•	
	$q^{1} w^{2} e^{3} r^{4} t^{5} y^{6} u^{7} i^{8} o^{9} p^{0} \checkmark$		
111	asd fghjkl 🗸		
	★ z x c v b n m ! ? ▲		
	?123 , . E		

• Tap on Legal information to check open source licenses.



# **Embedded Applications and Settings**

# **Embedded Digital Whiteboarding App**

Within ViewBoard, ViewSonic offers the embedded digital whiteboarding app, myViewBoard.

# <u>myViewBoard</u>

#### **Floating Bar**

	Move the Floating Bar.		
	Switch between presentation and preparation modes.		
	Paste from the clipboard onto the canvas.		
0	Click to open the web browser		
$\leftarrow$	Go to the previous canvas. 1. New myViewBoard File		
$\rightarrow$ $\rightarrow$	Go to the next canvas.	2. Open File	
	Add a new canvas.	3. Save File	

#### Toolbar

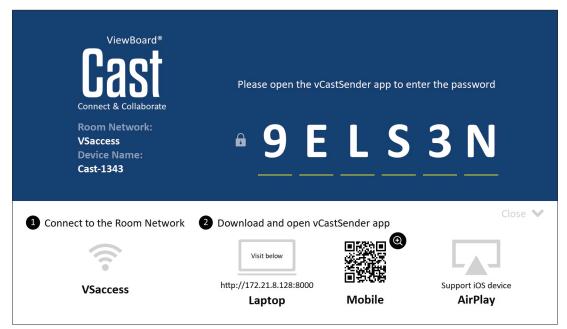
• •	Full Screen Capture				
$\begin{array}{c} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	Toolbar Move Button	Select and hold to move the toolbar to the left side, right side, or bottom of the screen.			
	File Button				
	1. New myViewBoard File4. Save as File2. Open File5. Export3. Save File6. Email				
۱	Import resources (image, video, audio, etc.) to the whiteboard.				
•	Infinite Canvas Button	Select – Use two hands to zoom in/out on/of the working panel.			
	Selection Button	Select objects, text, and pictures to get other tools.			
	Pen Button	Writing tools, changing colors, transparency, thickness, etc.			
	Eraser to erase of	aser to erase objects or clear the page.			
울 🖍	Shape/Line Button	Create shapes, select shape colors, insert arrows.			

ΠT	Text Box	Creates a Text box.	
00	Undo Button	Undo previous actions.	
CC	Redo Button	Redo previous actions.	
1	Page Toggle Button	Select pages, sort pages, delete pages.	
0	Show or hide the current host information.		
	Whiteboard background management menu.		

# **ViewBoard Cast**

**NOTE:** This is a paid feature. If you need to activate it please contact your local seller for more information.

Working with ViewBoard<sup>®</sup> Cast software, the vCastReceiver app, will allow the ViewBoard<sup>®</sup> to receive vCastSender laptop screens (Windows/Mac/Chrome) and mobile (iOS/Android) users' screens, photos, videos, annotations, and camera(s).



#### **Network Information**

- ViewBoard<sup>®</sup> Cast software, laptops, and mobile devices can connect to both the same subnet and across the subnet network.
- 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.

ViewBoard Cast is a wireless peer to peer data communication, therefore the below port settings are required:

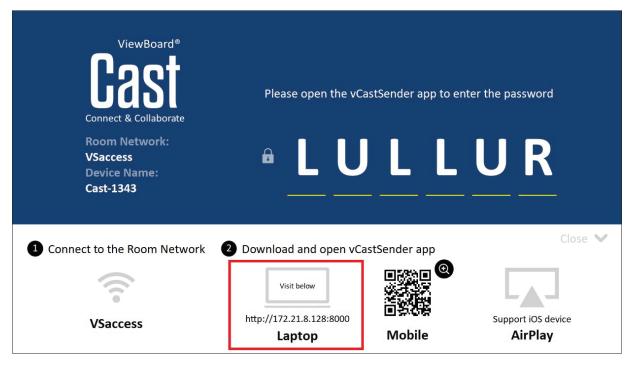
#### Ports:

- CP: 56789, 25123, 8121, and 8000
- UDP: 48689 and 25123

#### Port and DNS activation:

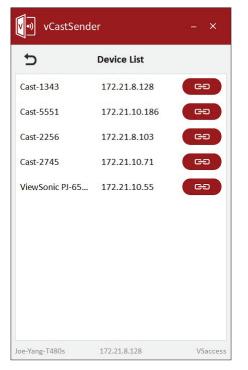
- Port: 8001
- DNS: h1.ee-share.com

## Cast Sender from Windows-based, Macbook, and Chrome devices.

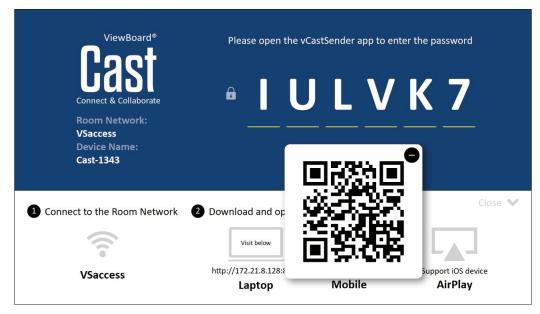


#### Mac, Windows, Chrome Devices:

- **1.** Make sure your device is connected to the same network as the ViewBoard.
- 2. Visit the address that is shown on the ViewBoard to download the application.
- **3.** Launch the application and click the connect icon next to the Device Name.



**NOTE:** If the device is not listed, click **Connect with PIN-Code** and input the pincode displayed on the ViewBoard. Cast Sender from Mobile Devices: iOS-based (iPhone, iPad) and Android OS based phone/tablet.

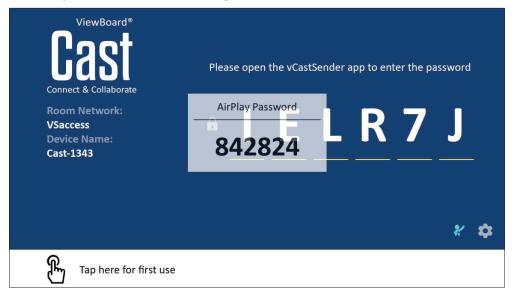


#### Android/iOS:

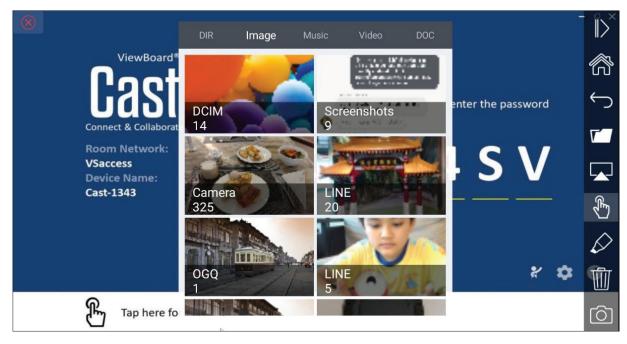
- 1. Make sure your device is connected to the same network as the ViewBoard.
- 2. Scan the QR Code that is shown on the ViewBoard to download directly from the server, or download from the Google Play Store or the Apple Store.
- **3.** Launch the application and select the correct Device Name and input the pin to connect. You can also directly input the pin-code displayed on the ViewBoard to connect.

#### **Apple AirPlay®:**

- **1.** Make sure your device is connected to the same network as the ViewBoard.
- 2. Directly open AirPlay and select the Device Name to connect.
- **3.** Another "AirPlay Password" will be generated on-screen for connection.



## Cast Out from a Mobile Device that Supports Annotation



	Item	Description
$\parallel$	Toggle	Click to hide or display tool bar
$\bigcirc$	Home	Click to return to the Home interface
$\leftarrow$	Return	Click to return to previous operation interface
<b>7</b> 7	Folder	Click to view or open the mobile device's internal file
	Screen sharing	Click to share screen (Android 5.0 and above supported)
Ł	Touch	Click to change to touch mode
$\Diamond$	Pen	Click to make annotations, and to change color and thickness
1	Clear	Click to clear everything on the screen
Ô	Camera	Click to use the camera and send the image to the ViewBoard

# **Screen Recorder**

Capture everything that is displayed on screen in a video format.

Preview			$\otimes$
	ViewBoard Interaction at your fingertips	02:10 Thursday 2020-04-09	
	Image: Browser       Image: CastReceiver       Image: CastReceiver         Image: CastReceiver       Image: CastReceiver       Image: CastReceiver		
	<b>E</b> thered		ViewSonic 🚟
00:00:02 / 00:00:04			8

To launch the Screen Recorder application:

- **1.** Select the Screen Recorder icon in the application drawer.
- 2. Tap the record icon 🕜 and select the preferred recording configurations. Then tap the check mark.



- **3.** Select *Start Now* and a three (3) second countdown will begin. Screen recording will begin immediately after the countdown.
- **4.** After stopping the recording, you will be able to preview the video, save it, or discard it.

# Air Class

Display quiz questions on the ViewBoard and allow up to 30 mobile users to submit answers remotely. Whether deploying single or multiple choice questions, the ViewBoard will record the results for each device being used.



Air Class

Android phone/ tablet: scan QR Code to enter Air Class

Other devices: Connect to the same network (Local Area Network) and enter the URL http://(enter your URL here):8080 to enter Air Class

# **Network Information**

- PC (Windows/Mac/Chromebook) and tablet/mobile (iOS/Android) devices, as well as the ViewBoard need to be linked to the same LAN network subnet.
- Ports: TCP 8080

To launch Air Class:

- **1.** Tap the tool bar trigger icon and select the more tools icon. Then select the Air Class icon.
- **2.** Select "Enter the class".



**3.** Choose from the available interactive functions at the bottom of the screen.

AB CD	ž	Q	-	2	F	20	G
Voter	Judge	Responder	Selector	Grouping	Message	Manager	Exit

	ltem	Description
AB	Voter	Single and Multiple choice questions.
×	Judge	True/False questions.
R	Responder	Race to answer first.
2	Selector	Randomly select a participant.
2	Grouping	Assign participants to groups.
	Message	Allow/Deny participants to direct message the ViewBoard.
	Manager	Add participants.
	Exit	Exit Air Class.

# <u>Voter</u>

1. Select the Single choice or Multiple choice icon to select the preferred answer type.



2. Tap BEGIN VOTING to let the participants start.



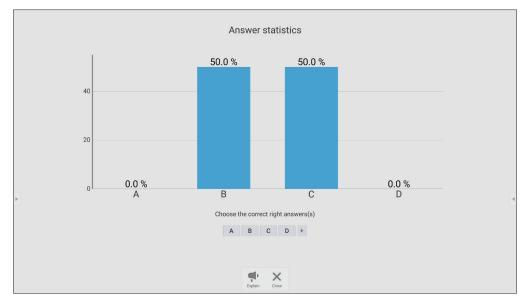
**3.** After the participants are finished and press **OK**, the ViewBoard will show the participant's name on screen.



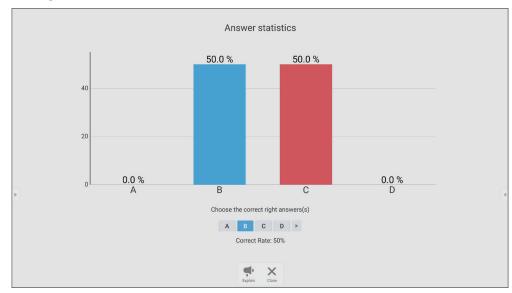
4. Tap FINISH VOTING to close the quiz.



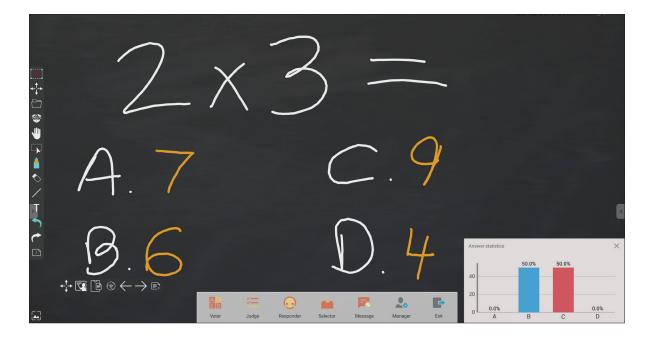
**5.** Then the participants' "Answer Statistics" will be displayed.



#### **6.** Choose the right answer to show the correct rate.



**7.** Click the Explain icon ( ) to further analyze the topic.



# <u>Judge</u>

**1.** Tap **BEGIN VOTING** to let the participants start a True/False questionnaire.



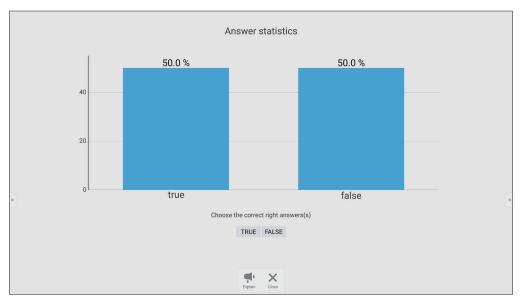
2. After the participants are finished and press OK, the ViewBoard will show the participant's name on screen.



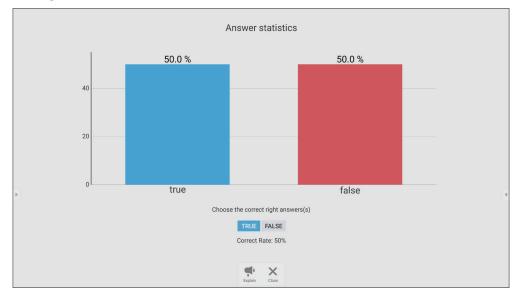
**3.** Tap **FINISH VOTING** to close the quiz.



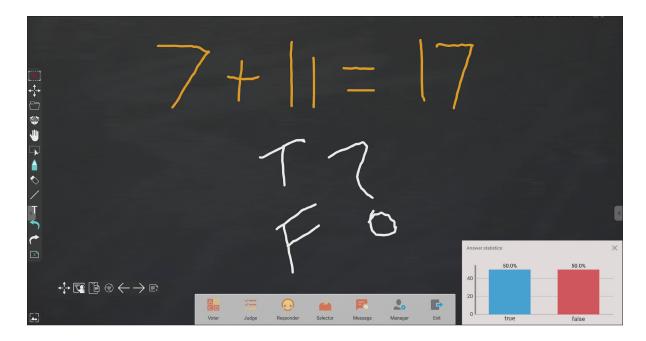
**4.** Then the participants' "Answer Statistics" will be displayed.



#### **5.** Choose the right answer to show the correct rate.



**6.** Click the Explain icon ( ) to further analyze the topic.



## **Responder**

Participants race to select their answer and tap **OK** to submit their answer.

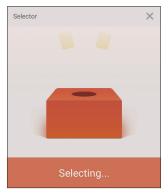


# <u>Selector</u>

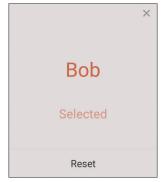
- 1. Select the "Selector' icon.
- 2. Set the number of participants to be selected.



- **NOTE:** The number of participants that can be selected will be based on the total number of participants.
- 3. Tap START to start the random selection.



**4.** The selected participant's name will then be displayed.



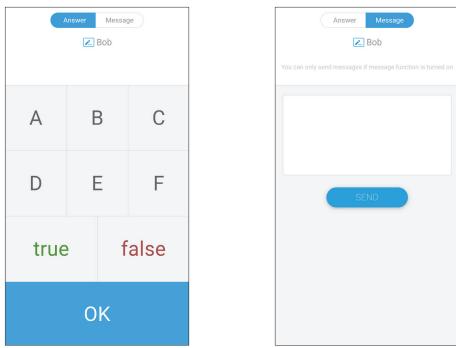
### **Grouping**

Select the icon to assign participants to groups.

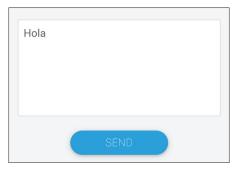
# <u>Message</u>

To allow messaging:

- **1.** Tap the "Message" icon to enable the function.
- 2. Participants select "Message" to change to the message interface.



**3.** Participants key in their message then select **SEND**.



**4.** The message will scroll across the top of the ViewBoard.

### <u>Manager</u>

Select the icon to let more participants join the class.

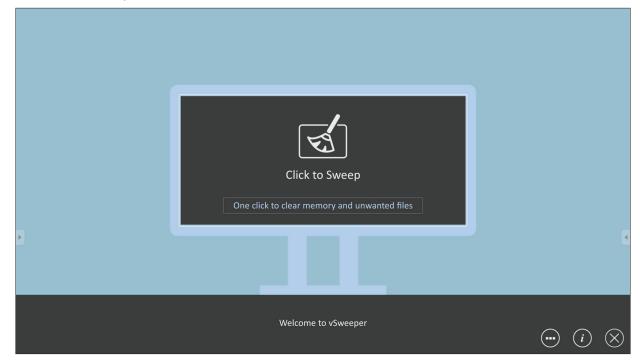
### <u>Exit</u>

Select to exit the Air Class interface.

# **Other Default Applications**

#### vSweeper

Clear unnecessary data and unwanted files.



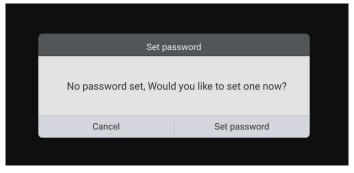
Advanced Settings can also be customized to the user's needs.

	Main Preference		
	<ul> <li>Clear all Auto clear all junk files when the app starts</li> </ul>	Auto Clear Interval	
	<ul> <li>Exit after clearing         <ul> <li>Exit after the clear button is clicked and the clean up has completed</li> </ul> </li> <li>Auto Clear         <ul> <li>Auto clear interval             <ul></ul></li></ul></li></ul>	<ul> <li>No auto clear</li> <li>1 hour</li> <li>3 hours</li> <li>6 hours</li> <li>12 hours</li> </ul>	<ul> <li>1 day</li> <li>2 days</li> <li>1 week</li> </ul>
Þ	Auto clear on boot Automaticaly clear caches on system startup		4
	Advanced Settings	,	<ul><li>(i) ⊗</li></ul>

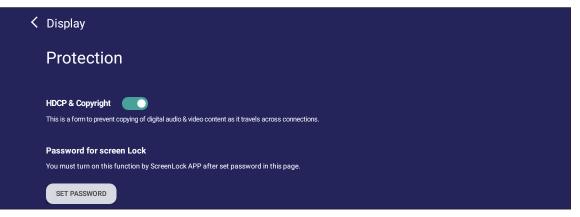
#### Screen Lock

Set a screen lock password and enable screen lock.

- **NOTE:** If the user forgets the password, use the remote control and press **INPUT-0-2-1-4** to restore the password to default.
- To set a screen lock password:
- 1. Go to: Settings > Personal > Password for screen lock, or select the Screen Lock icon in the apps list.
  - **NOTE:** If you select the Screen Lock icon and no password has been set, the below prompt will appear:



2. Select Set Password, and input a new four (4) digit password. Then select OK.

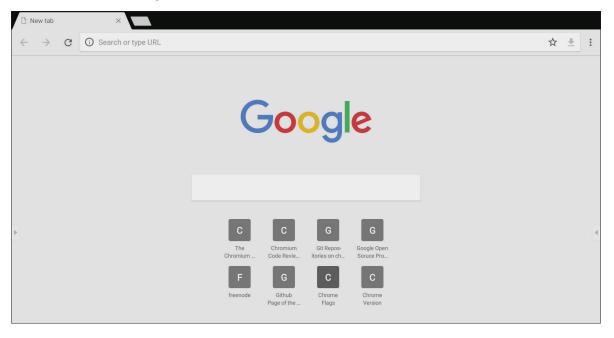


**3.** Now when selecting the Screen Lock icon, the screen will be locked.

					8	

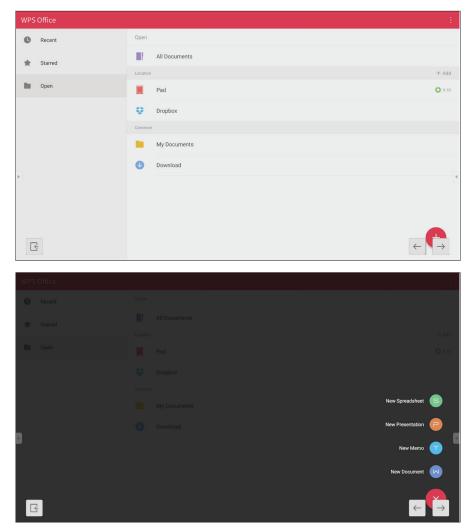
# Chromium

Web browser for surfing the Internet.



#### **WPS Office**

Create, edit, and view Documents, Memos, Presentations, and Spreadsheets.



# **Folders**

1	Folders 3	
Storage USB1	All     Doc     Note     Picture     Media       Image: Display black     Image: Display black     Image: Display black       2017-1135.png	4
	2 ⊞ ≣ ☑ □; 創 ů ‰ ṁ ≫ ☉	2017-11-01-16-27-35.png Dimension: 1920-1080 Size 523.67KB Time: 2017/11/01

# 1. Storage Device Display

Select the appropriate storage device.

# 2. Icons

Item	Description
Exit	Click to exit.
Sort	Click to sort file.
🔠 Thumbnail	Click to display file by thumbnail mode.
List	Click to display file by list mode.
Select	Click to select file.
Add folder	Click to add folder.
Е Сору	Click to copy file.
Paste	Click to paste file.
Cut	Click to cut file.
Delete	Click to delete file.
Rename	Click to rename file.
More	Click to show more functions.

#### 3. File Type Menu

Item	Description
All	All types
Doc	OFFICE files
Note	Image stored by myViewBoard, Side Tool Bar, and remote control Screen Capture button.
Picture	Image files
Media	Audio and Video files

#### 4. File Information

Preview the image, show the image's name, size, resolution, and creation date.

# 5. Main Display Area

Display files of corresponding type.

# **RS-232 Protocol**

This document describes the hardware interface spec and software protocols of RS-232 interface communication between ViewSonic LFD and PC 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 (or 3.5 mm barrel connector)
- 2. Use of crossover (null modem) cable for connection
- 3. Pin Assignment:

Female DSUB 9-Pin Remark Pin # Signal NC 1 54321 2 RXD Input to Display 3 TXD Output from Display 4 NC 9876 5 GND 6 NC Male DSUB 9-Pin 7 NC 12345 8 NC Provide +5V/2A power for external 9 NC specific dongle \*3.0 6789 frame GND

3.5 mm barrel connector (alternative for limited space)

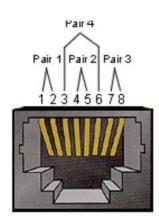


ltem	Signal	Remark
Тір	TXD	Output from Display
Ring	RXD	Input to Display
Sleeve	GND	

# 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	

# **RS232** Communication Setting

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

# LAN Communication Setting

Ethernet
TCP/IP
5000 (fixed)
No
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:

- If the message is received correctly it will send "+" (02Bh) followed by "CR" (00Dh)
- 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 of 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	1 Byte	2	1 Byte	1 Byte	1 Bvte	1 Byte	1 Byte	1
Count	Byte Byte	Byte	I Dyte	т буге	т вуге	твусе	т вуте	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 as 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 as 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	0x73	0x24	0x30	0x37	0x35	0x0D
		0x32						

#### 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	Comr	nand	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 works only under specific mode. To see display UG for details. *3.1.1 2. "WOL by MAC address" may avail- able as alterna- tive.*3.2.1
Input Select	8		S	ά	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)	<ol> <li>No need for USB</li> <li>For the case of two more same sources, the 2nd digital is used to indicate the extension.</li> <li>The HEX of 00A is 30 30 41.</li> </ol>
Brightness	8		S	\$	24	000 ~ 100 900: Bright down (-1) 901: Bright up (+1) *3.1.1	
Backlight*3.2.0	8		A	В	42	000 ~ 100	<ol> <li>For Android platform whose main mode is controlled by backlight and the other sources are controlled by bright- ness.</li> <li>Derived from Color calibration.</li> <li>*3.2.0</li> </ol>
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)	

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	В	42	000: Disable 001: Enable 002: Pass through	Disable: RCU will be no function Enabled: RCU con- trols normally Pass through: Display will bypass the RC code to con- nected device via the RS-232 port, but not react itself.
Restore default	8	S	~	7E	000	Recover to factory setting

#### NOTE:

## 1. Behavior at Lock Modes

Lock Mode	Behavior
Button Lock	<ol> <li>Lock all buttons on the front panel and RCU, except for "Power"</li> <li>All the SET functions should be workable via RS-232, even the ones with according hot key in RCU like Mute,etc.</li> </ol>
MENU Lock	<ol> <li>Lock "MENU' key of front panel and RCU</li> <li>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.</li> </ol>
POWER Lock	<ol> <li>Lock "POWER" key on the front and RCU.</li> <li>The SET_POWER on/off should be workable via RS-232, but does not mean the POWER lock will be released under this case.</li> <li>Can not be unlocked by reset in OSD setting</li> <li>Will auto AC power-on in power-lock</li> <li>Under power-lock, the set will not enter power saving when no PC signal and neither not turn off when no other video signals after 15 minutes.</li> </ol>
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
OxFF FF FF	MAC address	MAC address	 MAC address	0x00 00 00

# **B. Optional Function**

Set Function	Length	ID	Command	Com	mand	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 extend- ed for more sup- ported 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	,	3В	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	Value range is same as SET- Input select
						00A: Embedded/ Main (Android)	

Tiling-Mode	8		S	Р	50	000: OFF 001: ON	(for video wall)
Tiling-Compen- sation	8		S	Q	51	000: OFF 001: ON	(for video wall) Bezel width com- pensation
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	ĺ	S	W	57	S00~S59	2 digits

#### NOTE:

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

	[		H MONITORS			1
	1	2	3	4	5	-Position
RS	6	7	8	9	10	
V MONITORS	11	12	13	14	15	•
⊿ >	16	17	18	19	20	
	21	22	23	24	25	

#### 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 Bvte	2	1 Byte	1 Byte	1 Bvte	1 Byte	1 Byte	1
Count	твуше	Byte	I Dyte	I Byte	твусе	твусе	т Буге	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	1 Byte	2	1 Byte	1 Byte	1 Byte	1 Byte	1 Byte	1
Count		Byte						Byte
Bytes	1	2~3	4	5	6	7	8	9
order								

#### If the Command is NOT valid, Command Type = "-"

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

# 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)**

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

#### **Get-Function Table**

#### A. Basic Function

Get Function	Length	ID	Command	Comr	nand	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		а	В	42	000 ~ 100	<ol> <li>For Android platform whose main mode is controlled by backlight and the other sources are controlled by bright- ness.</li> <li>Derived from Color calibration. *3.2.0</li> </ol>
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~	<ol> <li>1st digit for signal detection: 0 means "no signal"; 1 means "signal detected"</li> <li>2nd &amp;3rd digit: See Set-function table</li> </ol>
Get-Power status: ON/ STBY	8		g	I	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	0	6F	000: Unlock 001: Lock	
Get-Button lock	8		g	р	70	000: Unlock 001: Lock	
Get-Menu lock	8		g	1	6C	000: Unlock 001: Lock	
Get-ACK	8		g	z	7A	000	This command is used to test the com- munication 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	<ol> <li>Accumulated hours in 6-digit integer (000,001~ 999,999)*3.2.0</li> <li>Can not be reset when FW update and Factory initiation*3.2.2</li> <li>Reply in new 32- byte format*3.2.0</li> </ol>
Get-Device name	8		g	4	34	000	Reply in new 32-byte format *3.2.0

Get-MAC address	8	g	5	35	000	(for the model with LAN) Reply in new 32-byte format*32.0
Get-IP address *3.2.0	8	g	6	36	000	(for the model 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**

<b>Get Function</b>	Length	ID	Command	Com	mand	Response	Comments
						Range	
			Type (ASCII)	Code (ASCII)	Code (Hex)	(Three ASCII bytes)	
Get-Contrast	8		g	а	61	000 ~ 100	
Get-Sharpness	8		g	с	63	000 ~ 100	
Get-Color	8		g	d	64	000 ~ 100	
Get-Tint	8		g	е	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 Compen- sation	8		g	W	77	000: OFF 001: ON	(for Video wall) Bezel width com- pensation
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	У	79	000: OFF 001~025	(for Video wall) Copy the screen of Position# to identi- fied 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

	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")
	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")
	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 getting a 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 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 shall send a 7-byte packet (followed by "CR") in response to remote control unit (RCU) button activation. In this mode the remote control shall have no effect on the Display function. For example: "Volume+" will not change the volume of the Display, but instead only sends 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

Кеу	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	
-	OB		V
RECALL (LAST)	0C		V
INFO (DISPLAY)	0D		V
	OE		
ASPECT (ZOOM, SIZE)	OF		V
VOLUME UP (+)	10	V	

	11		
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		
	2A		
	2B		
RED 📕 (F1)	2C		
GREEN 📕 (F2)	2D		
YELLOW [F3]	2E		
BLUE 🚺 (F4)	2F		

### 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

# Specifications

ltem	Category	Specifications			
Model	P/N.	IFP6532	IFP7532	IFP8632	
	No.	VS18471	VS18472	VS18473	
Screen Size		65.5″	74.5″	85.5″	
Input Signal		2 x HDMI			
			1 x VGA		
			1 x Audio In		
			1 x LAN (RJ45)		
			4 x USB Type A (2.	.0)	
Output Signal			1 x Audio Out		
		1 x USB Type B			
Speaker Output		10W x 2			
RS-232		RS-232 Communication			
Power	Voltage	162V-264V +/- 10%, AC 50/60Hz			
Operating	Temperature	32° F to 104° F (0° C to 40° C)			
Conditions	Humidity	10%	%~90% non-conde	nsing	
	Altitude	≤ 2,000 m			
Storage	Temperature	-4° F to 140° F (-20° C to 60° C)			
Conditions	Humidity	10%~90% non-condensing			
	Altitude	≤ 2,000 m			
Dimensions	Physical (mm)	1488 x 897 x 90	1710 x 1020 x	1958 x 1160 x 90	
		90			
Weight	Physical (kg)	38.3	51.8	66.7	
Power	On	174.4W	237.9W	313.3W	
Consumption	Off	<0.5W	<0.5W	<0.5W	

**NOTE:** Product specifications are subject to change without notice.

# **Display Modes**

# VGA Mode

Resolution	Refresh Rate (@)
1280 x 1024	60Hz
1600 x 1200	60Hz
1920 x 1080	60Hz

# HDMI Mode

Resolution	Refresh Rate (@)	
640 x 480	60Hz	
800 x 600	60Hz	
1024 x 768	60Hz	
1280 x 960	60Hz	
1920 x 1080	60Hz	
3840 x 2160	24Hz, 25Hz, 30Hz, 50Hz, 60Hz	
480p	59Hz, 60Hz	
576p	50Hz	
720р	50Hz, 59Hz, 60Hz	
1080i	50Hz, 59Hz, 60Hz	
1080p	23Hz, 24Hz, 25Hz, 29Hz, 30Hz, 50Hz, 59Hz, 60Hz	

# 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	<ol> <li>Check whether something is obstructing the display's remote control receiver.</li> </ol>	
	<ol> <li>Check whether the batteries in the remote control are installed correctly.</li> </ol>	
	<b>3.</b> Check whether the batteries need to be replaced.	
The unit turns off	1. Check whether Sleep mode is enabled.	
unexpectedly	<b>2.</b> Check if there is a power outage in your area.	
	<b>3.</b> 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.	
	<ol> <li>Adjust the Hs &amp;Vs (synchronization) settings using the OSD menu.</li> </ol>	
Background streaking	1. Choose auto adjust.	
	2. Adjust clock and phase.	
False color	1. Check the VGA connection.	
	<ol> <li>Adjust the chroma, brightness, and contrast settings.</li> </ol>	
Unsupported format	1. Choose auto adjust.	
	2. Adjust clock and phase settings.	

#### **Touch Function**

Problem or Issue	Possible Solutions
Touch function does	1. Check that drivers are installed correctly.
not work	2. Reinstall driver(s).
	<b>3.</b> 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.		
	<b>3.</b> Check that the internal PC is installed correctly.		
Picture is unclear or	1. Check the signal cable.		
cuts in and out	<b>2.</b> Check if other electronics are interrupting the signal.		
Poor picture	<ol> <li>Adjust chroma, brightness, and contrast settings in the menu.</li> </ol>		
	2. Check the signal cable.		

# Audio Not Working Properly

Problem or Issue	Possible Solutions		
No sound	1. Press the Mute/Unmute button.		
	<b>2.</b> Adjust the volume.		
	<b>3.</b> Check the audio cable.		
One speaker only	1. Adjust the sound balance in the menu.		
	<ol> <li>Check the sound control panel settings of the computer.</li> </ol>		
	<b>3.</b> Check the audio cable.		
	<b>NOTE:</b> SPDIF and Audio Out only work in Embd Player, HDMI, and DisplayPort (DP) channels.		

# 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, nonalcohol 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<sup>®</sup> 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<sup>®</sup> 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.

# **Industry Canada Statement**

CAN ICES-003(B) / NMB-003(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 <sup>+</sup> )	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.

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

### USA & Canada:

https://www.viewsonic.com/us/company/green/go-green-with-viewsonic/#recycle-program

#### Europe:

http://www.viewsoniceurope.com/eu/support/call-desk/

#### Taiwan:

https://recycle.epa.gov.tw/

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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/		
	Amer	ricas			
United States	www.viewsonic.com/us	Canada	www.viewsonic.com/us		
Latin America www.viewsonic.com/la					
	Euro	ppe			
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<sup>®</sup> Smart White Board

#### What the warranty covers:

ViewSonic<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup>.
  - » 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<sup>®</sup> 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<sup>®</sup> service center or ViewSonic<sup>®</sup>.
- For additional information or the name of the nearest ViewSonic<sup>®</sup> service center, contact ViewSonic<sup>®</sup>.

#### 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<sup>®</sup> 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<sup>®</sup>.

## 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<sup>®</sup> products sold outside of the U.S.A. and Canada, contact ViewSonic<sup>®</sup> or your local ViewSonic<sup>®</sup> 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".

