

Interactive Flat Panel



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SAFETY

Please follow all warnings, precautions and maintenance as recommended in this user manual.

Safety Instructions

- Only use attachments/accessories specified by the manufacturer.
- Do not block any ventilation openings. To ensure reliable operation of the device and to protect from overheating, it is recommended to install the device in a location that does not block ventilation. Do not put the device in an enclosure such as a book case or a cabinet that restricts air flow.
- Do not use the device near water or moisture. To reduce the risk of fire and/or electric shock, do not expose the device to rain or moisture.
- Do not install near heat sources such as radiators, heaters, stoves or any other apparatus, such as amplifiers, that emits heat.
- Do not let objects or liquids enter the device. They may touch dangerous voltage ports or short out parts that could result in fire or electric shock.
- Do not place the device on an unstable surface. The device may fall over, resulting in injury or the device may become damaged.
- Do not setup the device in places where it might be subjected to vibration or shock.
- Do not use any hard or sharp object to operate the touch screen.
- Do not use the device if it has been physically damaged or abused. Physical damage/abuse would be (but not limited to):
 - The device has been dropped.
 - Power supply cord or plug has been damaged.
 - Liquid has been spilled on to the device.
 - The device has been exposed to rain or moisture.
 - Something has fallen in the device or something is loose inside.
- Do not attempt to service the device yourself. Opening or removing covers may expose you to dangerous voltages or other hazards. Please call Optoma before you send the device for repair.
- Disconnect the power plug from AC outlet if the device is not being used for a long period of time.
- Remove the batteries from the remote control before storage. If the batteries are left in the remote for long periods, they may leak.
- Turn off and unplug the power plug from the AC outlet before cleaning the device.
- Use a soft dry cloth with mild detergent to clean the display housing. Do not use abrasive cleaners, waxes or solvents to clean the device.
- See the device enclosure for safety related markings.
- The device should only be repaired by appropriate service personnel.

Copyright

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Disclaimer

The information in this document is subject to change without notice. The manufacturer makes no representations or warranties with respect to the contents hereof and specifically disclaims any implied warranties of merchantability or fitness for any particular purpose. The manufacturer reserves the right to revise this publication and to make changes from time to time in the content hereof without obligation of the manufacturer to notify any person of such revision or changes.

Trademark Recognition

Kensington is a U.S. registered trademark of ACCO Brand Corporation with issued registrations and pending applications in other countries throughout the world.

HDMI, the HDMI Logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.

Google, the Google logo, and Google Drive are trademarks or registered trademarks of Google LLC.

OneDrive is a trademark and brand of Microsoft Corporation.

All other product names used in this manual are the properties of their respective owners and are Acknowledged.

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

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

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

FCC Warning

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Notice: Canadian users

This Class B digital apparatus complies with Canadian CAN ICES-3 (B)/NMB-003 (B).

Remarque à l'intention des utilisateurs canadiens

Cet appareil numerique de la classe B est conforme a la norme NMB-003 du Canada.

Declaration of Conformity for EU Countries

- EMC Directive 2014/30/EU (Including amendments)
- Low Voltage Directive 2014/35/EU

WEEE



Disposal instructions

Do not throw this electronic device into the trash when discarding. To minimize pollution and ensure utmost protection of the global environment, please recycle it.

ENERGY STAR



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

This product qualifies for ENERGY STAR in the "Standard mode" setting and this is the setting in which power savings will be achieved. Changing the Standard mode picture settings or enabling other features will increase power consumption that could exceed the limits necessary to qualify for ENERGY STAR rating. Refer to EnergyStar.gov for more information on Energy Star program.

Low Blue Light and Eye Health

What is Low Blue Light Technology?

Low Blue Light Technology reduces the blue-light component emitted by your product. The harm of blue light to human eyes is mainly manifested in the pathological harm of eyes and the harm of human body rhythm, which lead to myopia, cataract and macular disease.

Low blue light certification: it is a certification project to evaluate whether the display equipment meets the requirements of photobiosafety and UV free radiation safety.

Note: To meet TUV Rheinland of low blue light certificate, the display setting should be:

- Display Mode is Presentation
- Color Temperature is Standard
- Low Blue Light is 100.

Calculating Breaks

It is recommended to take a 10-minute break every hour of continuous screen use.

Note: Remember to blink your eyes often to keep them healthy and avoid dryiness.

Looking at Distant Objects

During the break look at distant objects or close your eyes. This helps to relax your ciliary (focusing) muscle and avoids eye strain.

How to Excercise Your Eyes?

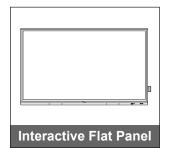
- 1. Hold your pointer finger a few inches away from your eye.
- 2. Focus on your finger.
- 3. Slowly move your finger away from your face, holding your focus.
- 4. Look away for a moment, into the distance.
- 5. Focus on your outstretched finger and slowly bring it back toward your eye.

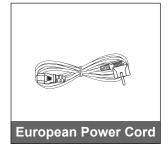
Package Contents

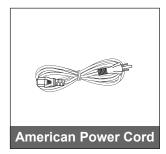
Carefully unpack and verify that you have the items listed below under standard accessories. Some of the items under optional accessories may not be available depending on the model, specification and your region of purchase. Please check with your place of purchase. Some accessories may vary from region to region.

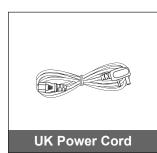
The warranty card is only supplied in some specific regions. Please consult your dealer for detailed information.

Standard Accessories

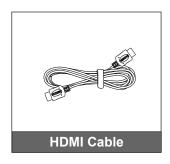


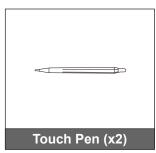




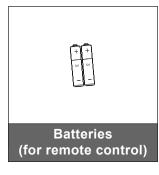




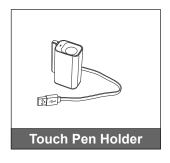






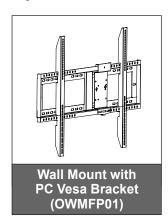


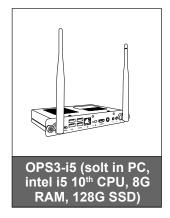


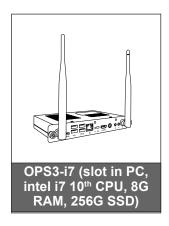


Note: For warranty information, please visit www.optoma.com.

Optional Accessories





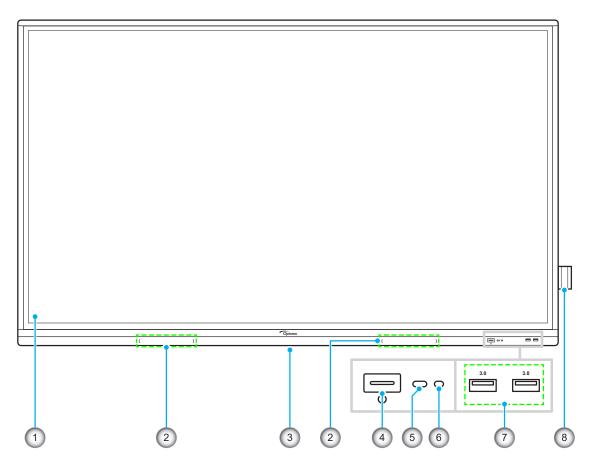






Product Overview

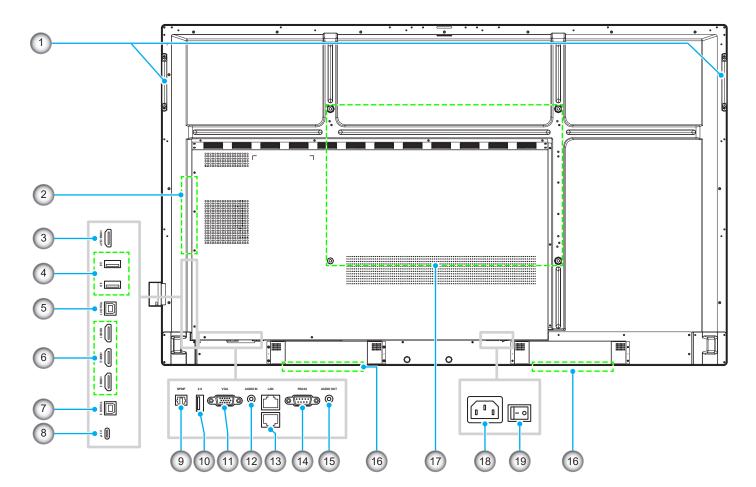
Front View



No.	ltem	
1.	Touch screen	
2.	Touch pen placements (x2)	
3.	Wi-Fi dongle slot	
4.	Power button with LED indicator	

No.	Item		
5.	IR receiver		
6.	Light sensor		
7.	USB 3.0 ports (x2)		
8.	Touch pen holder		

Rear View



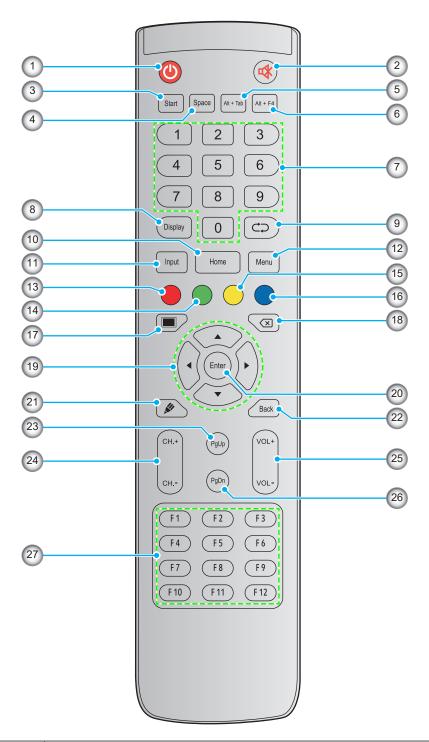
No.	ltem		
1.	Handles (x2)		
2.	OPS slot		
3.	HDMI Out port		
4.	USB 3.0 ports (x2)		
5.	Touch 1 USB port		
6.	HDMI 1/2/3 2.0 ports (x3)		
7.	Touch 2 USB port		
8.	USB Type-C port		
9.	SPDIF port		
10.	USB 2.0 port		

No.	Item	
11.	VGA port	
12.	Audio In port	
13.	LAN port (x2)	
14.	RS232 port	
15.	Audio Out jack	
16.	20W speakers (x2)	
17.	Mounting holes for wall mount	
18.	AC In socket	
19.	Power switch	

Note:

- Side USB 3.0 ports are full channel USB ports. USB ports can be used irrespective of the chosen input source.
- Two HDMI in ports support CEC and 1 HDMI in port supports ARC.
- USB type-C port supports DisplayPort 1.2 and power delivery (65W).
- USB 2.0 port is for firmware upgrade or for touch pen holder connection. If the touch pen holder is plugged into any of the USB 3.0 ports then the pen holder trigger function can be used only in Android mode.

Remote Control



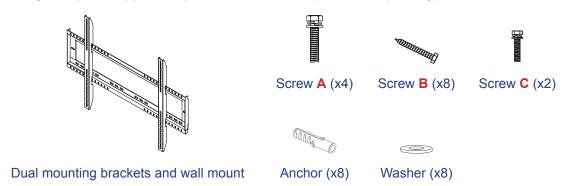
No.	Button	Description	
1.	Power (@)	Turn on/off the interactive flat panel (IFP).	
2.	Mute (♥)	Turn off the sound temporarily.	
3.	Start	Perform the same function as the <i>Windows</i> key on a computer keyboard.	
4.	Space	Perform the same function as the Space key on a computer keyboard.	
5.	Perform the same function as the <i>Alt</i> and <i>Tab</i> keys on a computer keyboard. Pressing both keys, you can switch between all open applications (windows).		

No.	Button	Description	
6.	Alt+F4	Perform the same function as the <i>Alt</i> and <i>F4</i> keys on a computer keyboard. Pressing both keys, you can close the current window.	
7.	Numeric keys	Numeric input keys	
8.	Display	Show the current input source and information.	
9.	Repeat (⊄⊃)	No function.	
10.	Home	Return to the Home screen.	
11.	Input	Select the input source.	
12.	Menu	Display or hide the OSD menu.	
13.	Red (●)	Lock or unlock the Power button (on the IFP) and touch functions.	
14.	Green (●)	Lock or unlock the Power button (on the IFP) function.	
15.	Yellow (○)	Lock or unlock the touch function.	
16.	Blue (●)	Freeze the screen.	
17.	Blank (Blank the screen.	
18.	Backspace (☒)	Perform the same function as the <i>Backspace</i> key on a computer keyboard.	
19.	Navigation keys (▲▼◀▶)	Select an item or option.	
20.	Enter	Confirm the selection.	
21.	Creative Board	Launch the Creative Board app.	
22.	Back	Return to the previous screen.	
23.	PgUp	Perform the same function as the <i>PgUp</i> key on a computer keyboard.	
24.	Channel keys	No function.	
25.	Volume keys	Adjust the volume level.	
26.	PgDn	Perform the same function as the <i>PgDn</i> key on a computer keyboard.	
27.	Function keys (F1 ~ F12)	Perform the same function as the <i>F1</i> ~ <i>F12</i> function keys on a computer keyboard.	

Note: If the PC module is not installed into the OPS slot, all computer-related keys will have no function.

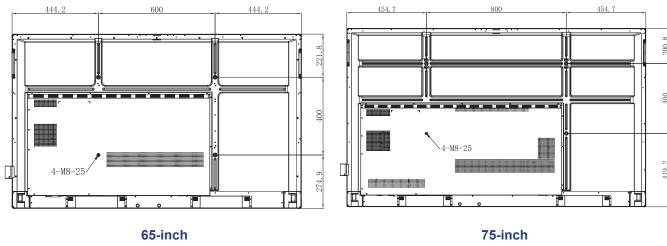
Wall Mounting Installation

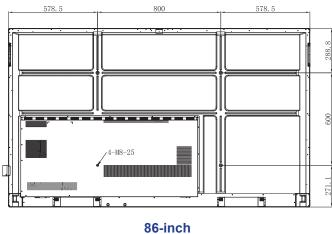
Use only an Optoma-approved optional wall mount kit (available separately). Kit will include the following items:



Wall Mount Specifications

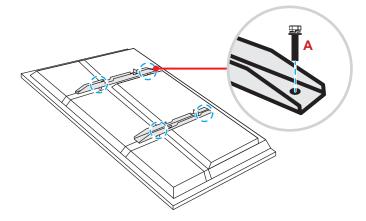
Model Name	VESA Grid	Screw Type & Length
65-inch	600 x 400 mm	M8*25L
75-inch	800 x 400 mm	M8*25L
86-inch	800 x 600 mm	M8*25L



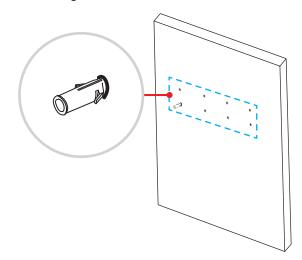


To mount the IFP on the wall, complete the following steps:

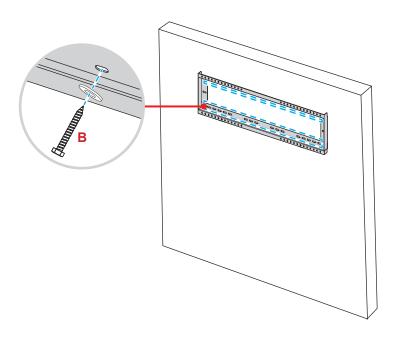
Install the dual mounting brackets on the rear of the IFP. Then secure the brackets with four screws (A).



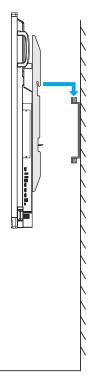
2. Drill eight small holes on the mounting location and insert the anchors into the holes.



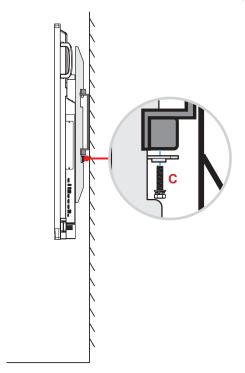
Position the wall mount on the wall, then secure the wall mount with eight screws (B) through the 3. washers into the installed anchors on the wall.



4. Align and hook the dual mounting brackets to the wall mount.



5. Secure the dual mounting brackets and the wall mount with two screws (C).



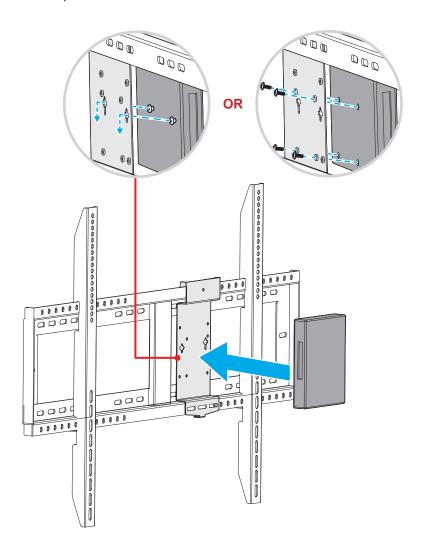
Note:

- The maximum wall mount kit load capacity:160kg (352lbs).
- The wall mount should be installed into concrete wall to ensure installation firmness. If concrete wall is not available, we recommend to use a stand instead. Please refer to page 18.
- Screws must be tightly secured; however, to avoid damage to the mounting brackets, wall mount, or IFP, do not overtighten the screws.
- The installation should only be performed by qualified technicians. Improper installation may cause the IFP to fall or malfunction.
- Please note that damage resulting from incorrect installation will void the warranty.

Installing an External Mini Computer

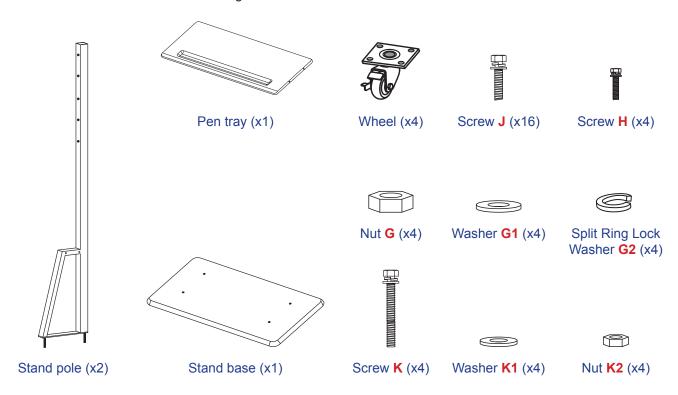
Install the mini PC bracket on the rear side of the wall mount, then complete one of the following to install the mini computer:

- Install the screws onto the mini computer, then align and hook the mini computer to the mini PC bracket.
- Align and install the mini computer to the mini PC bracket. Then secure it with four screws.



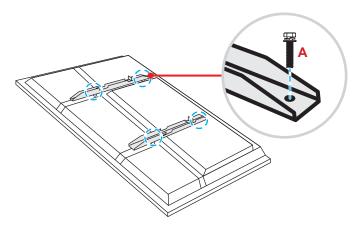
Stand Mounting Installation (Optional)

The stand mount kit includes the following items:



To mount the IFP on the stand, complete the following steps:

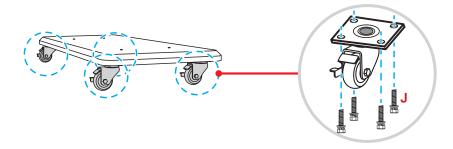
 Install the dual mounting brackets on the rear of the IFP. Then secure the brackets with four screws (A).



Note: Dual mounting brackets, wall mount, and screws (A) are included in the wall mount kit. Refer to "Wall Mounting Installation" on page 14.

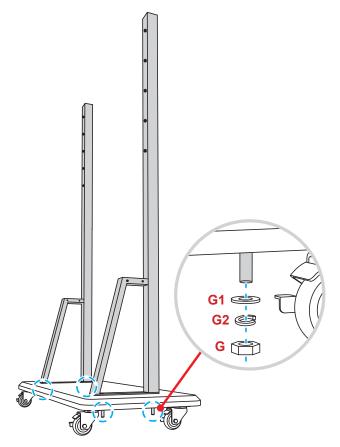
2. Flip the stand base so that you can see the screw holes for the wheel, then install the wheel onto its slot and secure it with four screws (J).

Repeat the same procedure to install the remaining three wheels.

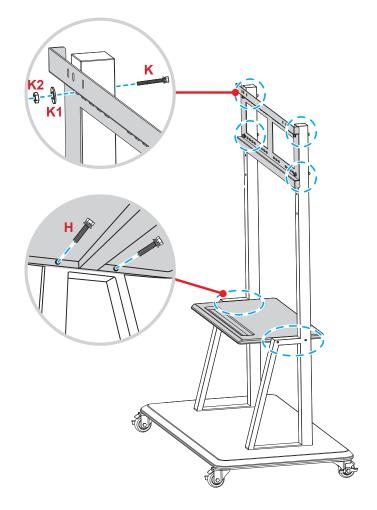


Place the stand base on the stable surface, then install the stand pole onto its slot and secure both 3. standoffs with two nuts (G) through the washers (G2 and G1).

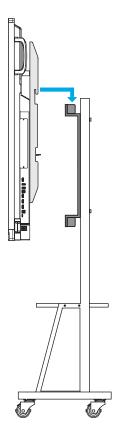
Repeat the same procedure to install another stand pole.



- Align the pen tray with the screw holes on the middle part of the poles, then secure the pen tray with four screws (H).
- 5. Install the wall mount on the upper part of the poles, then insert the screws (**K**) through the screw holes from the rear side of the poles.
- Place the washers (K1) and the nuts (K2) into the screws, then tighten the nuts (K2) to secure the wall mount in place.



7. Align and hook the dual mounting brackets to the installed wall mount on the stand poles.



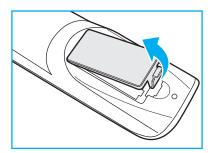
Using the Remote Control

Installing/Replacing the Remote Control Batteries

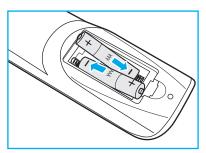
Two AAA size batteries are supplied for the remote control.

IMPORTANT! Replace only with the same or equivalent type batteries.

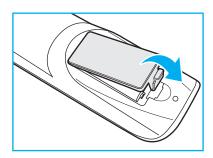
1. Remove the cover of the battery compartment.



2. Insert the two batteries with correct polarity (+/-) as shown inside the battery compartment.



3. Replace the cover.



CAUTION

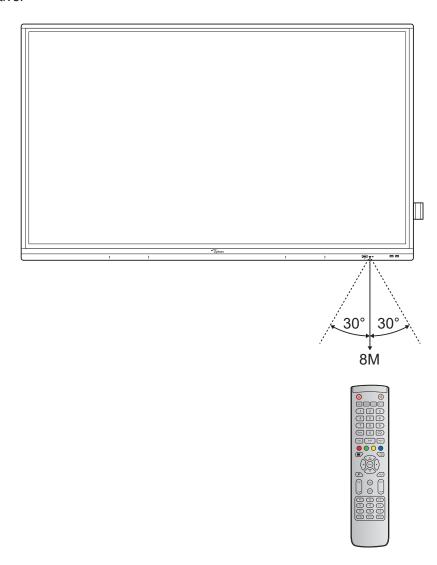
Improper use of batteries can result in chemical leakage or explosion. Be sure to follow the instructions below.

- Do not mix batteries of different types. Different types of batteries have different characteristics.
- Do not mix old and new batteries. Mixing old and new batteries can shorten the life of new batteries or cause chemical leakage in old batteries.
- Remove batteries as soon as they are depleted. Chemicals that leak from batteries that come in contact with skin can cause a rash. If you find any chemical leakage, wipe thoroughly with a cloth.
- The batteries supplied with this product may have a shorter life expectancy due to storage conditions.
- If you will not be using the remote control for an extended period of time, remove the batteries.
- When you dispose of the batteries, you must obey the law in the relative area or country.

Remote Control Operating Range

When using the remote control, make sure to point it within ±30° to the IR receiver on the IFP. The distance between the remote control and the IR sensor window should not be longer than 8 meters.

- Make sure that there are no obstacles between the remote control and the IR sensor window on the IFP that might obstruct the infra-red beam.
- Make sure the IR transmitter of the remote control is not being used in sunlight or fluorescent lamps directly.
- If the remote control is closed to Inverter-Type fluorescent lamps, it might become ineffective from time to time.
- If the remote control and the IFP are within a very short distance, the remote control might become ineffective.



Connections

Connecting to Power

- 1. Connect one end of the power cord to the AC-in socket on the IFP.
- 2. Connect the other end of the power cord to a power outlet or a power supply.
- 3. Set the **Power** switch to ON (I). The IFP will automatically enter standby mode.

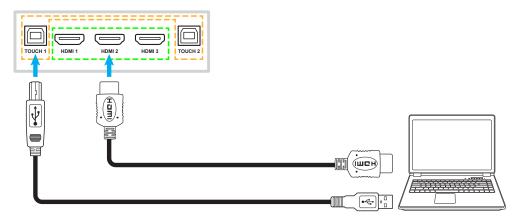


Connecting External Devices

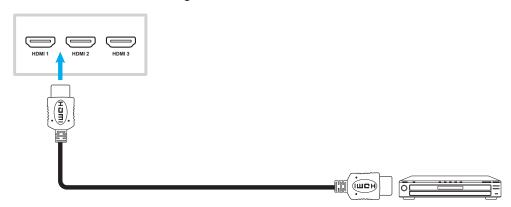
IMPORTANT! To use the touch screen function, make sure to connect one end of the USB cable to the USB type-B TOUCH 1 or TOUCH 2 port on the IFP and the other end of the cable to the USB type-A port on your device.

HDMI input connection

Connect your computer to the IFP using an HDMI cable.



Connect your video source to the IFP using an HDMI cable.

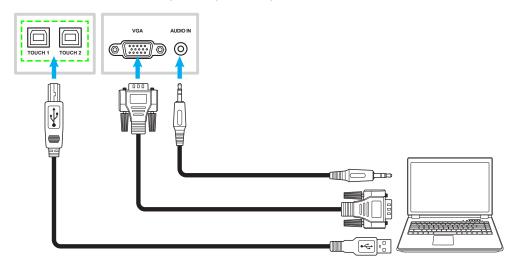


VGA input connection

Connect your computer to the IFP using a VGA cable.

Note:

- For audio input, connect one end of an audio cable to the AUDIO IN jack on the IFP and the other end of the cable to the audio jack on your computer.
- For touch function, connect one end of the USB cable to the TOUCH 1 or TOUCH 2 port on the IFP and the other end to the USB port on your computer.

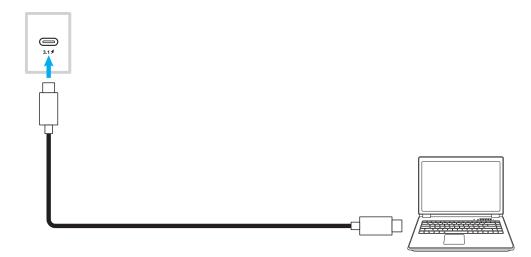


USB type-C connection

Connect your computer to the IFP using a USB type-C cable.

Note:

- USB type-C can be used to transmit audio, video and touch signals.
- The USB type-C port also supports power delivery and will output 65W.



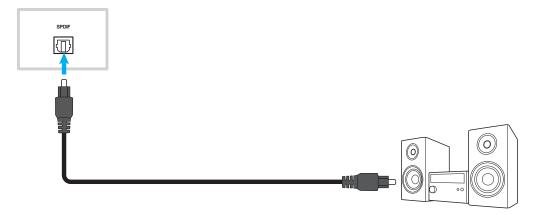
Audio output connection

Connect your external speakers to the Audio-out port on the IFP.



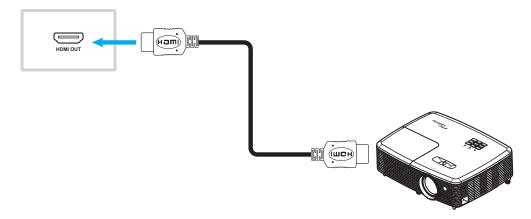
SPDIF connection

Connect your audio equipment to the IFP using a SPDIF cable.



HDMI output connection

Connect your projector to the HDMI out port on the IFP.

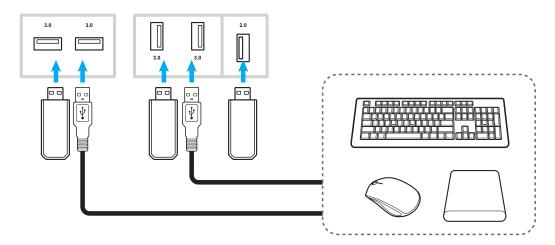


USB connection

Connect your USB peripheral device to the IFP using a USB cable.

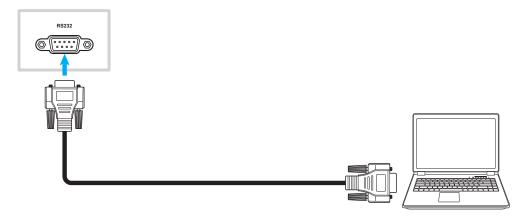
Note:

- For the USB flash drive connection, simply plug it into one of the available USB ports.
- USB 2.0 port is reserved for firmware upgrade.



RS232 connection

Connect your computer to the IFP using a RS232 cable.



LAN connection

Connect your router to the IFP using an Ethernet cable.



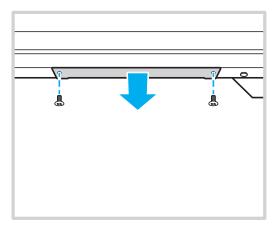
Note: To configure network settings, refer to "Configuring Network Settings" on page 41.

Wi-Fi connection

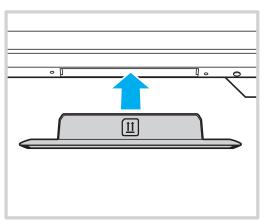
For Wi-Fi connection, you need to install a Wi-Fi dongle to the Wi-Fi slot on the bottom of the IFP. Wi-Fi dongle can receive the signal in an area where there is a Wi-Fi network.

To install the Wi-Fi dongle, complete the following steps:

- 1. Remove two (2) screws from the Wi-Fi slot bracket.
- 2. Remove the Wi-Fi slot bracket.



3. Insert the Wi-Fi dongle to the Wi-Fi slot on the IFP.



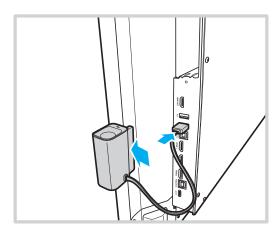
Note: To configure Wi-Fi settings, refer to "Configuring Network Settings" on page 41.

Touch pen holder connection

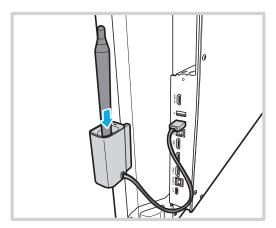
To install a holder for the touch pen, complete the following steps:

- 1. Attach the magnetic touch pen holder to the rear side of the screen.
- 1. Connect the USB cable of the touch pen holder to an available USB port on the IFP.

Note: If the touch pen holder is plugged into the USB 2.0 port then the pen holder trigger function can be used for multiple sources. If the touch pen holder is plugged into the USB3.0 port then it can be used only with Android source.



2. Insert the touch pen to its holder.



Note: If the IFP screen is on the Home screen, then removing the touch pen from its holder launches by default the **Creative Board**. To customize the pen holder trigger action, refer to the Configuring Device Settings section page 44.

USING THE DEVICE

Turning the Power On/Off

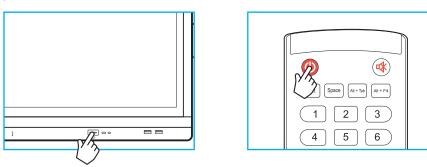
Powering on

Note: After the power cord is properly connected, make sure the Power switch is set to ON (I).



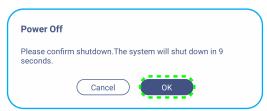
Press the Power button to turn on the IFP. The LED indicator light turns white, indicating it is ready to use.

Note: You can also press the button on the remote control to turn on the IFP.



Powering off

Press the **Power** button for 3 seconds to turn off the IFP. Press **OK** at the prompt to turn it off immediately or wait for 10 seconds until the IFP turns off automatically.



When the LED indicator light turns red, this indicates that the IFP has entered standby mode.

Note:

- You can also press the <a>O button on the remote control to turn off the IFP.
- The IFP still consumes power when it is in standby mode. It is highly recommended to unplug the power cord from the power outlet if the IFP will not be used for an extended period of time.

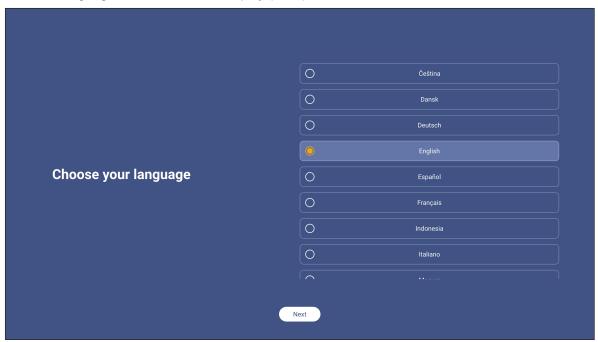
USING THE DEVICE

Setup Wizard

The Setup Wizard will appear on the screen when you turn on your IFP for the first time.

Note: This IFP is equipped with a touch-sensitive screen. You can simply tap the touch screen to operate your IFP.

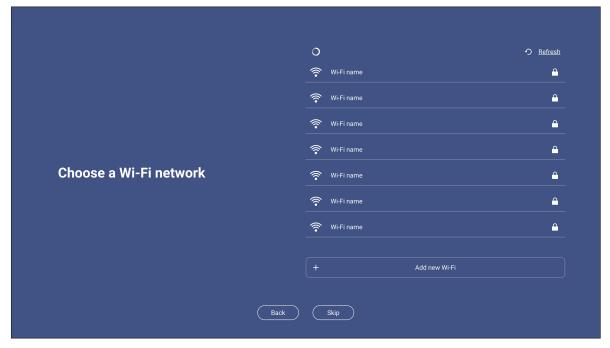
1. Select the language for the on-screen display (OSD) menu. Select **Next** to continue.



2. If you want to connect your IFP to the Internet wirelessly, select one of the available networks and tap **Connect**. Otherwise, select **Skip**.

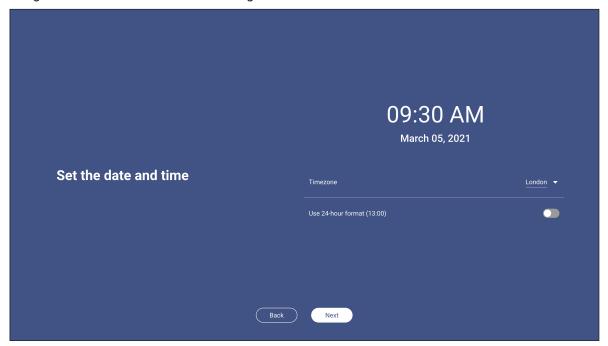
IMPORTANT!

- To connect to a wireless network, make sure the Wi-Fi dongle is properly plugged into the Wi-Fi dongle slot. Refer to page 27.
- If you are connecting to a secure network, you will need to enter the password when connecting for the first time only.

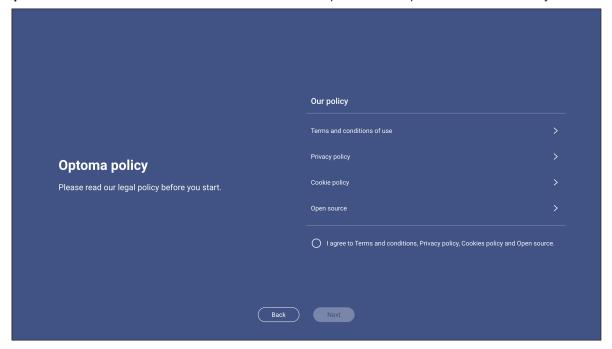


USING THE DEVICE

3. Configure the date and time related settings. Select *Next* to continue.

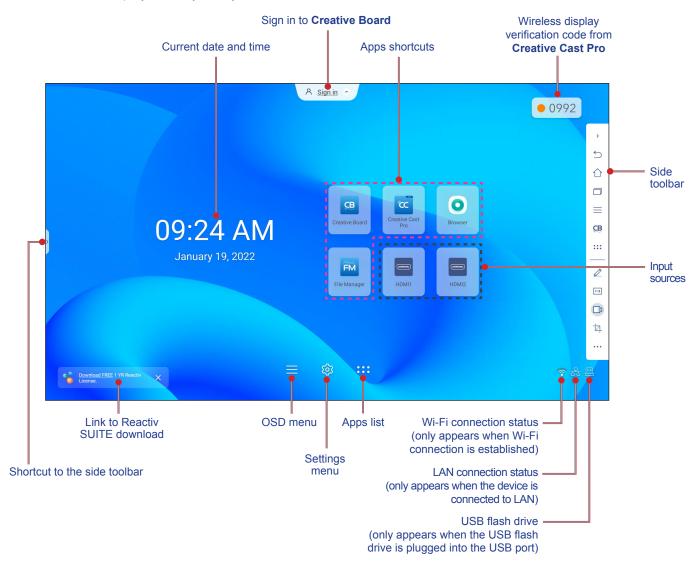


4. Read Optoma's legal policies, including Terms and conditions of use, Privacy policy, Cookie policy, and Open source. Check the I agree to Terms and conditions, Privacy policy, Cookies policy and Open source radio button and then select Next to complete the setup. The IFP is now ready to use.



Home Screen Overview

Home screen is displayed every time you start the IFP.



To navigate the Home screen, do any of the following:

- Select an option: simply tap on the desired item.
- Adjust the setting: drag the slider to the left or to the right.
- Open the side toolbar: tap or on the left or right side of the screen.

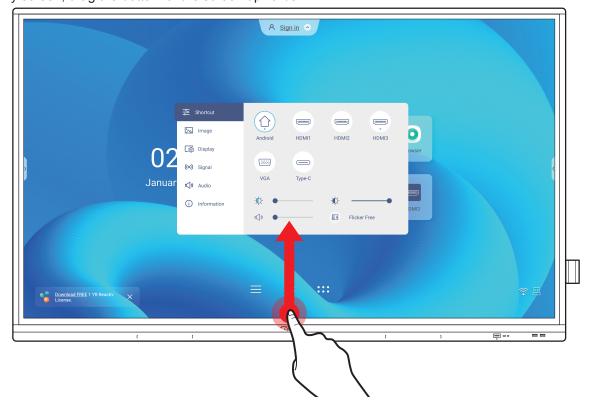
Note:

- Unless otherwise specified, this section describes IFP operations using touch gestures.
- You can also use the remote control to operate the IFP.

OSD Menu

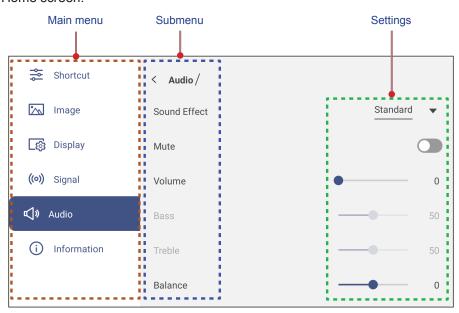
To open the OSD menu, do any of the following:

· On any screen, drag the bottom of the screen upwards.



- Press the *Menu* or *Input* button on the remote control.
- Tap

 on the Home screen.



Note:

- To configure the OSD menu settings, simply touch the menu item on the screen and use the screen controls to adjust its value or set the setting. The selected menu item is highlighted in [1].
- To move to the previous item in the menu, tap

 ✓ or press **Back** on the remote control.
- To close the OSD menu, touch anywhere on the screen outside the menu or press **Back** continuously (if necessary) on the remote control.

Shortcut Menu

Shortcut = menu is the first OSD menu. Complete the following steps:



Select the input source. Those input sources that are available are marked with the DOT • symbol.



Note:

- For more information on making connections to external devices, refer to the "Connections" section.
- The OPS option is only available if the PC module is properly installed into the OPS slot of the IFP.
- Drag the backlight slider bar to the right or to the left to adjust the backlight level.



Note: For comfortable viewing experience, you can enable Flicker Free function.

• Drag the low blue light slider bar to the right or to the left to adjust the low blue light level.

IMPORTANT! Studies have shown that just as the ultra-violet rays can cause eye damage, the shortwave-length blue light rays from displays can cause eyestrain, retina damage, and affect vision over time. Optoma Low Blue Light is an eye protection feature that can reduce the blue light.



IMPORTANT! For protecting your eyes against prolonged display use, we highly recommend you to do the following:

- Let your eyes rest for 10 minutes after 2 hours of continuous use.
- Roll your eyes upward towards your eyebrows, and then roll your eyes in a large circle every few hours.
- For every 20 minutes of display viewing, look into the distance for 20 seconds.
- When your eyes get sore, close your eyes for a minute.
- Drag the volume slider bar to the right or to the left to adjust the volume level.



Configuring the Image Settings

In the OSD menu, tap to open the Image menu, then complete the following steps:



Tap *Display Mode* and select one of the available options: Presentation, Bright, Cinema, HDR, or User.
 Note:

- Image settings can only be adjusted in HDMI, VGA, OPS, and Type-C input. It can't be adjusted and will be grayed-out in Android source.
- If the Display Mode setting is set to **User**, you can customize image settings by adjusting the brightness, contrast, and color settings based on your preferences.
- Drag the **Brightness** slider bar to the right or to the left to adjust the screen brightness level.
- Drag the Contrast slider bar to the right or to the left to adjust the screen contrast level.
- Drag the Color slider bar to the right or to the left to adjust the screen color level from black and white to fully saturated color.

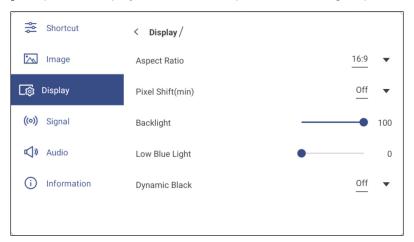
Note: Brightness level, contrast level, and color level can be adjusted only if the Display Mode is set to **User**. In other display modes these parameters are preset and cannot be adjusted.

- Tap Color Temperature and select one of the available options: Standard, Warm, or Cold.
- Tap Reset to reset all image settings to their defaults.



Configuring the Display Settings

In the OSD menu, tap to open the Display menu, then complete the following steps:



Tap Aspect Ratio and select one of the available options: 16:9, 4:3, or PTP (Pixel To Pixel).

Note: For 4K input, the aspect ratio will be locked to PTP. For non-4K input, PTP will be grayed out and user can select only 4:3 or 16:9 as aspect ratio.

Tap Pixel Shift (min) and select one of the available options: Off, 2, 3, 5, 30, or 60.

Note:

- Pixel shift feature helps to prevent image retention.
- Pixel shift is supported with all input sources except for Android.
- Drag the Backlight slider bar to adjust the backlight level.

Note: Backlight can be adjusted also in the Shortcut menu. Refer to page 34.

• Drag the Low Blue Light slider bar to adjust the blue light level.

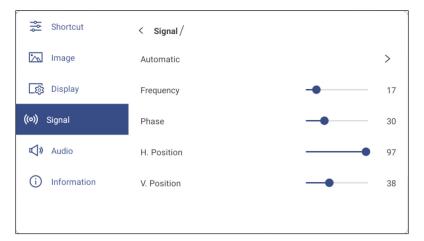
Note: Low Blue Light can be adjusted also in the Shortcut menu. Refer to page 34.

 Tap Dynamic Black and select one of the available options: Off, Based on Content (not supported in Android), or Based on Ambient light.

Note: Dynamic black feature gives more depth to your image so that bright scenes appear crisp and clear, while dark scenes remain detailed with deep blacks and exceptional light and shade detail.

Configuring the Signal Settings (for VGA input only)

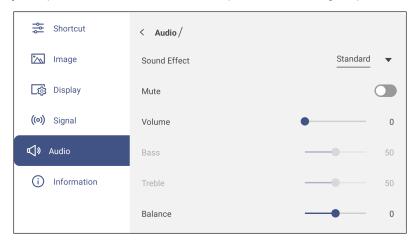
In the OSD menu, tap ((o)) to open the Signal menu, then complete the following steps:



- Tap *Automatic* to automatically adjust the image to its optimized frequency, phase, and position.
- Drag the *Frequency* slider bar to adjust the vertical noise of the image.
- Drag the **Phase** slider bar to adjust the horizontal noise of the image.
- Drag the *H. Position* slider bar to adjust the image horizontal position manually.
- Drag the *V. Position* slider bar to adjust the image vertical position manually.

Configuring Audio Settings

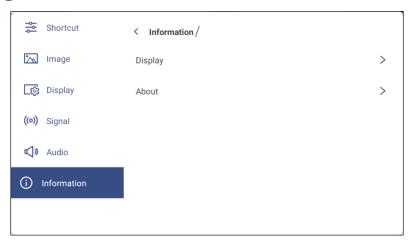
In the OSD menu, tap \(\square\) to open the Audio menu, then complete the following steps:



- Tap Sound Effect and select one of the available options: Standard, Meeting, Class, Movie, or User. Note: If the sound effect setting is set to User, you can customize audio settings by adjusting the bass and treble level according to your preference.
- Tap *Mute* to mute or unmute audio.
 - Note: You can also mute or unmute audio by pressing the of button on the remote control.
- Drag the Volume slider bar to adjust the volume level.
- Drag the *Bass* slider bar to adjust the bass level that is suitable for your room.
 - Note: Bass level and treble level can be adjusted only if the Sound Effect is set to User. In other sound effect modes this parameter is preset and cannot be adjusted.
- Drag the *Treble* slider bar to adjust the treble level that is suitable for your room.
- Drag the Balance slider bar to adjust the sound balance level that is suitable for your room.

Viewing Device Information

In the OSD menu, tap (i) to open the Information menu, then complete the following steps:

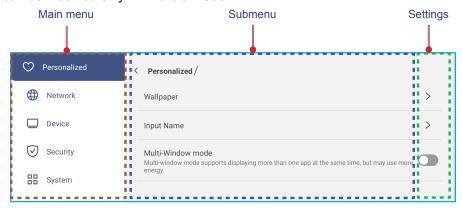


- Tap *Display* to view display mode, current input source, resolution, color depth, and color format.
- Tap *About* to view regulatory model name, serial number, firmware version, and Android version.

Android Settings Menu

To open the Settings menu, tap 👸 on the Home screen.

Note: Settings can be modified only in Android mode.

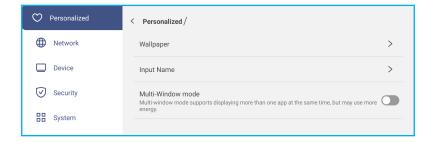


Note:

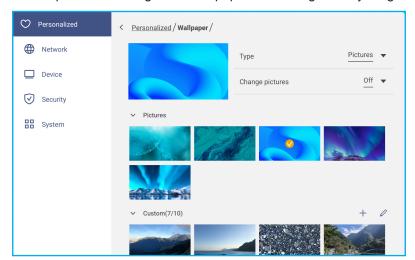
- To configure Android settings, simply touch the menu item on the screen and use the screen controls to adjust its value or set the setting. The selected menu item is highlighted in 🛍 🗀.
- To move to the previous item in the menu, tap ⟨ or press **Back** on the remote control.
- To close the OSD menu, touch anywhere on the screen outside the menu or press Back continuously (if necessary) on the remote control.

Personalizing the System

In the Settings menu, tap \(\) to open the Personalized menu, then complete the following steps:



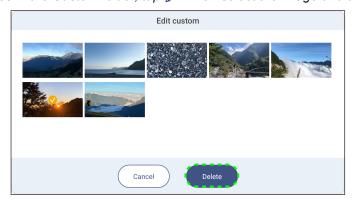
Tap Wallpaper and select a pre-loaded image as a wallpaper or an image from your gallery.



If you select a pre-loaded wallpaper from the Pictures folder, the setting will take effect immediately.

If you prefer to use a customized wallpaper, follow the steps:

- a) In the Custom folder tap +.
- b) Select your preferred image from the local or external storage and tap *Import*. You can import up to 10
- c) In the Custom folder tap on the image you wish to use as a wallpaper. The setting takes effect immediately. **Note:** To delete images in the Custom folder, tap \mathcal{Q} . Then select the image and tap **Delete**.



- Type: Select the image type.
- Change pictures: Select the slideshow interval from 5mins to 1 day. By default the slideshow is off.

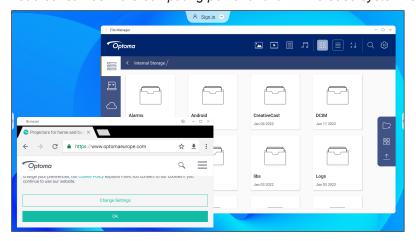
Note: You can also set a wallpaper directly from the File Manager gallery. For more information on the File Manager, refer to page 79.

Tap Input Name to rename the input. Tap on the input name you wish to change, then type a new name and confirm name modification by tapping **OK** at the prompt.



Tap Multi-Window mode to enable displaying on the screen more than one app at the same time. Tap Restart when prompted to make the setting take effect.

Note: Multi-window mode consumes more computing power and it will increase system loading.



To manage app windows in multi-window mode, long press the app window and do any of the following:

- Move the app window in any of the four directions on the screen.
- Tap 📑 to switch the app window between landscape and portrait modes (if supported).
- Tap __ to minimize the app window.

- Tap \square or drag the app window to the right or upper corner of the screen to view the app in full screen mode.
- In full screen mode, drag the upper edge of the screen down and then tap 🗇 to see the app in a window.
- Tap X to close the app.

Configuring Network Settings

In the Settings menu, tap (to open the Network menu, then complete the following steps:



Tap Wi-Fi to connect the IFP to the Wi-Fi network and view current connection status. Make sure the Wi-Fi function is enabled. In the Available network list, tap on your preferred Wi-Fi network, for example XXXX. Provide an access password if needed.

IMPORTANT! To connect to a Wi-Fi network, make sure the Wi-Fi dongle is properly installed in the Wi-Fi dongle slot. For more information, refer to page 27.



Note: If your preferred Wi-Fi network is not visible in the list, tap ◆ to refresh the list. To enter the Wi-Fi network manually, tap +.

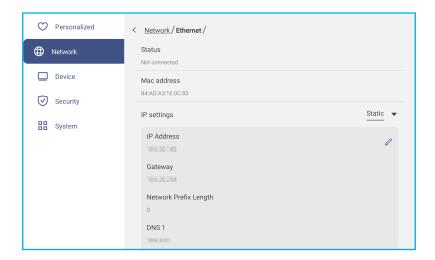
- Enable Portable hotspot feature to share the Wi-Fi network to other wireless devices. Modify the network name and set an access password if necessary.



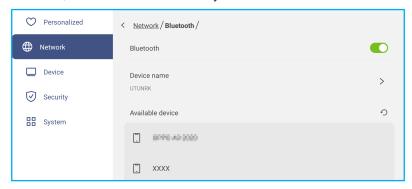
Note: For a secure connection, set the Wi-Fi encryption (Security field) as WPA2-PSK. Then enter the access password and tap **OK**.

Tap *Ethernet* to configure LAN settings and view the current connection status. In the IP settings section select the network type between static and DHCP. If you set the network type as **Static** then tap Q and enter the connection settings, such as IP address, gateway, network prefix length, and more.

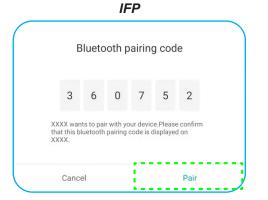
IMPORTANT! To connect to a wired network, make sure the IFP is connected to LAN. For more information, refer to page 26.

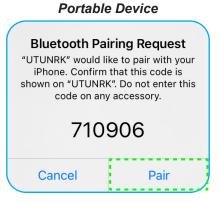


- Tap *Bluetooth* to enable Bluetooth and connect to other nearby Bluetooth devices. Tap the following:
 - Device Name to enter a new device name. To confirm the modification, tap OK at the prompt.
 - In the list of Available device, select the device where you want to connect to.



Make sure the pairing codes match on both devices and if they match, tap Pair to confirm.

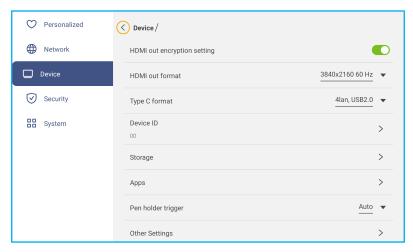




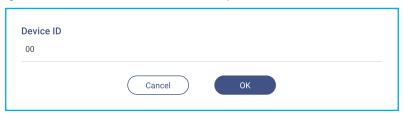
Note: If the Bluetooth device is not visible in the list of available devices, make sure the device is nearby the

Configuring Device Settings

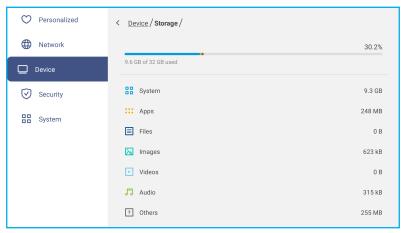
In the Settings menu, tap \square to open the Device menu, then complete the following steps:



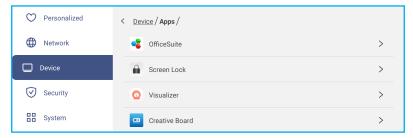
- Tap *HDMI* out encryption setting to enable or disable encrypting HDMI out signal with HDCP. Note: If the connected monitor does not support HDCP, disable HDMI out encryption function.
- Tap HDMI out format and select the format that can be output from the HDMI port.
- Tap Type C format and select the USB type-C format.
- Tap **Device ID** to assign a new ID to the IFP. To confirm, tap **OK**.



Tap **Storage** to view storage usage.



Tap *Apps* to view apps information, clear apps data and cache, and force stop apps.



Select an app in the list to force stop it (tap *Force stop*), view its storage and clear its data (tap *Clear data*) and cache (tap Clear cache), view app version and set permissions.





- Tap **Pen holder trigger** and select any of the following trigger actions:
 - Auto: When the pen is lifted, the system automatically launches whiteboard or annotation tool. (If the batch app is the launcher, open the whiteboard. If the batch app is another application or input source, open the note).
 - Whiteboard: When the pen is lifted, the system always launches whiteboard.
 - Annotation: When the pen is lifted, the system always launches the annotation tool.
 - Disabled: Lifting the pen from the holder does not launch whiteboard neither annotation tool.
- Tap *Other Settings* to configure side toolbar, floating annotation toolbar, touch sound, and email settings.

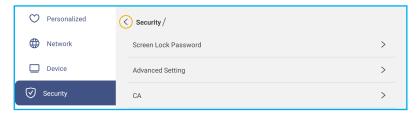


Tap any of the following:

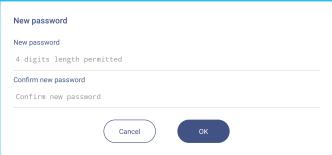
- Side toolbar settings to select one of the available locations where the side toolbar is visible: All channel, Only Android, All channels except OPS, or Disable the side toolbar.
- Floating Point to enable or disable floating annotation toolbar. For more information, refer to page 70.
- Touch Sound to enable or disable audio feedback when you tap items on the screen.
- Email to configure email settings.

Configuring Security Settings

In the Settings menu, tap \checkmark to open the Security menu, then complete the following steps:



Tap Screen Lock Password to set screen lock password. Enter a 4-digit password twice at the prompt and then tap **OK** to confirm.



Note: To remove the screen lock password, tap Clear Screen Lock Password (visible only if the password is set) and enter the current password. Then tap OK to confirm.



Tap Advanced Setting to set or modify the Advanced Setting password and enable or disable installing third party applications. Do the following:

Note: The DEBUG MENU advanced settings can be also accessed with the Advanced Setting password set in this

a) Enter the Advanced Setting password at the prompt to access the advanced settings and then tap **OK** to confirm.

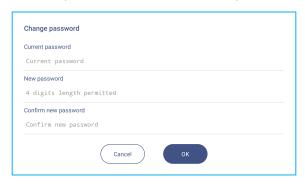
Note: The default password is 1 + 2 + 3 + 4.



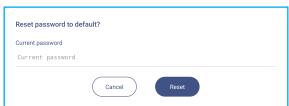
b) Select any of the following items:



- *Change password*: Enter the current password and twice the new password. Then tap *OK* to confirm.



 - Reset password to default: Enter the current password and tap Reset to confirm. The password is reset to 1 + 2 + 3 + 4.



- Under Permissions, tap *Unknown source* and enable or disable installing third party software from an unknown source.
- Under Permissions, tap *Install app from marketplace* and enable or disable installing third party software from *Optoma Marketplace*.
- Tap CA to view and modify trusted CA certificates, user stored credentials, and more.
 - Tap *Trusted credentials* to view and modify trusted CA certificates.
 - Tap *User credentials* to view and modify user stored credentials.
 - Tap *Install from storage* to install credentials from the storage.
 - Tap Clear all credentials to remove all user credentials.

Tap *Clear* at the prompt to confirm.



Enabling or Disabling USB Wi-FI/USB Disk

a) Press *Input* + 5 + 9 + 8 + 0 buttons on the remote control.

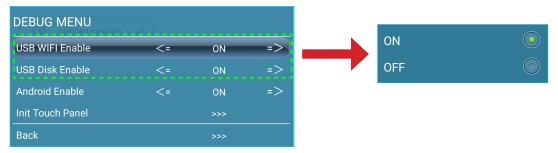
The DEBUG MENU opens.



b) Tap >>> next to the Advanced settings. Then enter the Advanced Setting password at the prompt and tap Confirm.



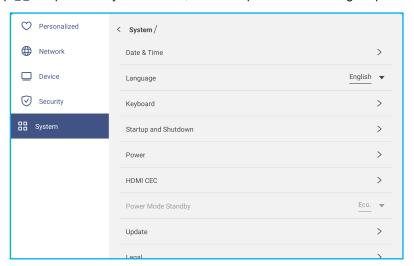
c) Tap <= or => next to USB WIFI Enable and select OFF when prompted to disable USB WIFI. Select ON to enable USB WIFI.



Tap **Confirm** at the prompt. After the system restarts, the setting takes effect.

Configuring System Settings

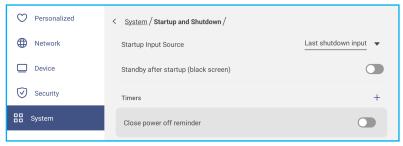
In the System menu, tap 🖫 to open the System menu, then complete the following steps:



Tap Date and Time to configure date and time related settings. Tap any of the following:

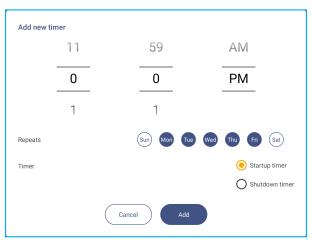


- Time Zone to select time zone in your area.
- Use 24-hour format (13:00) to enable or disable displaying time in 24-hour format.
- Tap *Language* to select one of the available language options: English, French, Spanish, Traditional Chinese, Simplified Chinese, Portuguese, German, Dutch, Polish, Russian, Czech, Danish, Swedish, Italian, Turkish, Arabic, Romanian, Hungarian, Finnish, or Norwegian.
- Tap Keyboard to view and manage keyboards.
- Tap Startup and Shutdown to configure settings related to starting and shutting down the IFP. Tap any of the following:

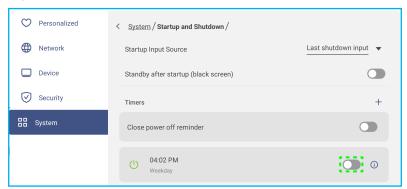


- **Startup Input Source** item to select one of the available startup input options: Last shutdown input, Android, HDMI 1, HDMI 2, HDMI 3, Type-C, or VGA.
- Standby after startup (black screen) to enable or disable standby after startup.
- **Close power off reminder** to enable or disable closing power off reminder when the IFP is scheduled to shut down.

- *Timers* > + to set a startup and shutdown timer. To create a schedule, do the following:
 - a) To enable startup timer and/or shutdown timer, check the checkbox next to Startup timer and Shutdown timer checkboxes.
 - b) Set the time and select day(s) when you want to startup or shutdown the IFP.
 - c) Tap Add to save the timer.

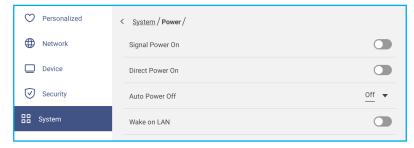


d) Enable (or disable) the new schedule in Timers menu.



Note:

- Tap (i) to modify or remove the schedule.
- You can set up to 3 schedules.
- Tap **Power** to configure power settings. Tap any of the following:



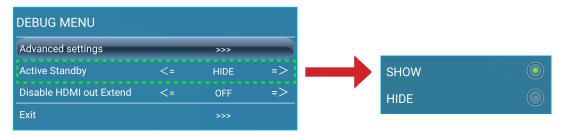
- Signal Power On to enable or disable starting up the IFP when an input signal is detected.
- Direct Power On to enable or disable starting up the IFP from the power source. Note: Direct power on feature aids installations that rely on power-on timers.
- Auto Power Off item to select one of the available time intervals in minutes to automatically power off the IFP when there is no input source found: Off (function is disabled), 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, or 60.

- Wake on LAN to enable or disable remotely starting up the IFP over LAN.
 Note: Wake on LAN can't work and will be gray out when Power Mode (Standby) is set to Active.
- Tap **HDMI CEC** to enable or disable any of the available options: Display on then player on, Display off then player off, Player on then display on, or Player off then display off.
- Tap Power Mode (Standby) item to select one of the available options: Eco or Active. By default, Active item is not visible. To enable Active option, do the following:
 - a) Press *Input* + 5 + 9 + 8 + 0 buttons on the remote control.

The DEBUG MENU opens.

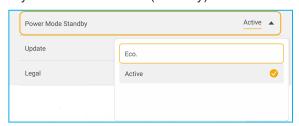


b) Tap HIDE next to Active Standby. Select SHOW at the prompt.



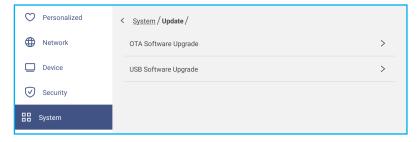
c) Tap Exit to exit the DEBUG MENU.

Active option is available in System > Power Mode (Standby) menu.



Note:

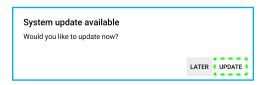
- OMS and LAN control remote power on functions will only work when Power Mode (Standby) is set to Active.
- Active Standby mode consumes higher power since system only turns off backlight and mainboard is still working to listen for power on command from LAN and OMS. If you don't have remote power on requirement, we suggest using Eco. Standby mode to save more power.
- It is also highly recommended that you switch back to **Eco.** Standby mode and turn off the IFP for a period of time. It will help IFP system to release memory and CPU loading.
- · Tap *Update* to configure upgrading options. Tap any of the following:



- OTA (Over-The-Air) Software Upgrade to enable or disable upgrading software over Internet. Tap Auto to enable the system to check for firmware upgrades automatically every time the IFP is powered on and connected to the Internet. If the Auto option is disabled, the system will not check for firmware upgrades automatically.

To update the system manually, do the following:

a) Tap *Update* at the prompt.



b) Tap **DOWNLOAD** at the System Update window.



c) Tap **UPDATE** to start the update process.

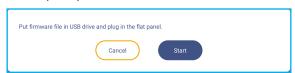


Wait until the update process is complete.

Note: Upgrading software over Internet requires network connection.

- USB Software Upgrade to update the system from a USB flash disk.

Note: To proceed with upgrading software, save the upgrade file to the USB flash disk first, then connect the disk to a USB 2.0 port on the IFP. Open Advanced Settings > System > Update > USB Software Upgrade and tap Start at the prompt.



Note: If you upgrade IFP's firmware from a USB storage, uncompress the upgrade file first and then copy the uncompressed file to the USB root directory. Make sure the USB flash disk is formatted as FAT32.

IMPORTANT!

- During the update process, either OTA or from a USB storage, DO NOT power off the IFP and DO NOT remove the USB dongle from the IFP. Doing so will damage the system.
- If you update the IFP from a USB storage then all user data saved to the USB storage will be wiped out. If you update the IFP over Internet (OTA) then all user data remains intact.

• Tap Legal to view Terms and Conditions of Use, Privacy policy, Cookie policy, and Open Source Library.



Side Toolbar

Tap) or \langle on the left or right side of the screen to open the side toolbar.

Note: Drag > or < up or down on the screen to relocate it.

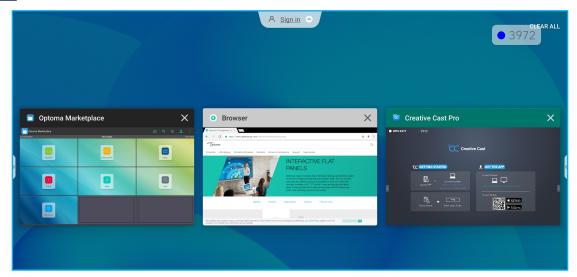


Shortcut to the side toolbar Side toolbar

- To hide the toolbar, tap > .
- To return to the previous screen, tap .
- To return to Home screen, tap
- To view recent tasks, tap . For more information, refer to "Viewing Recent Tasks" on page 54.
- To view OSD menu, tap —. For more information, refer to "OSD Menu" on page 33.
- To open the **Creative Board**, tap **B**. For more information, refer to "Creative Board App" on page 55.
- To open the apps screen, tap :::.
- To open the annotation app, tap 🙋. For more information, refer to "Annotation App" on page 62.
- To open an online classroom, tap 1+2. For more information, refer to "Airshare" on page 63.
- To open screen recording tool, tap 1. For more information, refer to "Floating Annotation Toolbar" on page 70.
- To open the crop tool, tap 1.
- To open more tools, such as Freeze, Stopwatch, Timer, Spotlight, ScreenLock, or Calculator, tap • •.

Viewing Recent Tasks

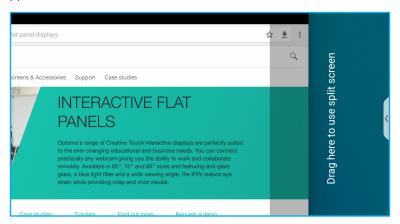
Tap >> to view and manage all opened apps.



- Tap on the app you want to launch.
- - In multi-window mode, swipe the app window to the left or to the right or tap 😢 to close the app.
- To clear the list, tap **CLEAR ALL**.
 - In multi-window mode, tap Clean All.



- To use split screen, tap and hold on the desired app and then drag it to the left or to the right of *Drag here to* use split screen column.
 - Split screen is not supported in multi-window mode.

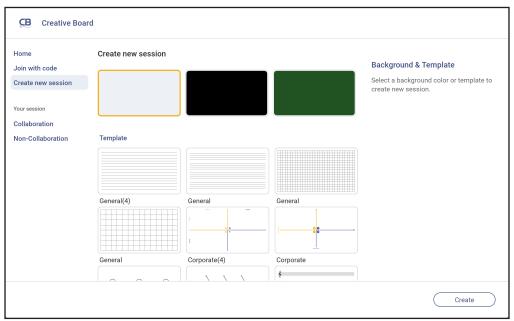


Note: You can also view recently used apps in floating annotation toolbar. Refer to ""Floating Annotation Toolbar" on page 70.

Creative Board App

Creative board is an online collaborative whiteboard platform that can bring teams together to brainstorm, sketch and collaborate, anytime, anywhere.

Tap >> CB to open the Creative Board.



To start using the app, do the following:

- Tap on the Create new session tab. Then select a background or template for your content.
 - Note: To access your cloud sessions, login to Creative Board first.
 - To open a recent session, tap on the Home tab and under Recent category tap on the session you want to continue.
 - To open a collaboration (saved to the cloud) or non-collaboration (saved locally) session, under Your session category, tap on the session you want to continue.

2. Tap *Create* and use any of the activities described in the table below:

Item		Description	
	Board relocation	Tap and drag or long-tap on the screen to move the board to your preferred location on the screen.	
	Minimize the board	Tap on the board relocator icon ← to minimize the board. Tap ✓ to expand the board.	
Ø 1	Pen	Write or draw a freeform line. Tap to select the desired line color and thickness. - Tap to modify the color palette. You can select five palette colors based on the theme or select them individually. Theme	

Item		Description	
	Eraser	Erase areas of your written texts or drawings. Select the eraser size and drag your fingers over the area you want to remove. Note: You can also use the palm of your hand to erase the item on the whiteboard.	
B	Select	Select an object on the whiteboard. Tap any of the following to alter the selected area: • (boundary point) to enlarge or diminish. • ? to change the color. • 1 to duplicate. • 1 to delete. • 2 to rotate.	

Item		Description	
8	Geometric shape	Draw a geometric shape. Tap to select the desired 2D, 3D shape with several color options, use a ruler to measure distances and draw lines, or use a protractor to measure and draw angles.	
		Top any of the following tools:	
>	More tools	 Import JPG, PNG, or PDF files from different storage devices, including internal storage, USB storage, or cloud drive. ⊕ embed a fully functional web browser. You can capture screenshots, resize, relocate, duplicate, and delete the browser window. Home - YouTube projector - Optoma UH50x Review UH50x Re	
+	Add a page.		
=	Menu	 Tap any of the following options: New to create a new session. Open to open a collaboration or non-collaboration session. Save/Save As to save/save as the current content to collaboration or non-collaboration session. Import to import a JPG, PNG, or PDF file. Export to export the session as JPG, PNG, or PDF file. to open Settings menu. Then enable or disable auto saving for non-collaboration session, eye protection writing mode, customize floating board, and update software. ? to read the Creative Board app tutorial. 	

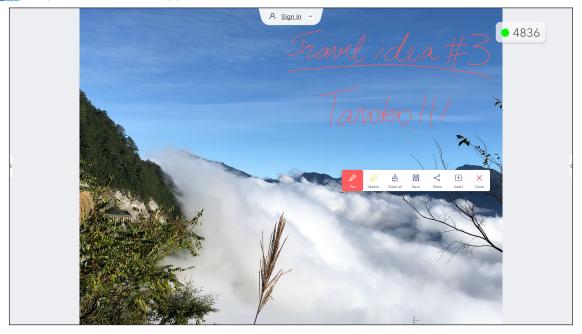
Item		Description	
		Tap any of the following to share the file to other devices:	
		QR Code to share the file with QR code.	
8		Share with QR code	
	Share	Ensure your device is connected to the same Wi-Fi network, then scan the QR code.	
		Close	
		Note: Before scanning the QR code to download the file, make sure the IFP and your mobile device are connected to the same Wi-Fi network.	
		Email to send the file by email.	
		Note: If you want to send the file by email for the first time, you are prompted to configure email settings first.	
⊕	Zoom	Zoom in or zoom out on the screen. Then tap [] to open the zooming window. Move the red box to the area that you want to show on the screen.	
		219% ×	
		Tap ★ to close the zooming window.	
		Select a background or template for your content.	
	Background options	Background	
		Color	
		Image Select	
		Template	
		General(4)	
		01 02	
	D 1 (
×	Delete a page	Delete all items/objects you draw in current page.	

Item		Description	
5	Undo	Undo your last action.	
ightharpoons	Redo	Redo your last action.	
	Page manager	View and manage all pages that are involved in the current session. Tap any of the following: 2 / 3 • to open the previous or next page. • Page number, for example 2/3 to open the page manager: 1 2 3	
		 - + on the left side to add a page to the left or on the right side to add a page to the right. - in to delete the selected page. 	
	Session name	The default session name is "Untitled session". B Untitled session CB Untitled sessio	

Item		Description	
		Sign in to Creative Board with your Creative Board account or with your Google account to create collaboration sessions.	
	Sign in	A Sign in	
		When signed in, tap ᅟ to view account settings or tap → to log out.	
		Invite attendees to join the Google Classroom through the Creative Board .	
		On the Attendees tab ⋮≡, tap + and then select any of the following options:	
		∷≣ Attendees ৩়ে +	
		28 Owner	
		(you) @gmail.com	
		∨ Invite (1)	
		user20220122RC (pending) _{Editor} ~	
		Y Session (0) mYGxUC\$ つ	
		Through the Google Classroom	
		By sending an email invitation with the session password	
		By sending a session code.	
29	Attendees management	On the Attendees tap you can assign a role to the attendee either viewer or editor, delete (> =) attendees, renew () the session code, and configure () attendee settings.	
		Tap \bowtie to access the Group tab. Then tap $+$ and enter the group information, such as group name and attendees. Tap Save .	
		Create new group	
		Group name	
		Choose attendee	
		Search	
		⊚gmail.com	
		Cancel Save	
		To modify group settings, tap ••••.	
		View the Google Classroom that is related to your sign in account. Tap 🖰 to change to	
1+2	Google Classroom	another classroom or tap to post session link to Google Classroom.	
1	management	Test Class @gmail.com	

Annotation App

Tap > \nearrow to open the annotation app.



In this mode, you can do the following:

Tap to write and draw on the screen.

Note: You can change the pen color by tapping Ø repeatedly.

Tap

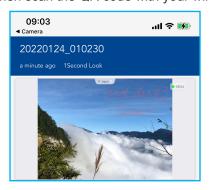
to highlight the item on the screen.

Note: You can change the highlighter color by tapping of repeatedly.

Note: You can also use the palm of your hand to erase the areas of your written texts or drawings.



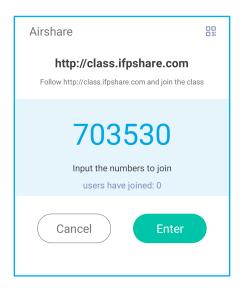
- To capture a screenshot of the entire screen, tap <a>
- To share the annotation to other wireless devices, tap ←. Make sure your wireless device is connected to the same Wi-Fi network as the IFP and then scan the QR code with your wireless device.



To exit the current mode, tap X.

Airshare

Tap > 112 to open **Airshare**. The online classroom access code and URL will be displayed on the screen.



To display the connection QR code, tap

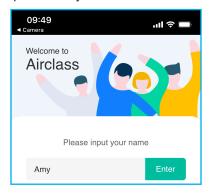


To join the virtual classroom remotely, complete the following steps:

- 1. Connect the IFP to an available network.
- 2. On your mobile device, enable Wi-Fi function.

IMPORTANT! Make sure you have access to the Internet throughout the entire online session.

3. Open the classroom URL in a web browser and enter the access code or scan the access QR code. Then enter your name and tap *Enter* to join the class.



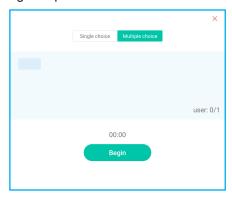
4. On the IFP, tap *Enter* to start the class session.

To participate in the class, do the following:

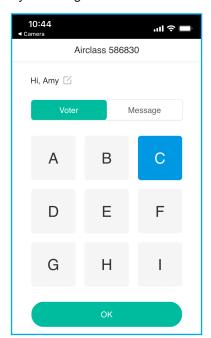
Launch the Creative Board app. Then use the following functions:

a. Voter

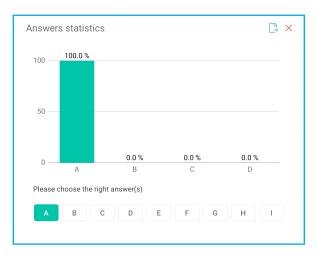
- 1. Tap $\stackrel{AB}{\circ}$ to enter the Voter interface.
- 2. Select **Single choice** or **Multiple choice** to define the answer type.
- 3. Tap *Begin* to start answering the question.



4. The participant can respond by selecting the answer on the mobile device screen and tapping **OK**.



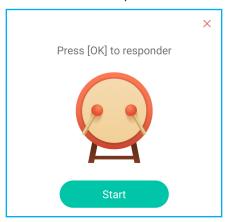
- 5. To close the answering session, tap *Finish*. The Answer statistics will be displayed on the screen.
- 6. Tap the right answer(s) on the statistics screen.



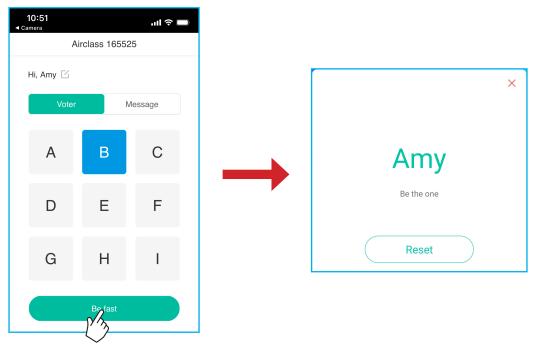
- Tap to save and export the result.
- Tap \times to close the Answer statistics page.

b. Responder

Tap $\stackrel{\wedge}{\sqsubseteq}$ to enter the Responder mode. Then tap *Start* to start the answering mode. 1.



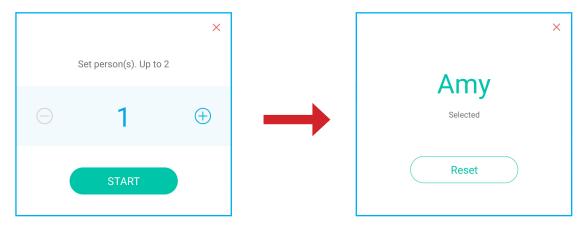
- 2. When the function is activated, the person who taps **Be fast** first will get the right to answer. For example, if Amy first taps **Be fast**, then she will get the right to answer the question.
 - Tap Reset to start the answering mode again.



c. Selector

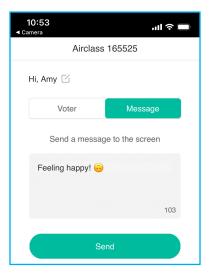
Tap ${}_{00}^{0}$ to enter the selector mode. Select the number of person(s) whom will be selected. Then tap **START**. The result is displayed on the screen.

• Tap Reset to select again.



d. Message

- Make sure the message function is enabled \bigcirc > \bigcirc . 1.
- 2. On the mobile device, tap *Message* to switch to the Message screen, then enter your message in the comment text box and tap Send.



The broadcast message will appear on the IFP screen.



Note:

- Tap 🔑 to display the class access code, URL, QR code and allow more participants to join the class.
- Tap] to export the result.
- Tap X to exit Airshare. Confirm Exit at the prompt. All classroom users will be logged off.

Screen Recorder

Tap > \to open screen recording utility. This utility helps you to record video from the IFP's screen and connected camera screen (if enabled).

Note:

- You can drag the recording utility to your preferred location on the screen.
- The screen recording utility can be used only with Android source.



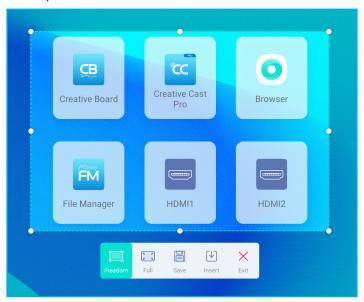
- Tap to start recording the screen. The recording starts 3 seconds after you tap •. While recording, tap III to pause recording or I to stop recording. Then tap *OK* to save the recording.
- Tap to configure recording settings: enable or disable connected camera recording, select the preferred video resolution, and select the path where you want the recordings to be saved.

Note: By default, all recordings are saved to the Storage/Record folder.

Tap X to close the recording tool.

Screen Capture Tool

Tap $\rangle > \frac{1}{2}$ to open the screen capture tool.

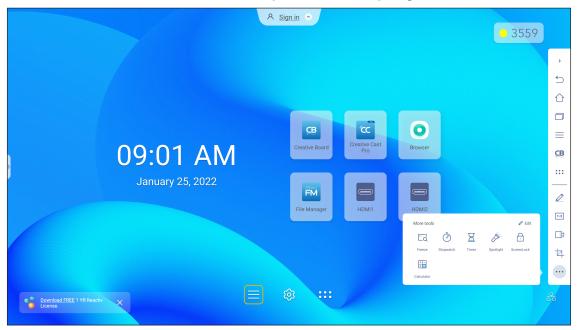


To capture the screen, do the following:

- 1. Tap either or to manually select the area or to capture the entire screen respectively.
- 2. Tap 📋 to save the screenshot or tap 🛂 to insert the screenshot directly to the whiteboard session.
- 3. Tap \times to exit the tool.

More Tools

Tap > · · · to access more tools such as Freeze, Stopwatch, Timer, Spotlight, ScreenLock, and Calculator.



- Tap *Freeze* to freeze the screen. Then tap to zoom in or tap to zoom out. To restore the screen to its original size, tap . Finally, to exit the tool, tap X.
- Tap (to use the **Stopwatch**.
- Tap \overline{X} to use the **Timer**.
- Tap to activate **Spotlight**. **Spotlight** can be used to direct the audience's focus to a specific part of the board.
- Tap \bigcap to lock the screen (**ScreenLock**). If the screen lock password is not set, you are prompted to set the password. Follow the onscreen instructions to complete the procedure.



Tap to use the **Calculator**.

To customize More tools icons in the side toolbar, tap > · · · > Edit. Then tap enext to the icon you want to remove from the side toolbar and tap 🕕 next to the icon you want to add to the side toolbar. You can add up to 4

icons to the side toolbar.



Floating Annotation Toolbar

Touch and hold the screen with your two fingertips, a centimeter apart from each other. The floating annotation toolbar opens.



- Tap (5) to return to the previous screen.
- Tap (1) to return to Home screen.
- Tap (2) to open annotation app.
- Tap (B) to open Creative Board.
- Tap (to view recent apps. Tap the app you want to switch to or tap × to close the annotation toolbar.



and drag the annotation toolbar to your preferred location on the screen.

USING THE APPS

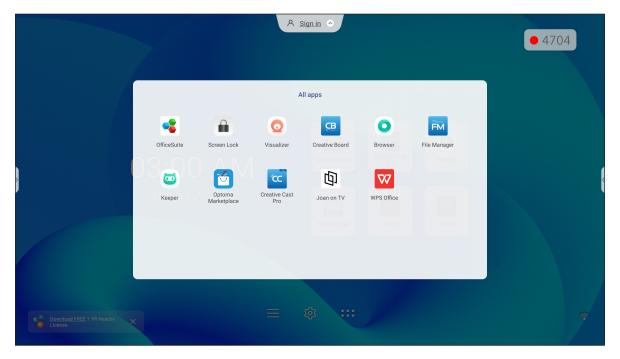
From the Home screen, tap ::: to view the Apps list.

Note: To install a third party application, you have to enable the **Unknown sources** setting first in the **Advanced Settings > Security** menu. Refer to "Configuring Security Settings" on page 45.

You can then install the downloaded APK (Android Package) file into your system.

IMPORTANT! The embedded Android 9.0 operation system is not standard Android. As such, Google Play is not available in the Apps list. The installed third party application might not work properly if it is not designed for IFP. Optoma will not guarantee that these self-installed Apps work.

Optoma interactive flat panel displays run a customized Android operating system and do not support Google Play Services. The operating system may not be compatible with all third-party Android apps. Third-party Android apps can vary in quality and some even contain malicious codes, which could compromise system security and may invalidate product warranty. Optoma makes no representations regarding the quality, security or suitability of any third-party apps and their compatibility with the Optoma interactive flat panel. Optoma shall have no responsibility or liability with respect to any damage, faults, loss in functionality or security issues arising as a direct or indirect result of the installation of third-party apps on the interactive flat panel. Optoma support in rectifying any issue which may result from the installation of third-party apps will be chargeable and may be limited. Information is correct at the time of writing and is subject to change.





Tap Creative Cast to start wireless sharing and projection via Wi-Fi or LAN.

IMPORTANT!

- The IFP and your mobile device/computer must be connected to the same Wi-Fi or LAN network.
- During the operation, make sure that you have access to the Internet.

Supported Operating Systems for Casting

Collavision Senders	Available Version
Windows	Windows 7, 8, 8.1, 10 and above
Mac Mac	Mac OS X 10.12 and above
iPhone	iOS 13 and above
Android	Android 7.0 and above
Chrome	Chromebook OS V74 and above

Proprietary Sharing

Features	Operation System
Web Sharing (Web Sender)	Chrome Browser
AirPlay Support	iOS 9 and above
ChromeCast	

Mobile Device

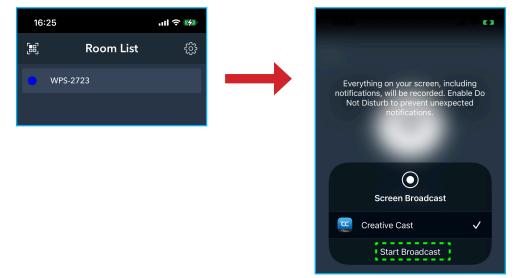
When the setup guideline screen appears, scan the QR code to download and install the Creative Cast app onto your mobile device.



To connect to the IFP, complete the following steps:

Note: The connection steps are desribed based on an iOS device.

Launch the Creative Cast capp. Select the device and then tap Start Broadcast.



2. Enter the **Creative Cast** verification code from the launcher screen to establish the connection.



3. Tap any of the following:

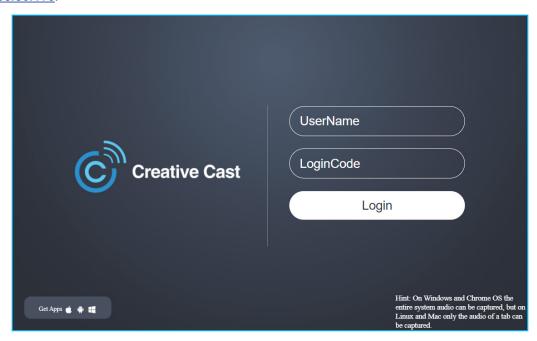


- Mirroring to mirror your mobile device's screen to the IFP.
- Remote View to mirror the IFP screen to your mobile device with annotation and image saving feature.
- **Document** to view and share documents.
- **Photo** to view and share photos.
- Camera to stream your mobile device's camera to the IFP.
- Settings to modify your mobile device's user name and view the Creative Cast version.
- Smart Control to use your mobile device as a remote control to control the IFP.
- Screen Control to mirror the IFP screen to your mobile device. You can use your mobile device to operate the IFP.
- Custom Menu to customize the Creative Cast menu in your mobile device.
- 4. To stop the screen broadcast, tap (5)



Computer

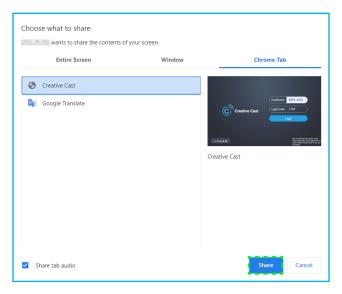
You can mirror the screen of your computer via Chrome browser or Creative Cast. To use either of these options, open the browser and enter to the URL field the IP address that is displayed on the launcher page. For example, http://192.168.50.116.



To download the Creative Cast, tap on the respective operating system icon next to Get Apps link.



 To start screen casting from Chrome browser, enter the UserName (device name on the launcher screen), LoginCode (verification code on the launcher screen) and tap *Login*. Select what you want to share and then click *Share*.



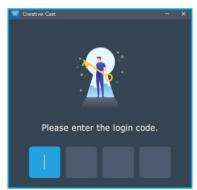
To stop sharing, click Stop sharing.

To start screen casting from desktop app, download the Creative Cast to your computer.

- 1. Launch the app and click on the device name.
 - If the IFP is not visible in the Room List, input the IFP's IP address manually to the Input IP address field. Press *Enter* to start searching for the device.



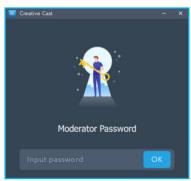
2. Enter the login code from the launcher screen.



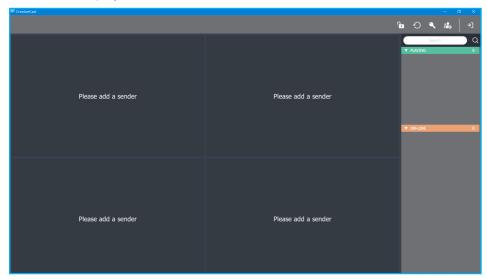
3. Click any of the following:



- Mirroring to mirror your computer's screen to the IFP.
- Remote View to mirror the IFP screen to your computer with annotation and image saving feature.
- **Moderation** to select up to 4 screens to display on the IFP. Enter the Moderator password and click *OK*. Note: To modify the Moderator password, refer to "Creative Cast Settings" on page 78.



Select the screens to display.



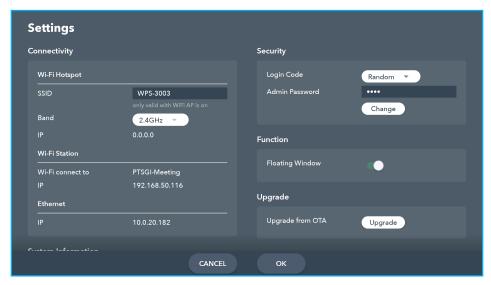
4. To stop the screen broadcast, tap *Exit*



Creative Cast Settings

Tap and then tap on any of the following icons to configure the **Creative Cast** launcher screen settings:

- Grouping to share the screen to other devices.
- Settings to manage connection settings, view Creative Cast version and ugprade software, configure login code settings, set the administrator password for the Moderator user, and enable or disable floating window feature.



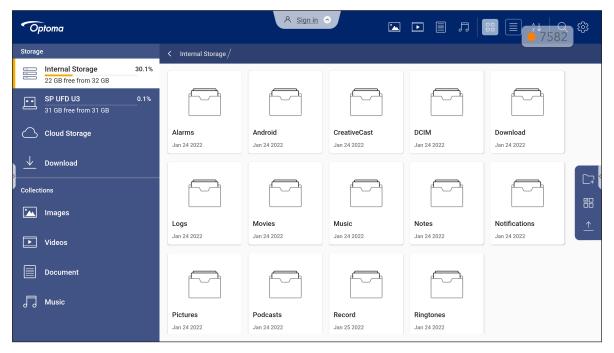
Minimize the menu bar.

File Manager 🛼



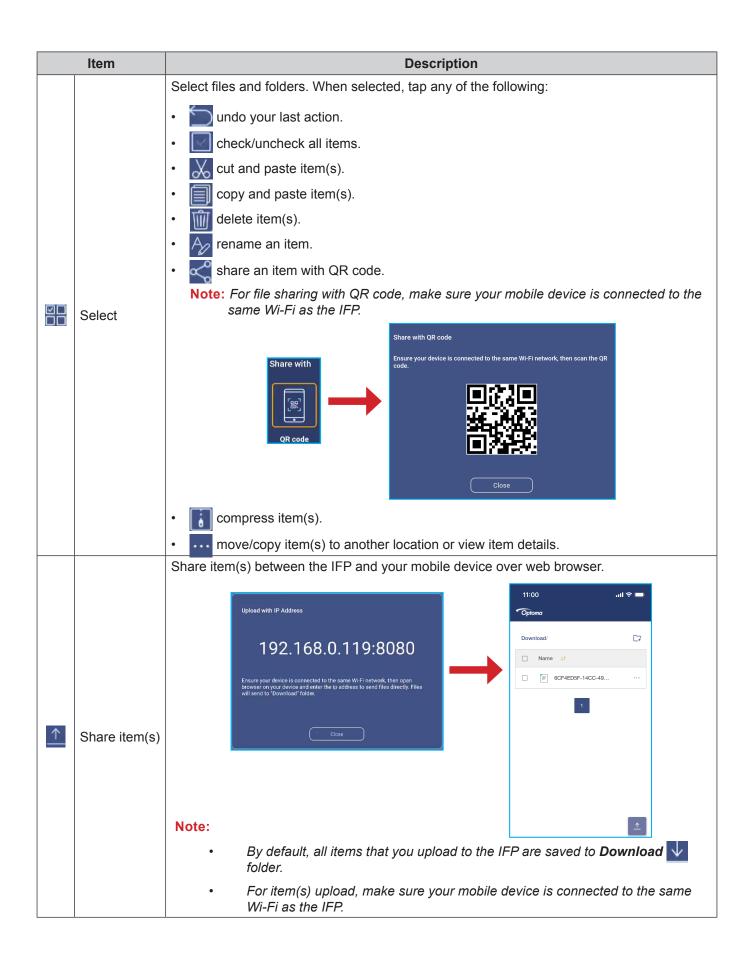
Tap File Manager to manage files and folders.

Managing Files



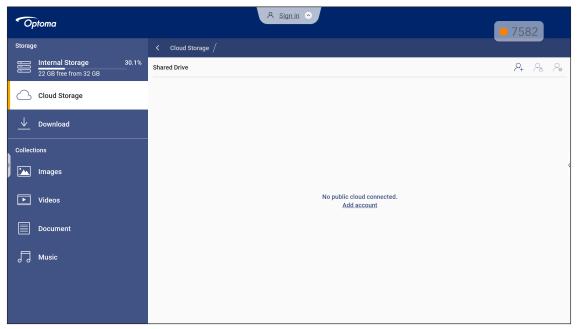
Select a storage and browse for a file or folder you want to view, then do any of the following:

	Item	Description
	Images	Display image files.
•	Videos	Display video files.
	Document	Display documents.
J	Music	Display audio files.
000	Thumbnail view	View content as thumbnails.
	List view	View content as a list.
A ↓	Sort	Sort content by name or by date in ascending or descending order.
Q	Search	Search files and folders.
ĘĞŞ	Software version	View software version and update app (if necessary).
\Box	New Folder	Add a new folder.



Cloud Storage

Tap File Manager > Cloud Storage to create an account or use an existing account to access your cloud storage.



To create an account:

- Tap \mathcal{Q}_{\perp} or **Add account**. 1.
- 2. Select the drive type.

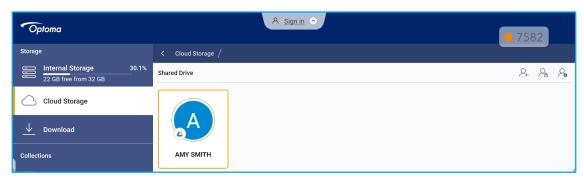


- 3. Follow on-screen instructions to create an account or sign in to your existing account.
- After successful login, you are prompted to set a security PIN. Tap **Setup** to set the PIN or **Skip** to skip 4. this step.



Note: PIN code is used to protect user's cloud storage from being illegally deposited. When system status changes (for example, from standby to normal, from backlight off to on), if someone wants to access this cloud storage, he needs to key in PIN code for verification.

Your account will be listed in the Cloud Storage menu.



- 5. To manage your cloud storage account(s) in the **File Manager**, tap any of the following:
 - Let to add another cloud storage account.
 - \nearrow to lock the cloud storage account.
 - Q to delete the cloud storage account.

Note: Locking and deleting the cloud storage account in the File Manager will only prevent access to that cloud storage in the File Manager and will not lock or delete the cloud storage in its original location, for example in Google.

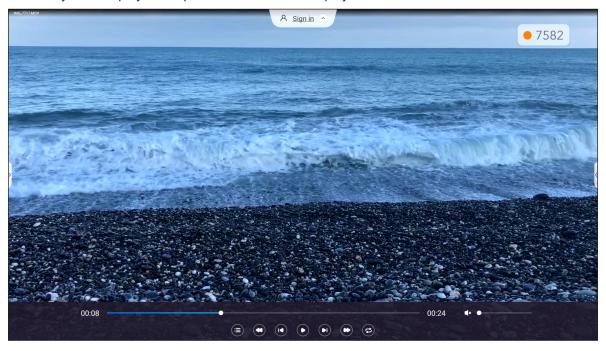
Playing Multimedia Files

Multimedia support format

Media Type	Supported Format
	Video support format (codec) up to 4K resolution:
	.avi (MPEG-1, MPEG-2 MP@HL, MPEG-4 SP@L0-3, ASP@L0-5, H.264, MP, HP@Level 4.1,H263, VP6, MJPEG)
	.ts (MPEG-2 MP@HL, MPEG-4 SP@L0-3,ASP@L0-5, H.264 MP, HP@Level 4.1, VC1 AP, H265)
Video	.mpg, .mpeg (MPEG-1, MPEG-2 MP@HL, H.264 MP, HP@Level 4.1)
	• .mp4 (MPEG-4 SP@L0-3, ASP@L0-5, H.264 MP, HP@Level 4.1, H265)
	• .mov (MPEG-4 SP@L0-3, ASP@L0-5, MJPEG, H.264 MP, HP@Level 4.1, H265)
	• .mkv (VP9, H.265)
	• 3gp (H.264 MP, HP@Level 4.1, H263, MPEG-4 SP@L0-3, ASP@L0-5)
	Audio support format (codec):
	.wma (WMA/WMAPro: 128Kbps~320Kbps, 8KHz~48KHz sampling rate)
	.mp3 (MPEG Layer 3: 32Kbps~320Kbps, 32KHz~48KHz sampling rate)
Audio	.wav (PCM: Max 320Kbps, Max 48kHz sampling rate / ADPCM: 384Kbps, 8KHz ~ 48Khz sampling rate)
	.m4a (ACC: 24kbps ~ 384kbps, 16KHz~48KHz sampling rate)
	.ogg (Vorbis: Max 320Kbps, 8KHz~48KHz sampling rate)
	Supported image format (with the maximum resolution):
	• .png (8k*8k)
Image	.jpeg (baseline 8k*8k; progressive 4k*4k)
	• .bmp (8k*8k)
	• .gif (4k*4k)

Playing videos

Select the video you want play and tap twice on it to start the playback.



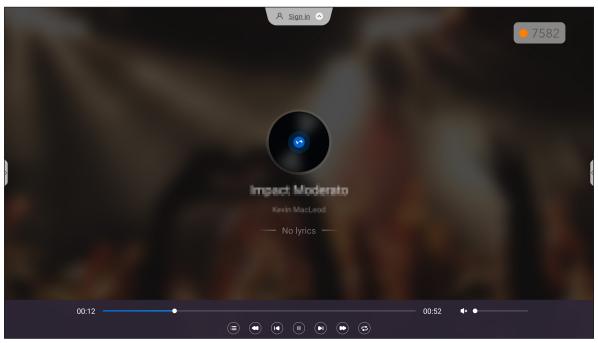
During the playback tap on the screen to open the playback control toolbar. Then tap any of the following:

	Item	Description
	List	Display video thumbnails.
	Rewind	Rewind video.
	Previous video	Skip to the previous video.
	Pause/Play toggle	Tap 11 to Pause the playback. To resume, tap .
0	Next video	Skip to the next video.
	Fast forward	Fast forward video.
© ©	Loop/Play once toggle	Tap to play all video files in a loop or tap to play the current video file in a loop. Tap to play through all videos in the list once.
	Volume control	Adjust the volume level.

Note: To stop the playback, open the side toolbar and tap \bigcirc or press the **Back** button on the remote control.

Playing music

Select the audio track you want play and tap twice on it to start the playback.



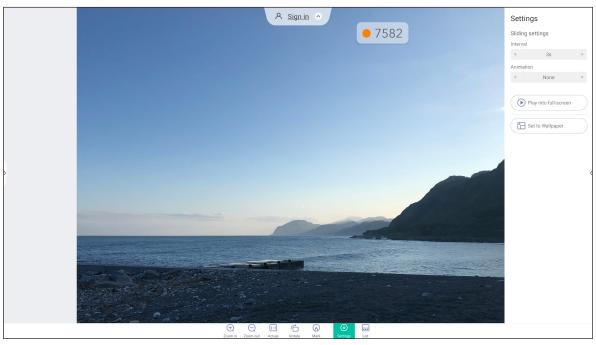
During the playback tap on the screen to open the playback control toolbar. Then tap any of the following:

	Item	Description
	List	Display track thumbnails.
	Rewind	Rewind the track.
	Previous track	Skip to the previous track.
	Pause/Play toggle	Tap 11 to Pause the playback. To resume, tap .
(1)	Next track	Skip to the next track.
	Fast forward	Fast forward the track.
	Loop/Play once toggle	Tap to play all tracks in a loop or tap to play the current track in a loop. Tap to play through all tracks in the list once.
(x)	Volume control	Adjust the volume level.

Note: To stop the playback, open the side toolbar and tap \bigcirc or press the **Back** button on the remote control.

Viewing images

Select the image you want to display and tap twice to open it on the screen.



Tap on the screen to open the image control toolbar. Then tap any of the following:

	Item	Description
		Magnify the image or zoom out on the magnified image.
+ / -	Zoom in/Zoom out	As an alternative, touch the screen with your two fingers and move them apart to zoom in or together to zoom out.
[:]	Actual	Display the image in its actual size.
	Rotate	Rotate the image clockwise.
\bigcirc	Mark	Annotate the image.
		Configure the slideshow settings and tap <i>Play into full-screen</i> to start the
	Settings	slideshow. Tap 🕝 to stop the slideshow.
		Tap Set to Wallpaper to set the image as the device wallpaper.
•••	List	Display image thumbnails.

Note: To return to the file manager, open the side toolbar and tap 🕥 or press the Back button on the remote control.

Screen Lock



Tap Screen Lock to set the 4-digit pin code. Using the pin code, you can block the IFP from unauthorized use.

To set the pin code for the first time, launch the Screen Lock app. Then tap Set password.

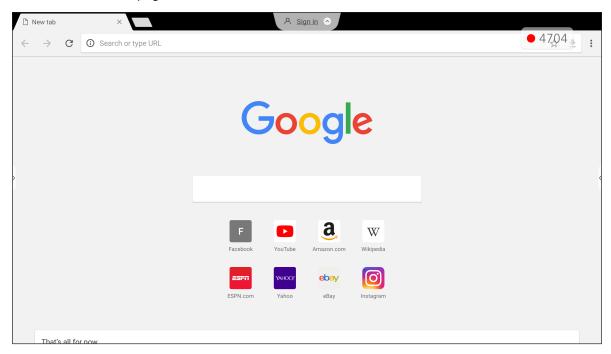


The Advanced Settings > Security menu opens. To set the password, refer to "Configuring Security Settings" on page 45.

Browser



Tap **Browser** to access web pages.



Optoma Marketplace 💆

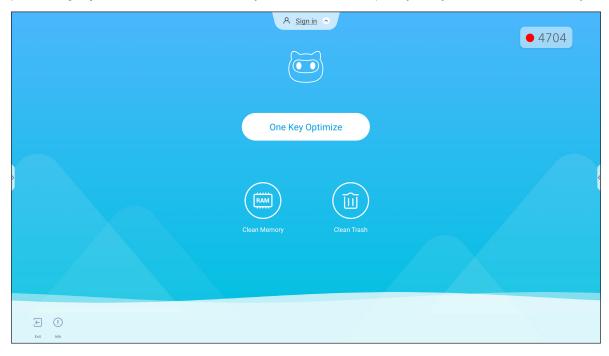
Tap Optoma Marketplace to install more apps to the IFP.



Keeper 🗂

Tap Keeper to clean and optimize the data on the IFP.

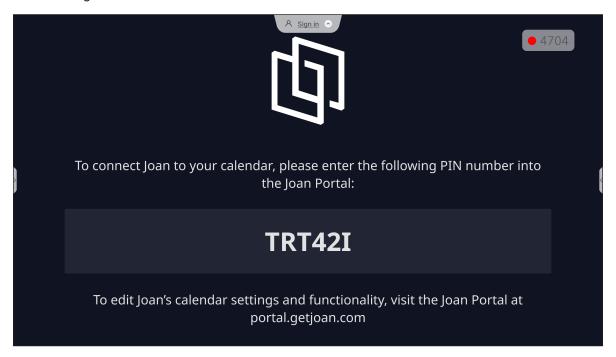
Then tap *One Key Optimize* to clean the memory and delete the temporary and junk files simultaneously.



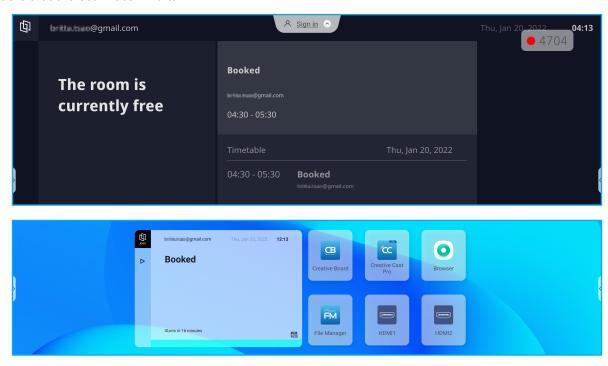
Otherwise, tap *Clean Memory* or *Clean Trash* to perform the cleaning task separately.

Joan on TV

Tap Joan on TV to get the access PIN number. Use this PIN to connect the IFP to Joan Portal.

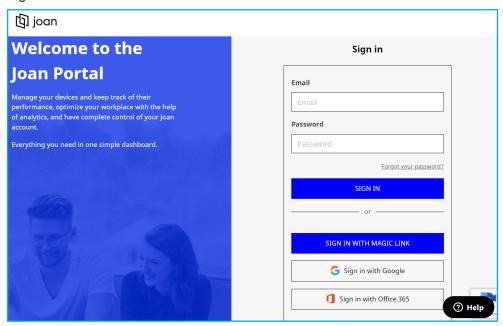


After successful connection, the IFP will display meeting room(s) schedule, meeting reminders, and meeting room reminders that are set in Joan Portal.

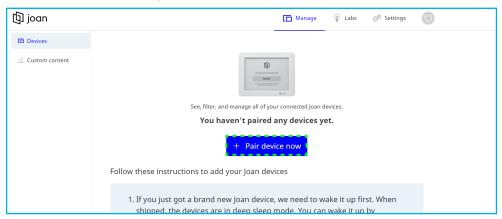


To connect the IFP to the Joan Portal, complete the following steps:

- 1. Open the web browser on your computer and enter http://portal.getjoan.com into the address bar. The Joan Portal login page opens.
- 2. Sign in to the Joan Portal.



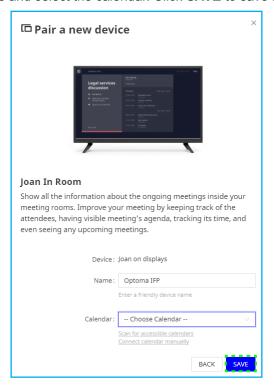
3. Click Pair device now to pair with IFP.



- 4. On Let's pair your device page, select any of the pairing methods. For example, click **PAIR DEVICE** to pair with the IFP using the PIN number.
- 5. Enter the PIN number that is displayed on the IFP at the prompt and click PAIR DEVICE.



6. Enter the device name and select the calendar. Click **SAVE** to save the information.

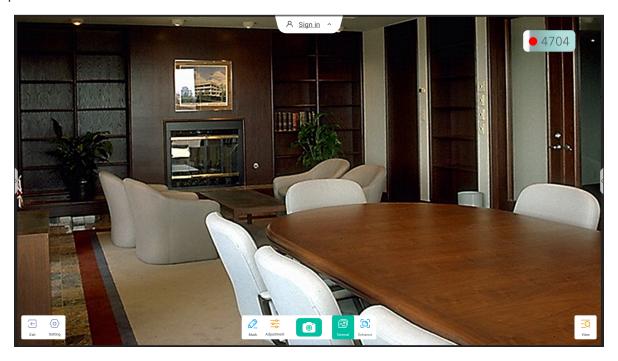


All the meetings in the selected calendar will appear on the screen of the IFP.

Visualizer



Visualizer is an operation app for a document camera. If you connect a document camera device, tap Visualizer to set it up.



To use **Visualizer**, complete the following steps:

- 1. Connect a USB document camera to an available USB port on the IFP.
- 2. Launch Visualizer app. Then do any of the following:

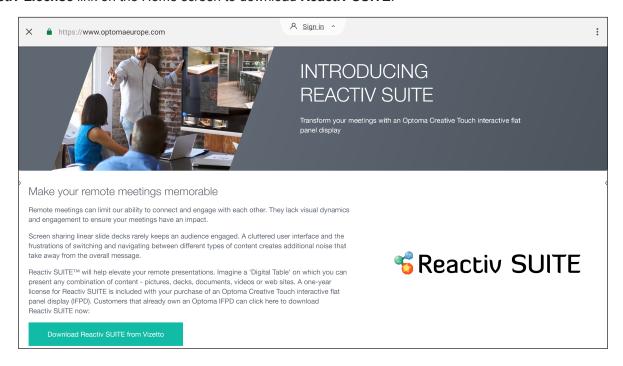
	Item	Description
	Mark	Write and draw on the screen. For more information, refer to "Annotation App" on page 62.
© ⁻	Capture screen	Capture the screen image.
	Capture screen	Note: By default, images are saved to VideoPresenter/photograph/{current date} folder.
~	Normal mode	Pinch the screen to zoom in/zoom out, rotate the video image and move it around on the screen.
	Enhance mode	Display the video image in full screen.
	Adjustment	Adjust the video image settings:
-		Exhibition settings: size, scaling, rotation, and type
		Advanced options: brightness, contrast, saturation, and sharpness.
		Note: Settings can be configured only in Normal mode.
	Viou	Display and customize simultaneously multiple video streams or video captures.
	View	Note: View feature is available only in Normal mode.
0	Setting	View connected camera(s) and select preferred resolution.
\leftarrow	Exit	Exit Visualizer.

Other Software

Reactiv Suite * Reactiv SUITE

Reactiv SUITE is a digital workspace where multimedia content can be displayed, organised, manipulated, and annotated as naturally as paper. Present multiple types of non-linear content and seamlessly capture feedback without the extra clicks and micro-frustrations of traditional screen sharing tools. Even pin your camera and elevate your presence to stand out.

A one-year license for Reactiv SUITE is included with your purchase of the IFP. Tap Download FREE 1 YR Reactiv License link on the Home screen to download Reactiv SUITE.



Optoma Management Suite (OMS)™ OMS

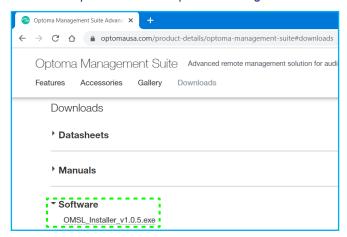
OMS is a large display management software that operates through LAN or over Internet. It simplifies the management of the IFP remotely.

OMS has the following features:

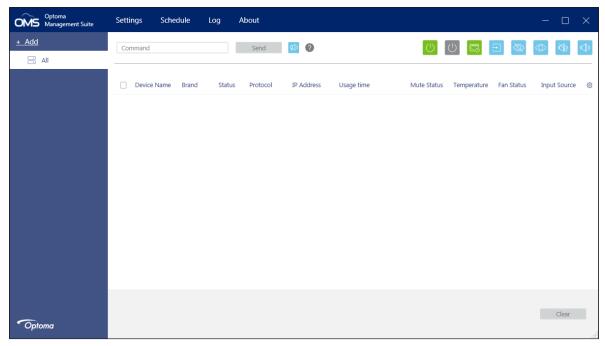
- Accessible from anywhere with Internet access at anytime (cloud soution only).
- Device monitoring, alerts, control, scheduling, broadcasting, and more.
- Over-the-air firmware updates (cloud solution only).

To start using the OMS over LAN, complete the following steps:

1. Connect the IFP and your PC to the same LAN. Open the browser and download the **OMS** app to your PC from Optoma web page: https://www.optomausa.com/product-details/optoma-management-suite#downloads



- 2. Install the **OMS** to your PC.
- 3. Double-click on The **OMS** control page opens.



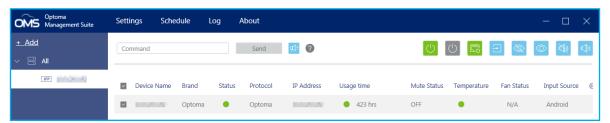
- 4. Click on Add > Device.
- 5. Select **Automatic Search** and click **Search** to search for devices automatically.

Note: If the device cannot be found automatically, then click **Manual Search** to search the device by the IP address or click **Range Search** to search the devices within the range of IP addresses.

6. Select the device and click **Add**.



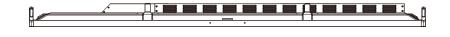
7. Select the device and then use the screen controls to display a message on the screen of the selected IFP, power on/off the IFP, enable/disable wake on LAN, select an input source, enable/disable AV mute mode, mute or unmute the IFP, monitor the device's status, usage time, mute status, temperature, and more.

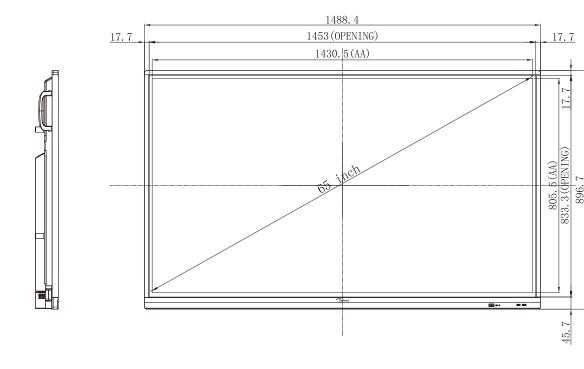


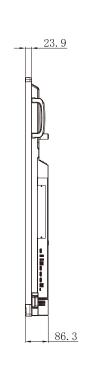
Note: For enhanced device management, you can group similar devices. To create a device group, click **Add > Group**. Then add the selected devices to the group.

Dimensions

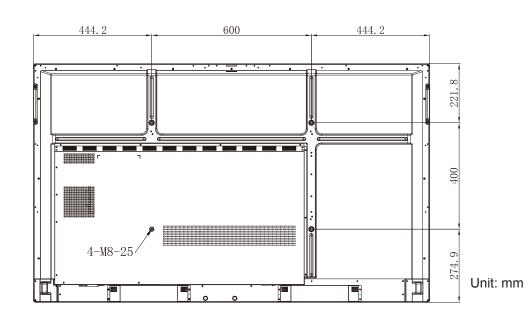
65-inch



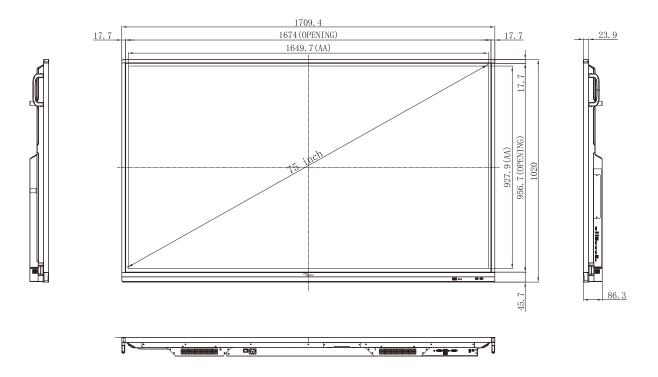


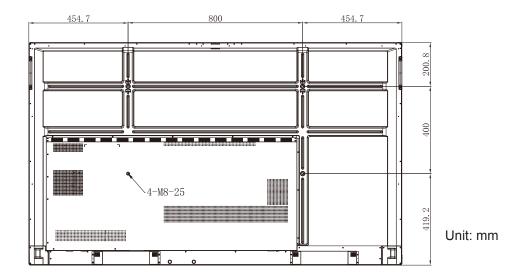




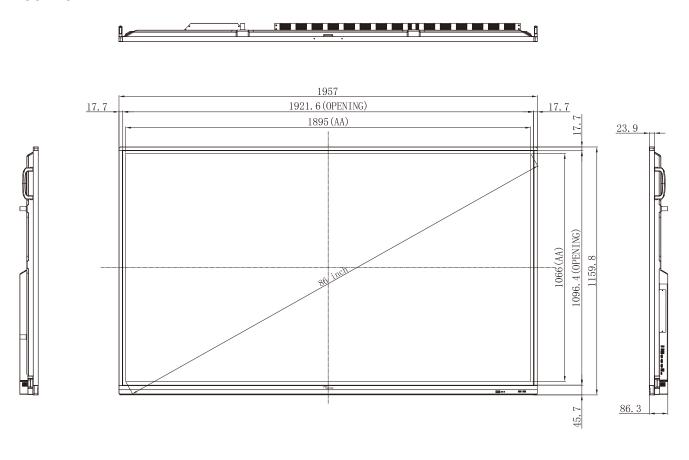




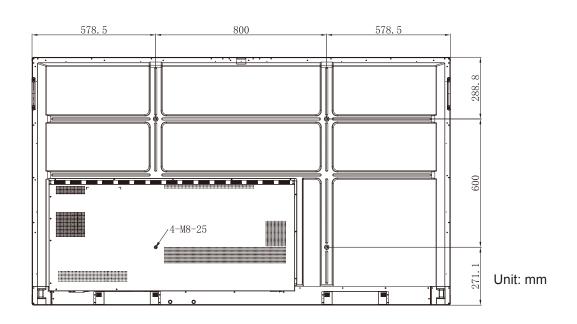




86-inch







Supported Timing List

	Input Source				
Resolution	HDMI	AV			
640x480@60Hz	•				
640x480@67Hz					
640x480@72Hz					
640x480@75Hz					
720x400@70Hz	•				
800x600@60Hz	•				
800x600@75Hz					
832x624@75Hz					
1024x768@60Hz	•				
1024x768@75Hz	•				
1152x870@75Hz					
1280x720@60Hz	•				
1280x768@60Hz	•				
1280x800@60Hz	•				
1280x960@60Hz	•				
1280x1024@60Hz	•				
1366x768@60Hz	•				
1400x1050@60Hz					
1440x900@60Hz	•				
1600x1200@60Hz	•				
1680x1050@60Hz	•				
1920x1080@50Hz	•				
1920x1080@60Hz	•				
3840x2160@30Hz	•				
3840x2160@50Hz	•				
3840x2160@60Hz	•				
NTSC-M		•			
NTSC-J		•			
PAL-BDGHI		•			
480i (60Hz)	•				
480p (60Hz)	•				
576i (50Hz)	•				
576p (50Hz)	•				
720p (50Hz)	•				

Resolution	Input Source				
Resolution	HDMI	AV			
720p (60Hz)	•				
1080i (50Hz)	•				
1080i (60Hz)	•				
1080p (24Hz)	•				
1080p (50Hz)	•				
1080p (60Hz)	•				
2160p (50Hz)	•				
2160p (60Hz)	•				

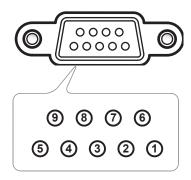
CVTE Timing V9950								
			Clock	Hf	Vf	Input Source		
No.	Signal Timing Name	Reference	[MHz]	[KHz]	[Hz]	VGA	HDMI1/2/3 (2.0)	Type C
1	720x400 @70Hz	IBM	28.32	31.78	70.00	Υ	1	Υ
2	640x480 @60Hz	VESA	25.18	37.92	59.94	Y	Y	Υ
3	640x480 @72Hz	VESA	31.50	37.86	72.81	Y	1	Υ
4	640x480 @75Hz	VESA	31.50	37.50	75.00	Y	1	Υ
5	800x600 @56Hz	VESA	36.00	35.15	56.25	Y	1	Υ
6	800x600 @60Hz	VESA	40.00	37.87	60.31	Y	Y	Υ
7	800x600 @72Hz	VESA	50.00	48.07	72.18	Y	1	Υ
8	800x600 @75Hz	VESA	49.50	46.87	75.00	Y	1	Υ
9	832x624 @75Hz	MAC	57.28	49.72	74.55	Y	1	Υ
10	1024x768 @60Hz	VESA	65.00	48.36	60.00	Y	Y	Υ
11	1024x768 @70Hz	VESA	75.00	56.47	70.06	Y	1	Υ
12	1024x768 @75Hz	VESA	78.75	60.02	75.02	Y	1	Υ
13	1152x864 @75Hz	VESA	108.00	67.50	75.00	Y	1	Υ
14	1280x768 @60Hz(RB)	CVTRB	68.25	47.39	59.99	Y	Y	Υ
15	1280x768 @60Hz	CVT	79.50	47.77	59.87	Y	Y	Υ
16	1280x720 @60Hz	CEA-861	74.25	44.67	60.00	Y	1	Υ
17	1280x800 @60Hz	CVT	83.50	49.70	59.81	Y	Y	Υ
18	1280x960 @60.000Hz	VESA	108.00	60.00	60.00	Y	Y	Υ
19	1280x1024 @60Hz	VESA	108.00	63.98	60.00	Y	Y	Υ
20	1360x768 @60Hz	VESA	85.50	47.71	60.01	Υ	Y	Υ
21	1440x900 @60Hz(RB)	CVTRB	88.75	55.46	59.90	Υ	Y	Υ
22	1440x900 @60Hz	CVT	106.50	55.93	59.88	Υ	Y	Υ
23	1600x1200 @60Hz	VESA	162.00	75.00	60.00	Υ	/	Υ
24	1680x1050 60Hz	CVT	146.25	65.29	59.95	Υ	Y	Υ

	CVTE Timing V9950							
			Clock	Hf	Vf	Input Source		
No.	Signal Timing Name	Reference	[MHz]	[KHz]	[Hz]	VGA	HDMI1/2/3 (2.0)	Type C
25	1920x1080 60Hz	CEA-861	148.50	67.50	60.00	Y	Y	Y
26	720(1440)x480i	CEA-861	27.00	15.73	59.94	/	Y	/
27	480p 59Hz	CEA-861	27.00	31.46	59.94	/	Y	/
28	480p 60Hz	CEA-861	27.02	31.50	60.00	/	Y	/
29	720(1440)x576i	CEA-861	27.00	15.62	50.00	/	Y	/
30	576p	CEA-861	27.00	31.25	50.00	/	Y	/
31	720p 60Hz	CEA-861	74.25	45.00	60.00	/	Y	/
32	720p 59Hz	CEA-861	74.17	44.95	59.94	/	Y	/
33	720p 50Hz	CEA-861	74.25	37.50	50.00	/	Y	/
34	1080i 60Hz	CEA-861	74.25	33.75	60.00	/	Y	/
35	1080i 59Hz	CEA-861	74.17	33.71	59.94	/	Y	/
36	1080i 50Hz	CEA-861	74.25	28.12	50.00	/	Y	/
37	1080p 60Hz	CEA-861	148.25	67.50	60.00	/	Y	/
38	1080p 59Hz	CEA-861	148.35	67.44	59.94	/	Y	/
39	1080p 50Hz	CEA-861	148.50	56.25	50.00	/	Y	/
40	1080p 30Hz	CEA-861	74.25	33.75	30.00	/	Y	/
41	1080p 29Hz	CEA-861	74.17	33.71	29.97	/	Y	/
42	1080p 25Hz	CEA-861	74.25	28.12	25.00	/	Y	/
43	1080p 24Hz	CEA-861	74.25	27.00	24.00	/	Y	/
44	1080p 23Hz	CEA-861	74.17	26.97	23.97	/	Y	/
45	3840x2160 60Hz	CEA-861	594.00	135.00	60.00	/	Y	Y
46	3840x2160 50Hz	CEA-861	594.00	112.50	50.00	1	Y	Y
47	3840x2160 30Hz	CEA-861	297.00	67.50	29.97	1	Y	Y
48	3840x2160 25Hz	CEA-861	297.00	56.25	25.00	1	Y	Y
49	3840x2160 24Hz	CEA-861	297.00	54.00	23.98	1	Y	Y
50	4096x2160 24Hz	CEA-861	297.00	54.00	24.00	1	Y	Y

RS232 Protocol Function List

Note: IFP supports RS232 and RJ45 (port 23) control command.

RS232 Pin Assignments



Pin No.	Spec. (from IFP side)
1	N/A
2	TXD
3	RXD
4	N/A
5	GND
6	N/A
7	N/A
8	N/A

RS232 RJ45 Control Connection

RS232 Settings					
Baud Rate	9600				
Data Bits	8				
Parity	None				
Stop Bits	1				
Flow Control	None				

LAN Control Settings						
IP	Machine IP					
Port	23					

~	X	x x x x		X	X	CR			
Lead Code	_	Device ID (where 01 indicates Device ID = 01)		mmand	ID	Space	Vari	able	Carriage return

SET Command

-	Ontonom	D		45	Harri O and a OMB	Respo	onse
Type	Category	Parameter	CI	MD	Hex Code CMD	Success	Failed
		Power off	~xx00 n	n=0	7E 30 30 30 30 20 30 0d	Р	F
	Power	Power on	~xx00 n	n=1	7E 30 30 30 30 20 31 0d	Р	F
		Restart	~xx00 n	n=3	7E 30 30 30 30 20 33 0d	Р	F
	Power Mode	Eco.	~xx114 n	n=0	7E 30 30 31 31 34 20 30 0d	Р	F
	(standby)	Active		7E 30 30 31 31 34 20 31 0d	Р	F	
-	Treble	0 ~ 100	~xx95 n	n=0-100	7E 30 30 39 35 20 30 0d to 7E 30 30 39 35 20 31 30 30 0d	Р	F
	Bass	0 ~ 100	~xx96 n	7E 30 30 39 36 20 30 0d			
	Balance	0 ~ 100	~xx99 n	n=0-100	7E 30 30 39 39 20 30 0d to 7E 30 30 39 39 20 31 30 30 0d	Р	F
	Contrast	0 ~ 100	~xx22 n	n=0-100	7E 30 30 32 32 20 30 0d to 7E 30 30 32 32 20 31 30 30 0d	Р	F
	Brightness	0 ~ 100	~xx21 n	n=0-100	7E 30 30 32 31 20 30 0d to 7E 30 30 32 31 20 31 30 30 0d	Р	F
		Standard		n=1	7E 30 30 32 35 32 20 31 0d	Р	F
		Meeting		n=4	7E 30 30 32 35 32 20 34 0d	Р	F
SET	Sound Mode	User	~xx252 n	n=2	7E 30 30 32 35 32 20 32 0d	Р	F
		Classroom		n=3	7E 30 30 32 35 32 20 33 0d	Р	F
		Movie		n=5	7E 30 30 32 35 32 20 35 0d	Р	F
	Volume	0 ~ 100	~xx81 n	n=0-100	7E 30 30 38 31 20 30 0d to 7E 30 30 38 31 20 31 30 30 0d	Р	F
	Video Mute	Off	. vv.12 n	n=0	7E 30 30 31 33 20 30 0d	Р	F
	video iviute	On	~xx13 n	n=1	7E 30 30 31 33 20 31 0d	Р	F
	Mute	Off	~xx80 n	n=0	7E 30 30 38 30 20 30 0d	Р	F
	Mule	On	~xxou	n=1	7E 30 30 38 30 20 31 0d	Р	F
		HDMI1		n=1	7E 30 30 31 32 20 31 0d	Р	F
		HDMI2		n=15	7E 30 30 31 32 20 31 35 0d	Р	F
		HDMI3		n=16	7E 30 30 31 32 20 31 36 0d	Р	F
	Input Source	USB Type C	~xx12 n	n=27	7E 30 30 31 32 20 32 37 0d	Р	F
		VGA		n=5	7E 30 30 31 32 20 35 0d	Р	F
		Solot in PC		n=25	7E 30 30 31 32 20 32 35 0d	Р	F
		Android		n=24	7E 30 30 31 32 20 32 34 0d	Р	F
		4:3		n=1	7E 30 30 36 30 20 31 0d	Р	F
	Aspect Ratio	16:9	~xx60 n	n=2	7E 30 30 36 30 20 32 0d	Р	F
		PTP		n=14	7E 30 30 36 30 20 31 34 0d	Р	F
	Language	English	~xx70 n	n=1	7E 30 30 37 30 20 31 0d	Р	F
		Français	777 0 11	n=3	7E 30 30 37 30 20 33 0d	Р	F

T	Coto	Parameter CMD		MD	Hay Carlo OND	Response		
Туре	Category	Parameter	Ci	VID	Hex Code CMD	Success	Failed	
		Español		n=5	7E 30 30 37 30 20 35 0d	Р	F	
		Traditional Chinese		n=13	7E 30 30 37 30 20 31 33 0d	Р	F	
		Simplified Chinese		n=14	7E 30 30 37 30 20 31 34 0d	Р	F	
		Português	1	n=6	7E 30 30 37 30 20 36 0d	Р	F	
		German		n=2	7E 30 30 37 30 20 32 0d	Р	F	
		Dutch	1	n=8	7E 30 30 37 30 20 38 0d	Р	F	
		Polish	1	n=7	7E 30 30 37 30 20 37 0d	Р	F	
		Russia	1	n=17	7E 30 30 37 30 20 31 37 0d	Р	F	
	Language	Czech	~xx70 n	n=19	7E 30 30 37 30 20 31 39 0d	Р	F	
		Danish		n=24	7E 30 30 37 30 20 32 34 0d	Р	F	
		Swedish		n=9	7E 30 30 37 30 20 39 0d	Р	F	
		Italian		n=4	7E 30 30 37 30 20 34 0d	Р	F	
		Turkish		n=22	7E 30 30 37 30 20 32 32 0d	Р	F	
		Arabic		n=20	7E 30 30 37 30 20 32 30 0d	Р	F	
		Romanian		n=27	7E 30 30 37 30 20 32 37 0d	Р	F	
		Hungarian	_	n=18	7E 30 30 37 30 20 31 38 0d	Р	F	
		Finnish	1	n=11	7E 30 30 37 30 20 31 31 0d	Р	F	
		Norge		n=10	7E 30 30 37 30 20 31 30 0d	Р	F	
	Picture Mode	Presentation		n=1	7E 30 30 32 30 20 31 0d	Р	F	
SET		Bright		n=2	7E 30 30 32 30 20 32 0d	Р	F	
		Cinema	~xx20 n	n=3	7E 30 30 32 30 20 33 0d	Р	F	
		User	=	n=5	7E 30 30 32 30 20 35 0d	Р	F	
		HDR	1	n=21	7E 30 30 32 30 20 32 31 0d	Р	F	
	Color	0 ~ 100	~xx45 n	n=0-100	7E 30 30 34 35 20 30 0d to 7E 30 30 34 35 20 31 30 30 0d	Р	F	
	Backlight	0 ~ 100	~xx251 n	n=0-100	7E 30 30 32 35 31 20 30 0d to 7E 30 30 32 35 31 20 31 30 30 0d	Р	F	
		Cool		n=2	7E 30 30 33 36 20 32 0d	Р	F	
	Color Temp	Standard	~xx36 n	n=1	7E 30 30 33 36 20 31 0d	Р	F	
		Warm	7	n=4	7E 30 30 33 36 20 34 0d	Р	F	
	Гтоото	Unfreeze	20204 n	n=0	7E 30 30 30 34 20 30 0d	Р	F	
	Freeze	Freeze	~xx04 n	n=1	7E 30 30 30 34 20 31 0d	Р	F	
ļ		Off		n=0	7E 30 30 32 35 30 20 30 0d	Р	F	
		2	1	n=2	7E 30 30 32 35 30 20 32 0d	Р	F	
	Pixel shift interval	3	6.50	n=3	7E 30 30 32 35 30 20 33 0d	Р	F	
	(min)	5	~xx250 n	n=5	7E 30 30 32 35 30 20 35 0d	Р	F	
		30	1	n=30	7E 30 30 32 35 30 20 33 30 0d	Р	F	
		60	1	n=60	7E 30 30 32 35 30 20 36 30 0d	Р	F	
	Reomte control command	Vol +	~xx140 n	n=17	7E 30 30 31 34 30 20 31 37 0d	Р	F	

Tyma	Cotogony	Daramatar	СМД		Hex Code CMD	Response		
Type	Category	Parameter	CI	טוו	Hex Code CIVID	Success	Failed	
		Vol -		n=18	7E 30 30 31 34 30 20 31 38 0d	Р	F	
		Remote UP		n=10	7E 30 30 31 34 30 20 31 30 0d	Р	F	
		Remote DOWN		n=14	7E 30 30 31 34 30 20 31 34 0d	Р	F	
		Remote LEFT		n=11	7E 30 30 31 34 30 20 31 31 0d	Р	F	
		Remote RIGHT		n=13	7E 30 30 31 34 30 20 31 33 0d	Р	F	
	Reomte control command	Remote OK	~xx140 n	n=12	7E 30 30 31 34 30 20 31 32 0d	Р	F	
		Remote Menu Key		n=20	7E 30 30 31 34 30 20 32 30 0d	Р	F	
SET		Remote Input source		n=47	7E 30 30 31 34 30 20 34 37 0d	Р	F	
		Remote Exit		n=74	7E 30 30 31 34 30 20 37 34 0d	Р	F	
	Display message on the OSD		~xx210	nnn	7E 30 30 32 31 30 20 nnn od	Р	F	
	Reset To Default		~xx112	n=1	7E 30 30 31 31 32 20 31 od	Р	F	
	OSD lock	OSD lock On with password	~xx239	n=1 ~nnnn	7E 30 30 32 33 39 20 31 20 a 0d	Р	F	
	OSD IOCK	OSD lock Off with password	~xx239	n=2 ~nnnn	7E 30 30 32 33 39 20 32 20 a 0d	Р	F	

GET Command

Tuna	Catamami	CMD		Hay Cada CMD	Response						
Type	e Category CMD Hex Code		Hex Code CMD	Success	Parameter	Failed					
	Power	~xx124 n	n=1	7E 30 30 31 32 34 20	Ok0	Power off	F				
	Power	~XX 124 11	N=1	31 0D	OK1	Power on	F				
	Contrast	~xx126 n	n=1	7E 30 30 31 32 36 20 31 0D	OK0-100	0-100	F				
	Brightness	~xx125 n	n=1	7E 30 30 31 32 35 20 31 0D	OK0-100	0-100	F				
	Volume	~xx120 n	n=1	7E 30 30 31 32 30 20 31 0D	OK0-100	0-100	F				
	Video Mute	~xx363 n	n=1	7E 30 30 33 36 33 20	OK0	Off	F				
	video iviute	~xx363 II	n=1	31 0D	OK1	On	F				
	Mute	~xx356 n	n=1	7E 30 30 33 35 36 20	OK0	Off	F				
				31 0D	OK1	On	F				
GET		~xx139			OK1	Standard	F				
			n=1	75 20 20 24 22 20 20	OK2	User	F				
	Sound Mode			7E 30 30 31 33 39 20 31 0D	OK3	Classroom	F				
				0100	OK4	Meeting	F				
					OK5	Movie	F				
					OK7	HDMI1	F				
					OK8	HDMI2	F				
					OK9	HDMI3	F				
	Input Source	~xx121 n	n=1	7E 30 30 31 32 31 20 31 0D	OK23	USB Type C	F				
					OK2	VGA	F				
					OK20	Android	F				
					OK21	Slot in PC	F				

Туре	Catogory	ry CMD Hex Code CMD		Resp	oonse		
Type	Category	CIVIL	CWID Hex Code CWID		Success	Parameter	Failed
GET				75 00 00 04 00 07 00	OK1	4:3	F
	Aspect Ratio	spect Ratio ~xx127 n n=1 7E 30 30 31 32 37 2 31 0D		7E 30 30 31 32 37 20	OK2	16:9	F
GET				3100	OK14	PTP	F
					OK1	Presentation	F
					OK2	Bright	F
	Dieture Mede		n=1	7E 30 30 31 32 33 20	OK3	Cinema	F
	Picture Mode	~xx123 n	n=1	31 0D	OK5	User	F
					OK10	DICOM SIM.	F
					OK21	HDR	F
				== 00 00 04 00 00 00	OK1	Cool	F
	Color Temp	~xx128 n	n=1	7E 30 30 31 32 38 20 31 0D	OK0	Standard	F
				3100	OK3	Warm	F
	\A/I A NI etetue	20/4E1 p	n=1	7E 30 30 34 35 31 20	OK0	Disconnected	F
	WLAN status	~xx451 n	n=1	31 0D	OK1	Connected	F
	WLAN Mac address	~xx555 n	n=2	7E 30 30 35 35 35 20 32 0D	Oknn:nn:nn:nn:nn	Mac Address	F
	WLAN IP address	~xx451 n	n=2	7E 30 30 34 35 31 20 32 0D	Oknnn:nnn:nnn:nnn	IP address	F
	I ANI status	~xx87 n	n=1	7E 30 30 38 37 20 31 0D	OK0	Disconnected	F
	LAN status	~XX07 11	11-1	7E 30 30 30 37 20 31 0D	OK1	Connected	F
	LAN Mac address	~xx555 n	n=1	7E 30 30 35 35 35 20 31 0D	Oknn:nn:nn:nn:nn	Mac Address	F
	LAN IP address	~xx87 n	n=3	7E 30 30 38 37 20 33 0D	Oknnn:nnn:nnn:nnn	IP address	F
	FW version	~xx122 n	n=1	7E 30 30 31 32 32 20 31 0D	Oknnnnnnnnnnnnn (ex. 20190926164814)	FW version	F
GET	Usage hour	~xx108 n	n=1	7E 30 30 31 30 38 20 31 0D	Oknnnn	Suage hours	F
GEI	Device type	~xx149 n	n=1	7E 30 30 31 34 39 20 31 0D	OK2	Device type = IFP	F
			n=1	7E 30 30 31 35 30 20 31 0D	OKabbbbbccddddee (Note*1)		F
			n=2	7E 30 30 31 35 30 20 32 0D	Oknnn	Device native resolution	F
			n=3	7E 30 30 31 35 30 20 33 0D	Oknnn (ex. OKHDMI1)	Input source	F
			n=4	7E 30 30 31 35 30 20 34 0D	Oknnn (ex. OK1920x1080)	Source resolutuion	F
	Information string	~xx150 n	n=16	7E 30 30 31 35 30 20 31	OK0	Power mode (standby) = Eco.	F
			11-10	36 0D	OK1	Power mode (standby) = Active	F
			n=17	7E 30 30 31 35 30 20 31	OK0	DHCP = Of	F
			11-17	37 0D	OK1	DHCP = On	F
			n=18	7E 30 30 31 35 30 20 31 38 0D	Oknnn (ex. OK48)	System temperature	F
			n=19	7E 30 30 31 35 30 20 31 39 0D	Oknnn (ex. OK60Hz)	Source refresh rate	F

Type	Category	CMD		Hex Code CMD	Resp	oonse	
Туре	Category	CIVIL	,	Hex Code Civid	Success	Parameter	Failed
GET	Requiatory Model name	~xx151 n	n=3	7E 30 30 31 35 31 20 33 0d	Oknnn (ex. SLUGRK)	Regulator model name (will provide when kick off)	F
	Standby Mode				INFO0		
System	Warming up				INFO1		
Auto	Cooling down				INFO2		
send	Over temperature				INFO7		
CET	OSD lock	OCD look	n=1	7E 30 30 32 32 39 20	OK0	OSD lock = Off	F
GET	O3D lock	~xx229 n		31 0D	OK1	OSD lock = On	F

Note: (*1)

	Power	Running Time		Input Source	Firmware Version		Display Mode
•	a=0 Power Off	Usage hours = nnnnn	•	cc=02 VGA1	####	•	ee=01 Presentation
•	a=1 Power On		•	cc=08 HDMI2		•	ee=02 Bright
			•	cc=10 Compnent		•	ee=05 User
			•	cc=14 HDMI3		•	ee=21 HDR
			•	cc=15 DisplayPort		•	ee=03 Cinema
			•	cc=18 Android		•	ee=10 DICOM SIM.
			•	cc=19 Slot in PC			
			•	cc=21 USB Type C			

LED Indicator

Power LED Color & Behavior	Status
Solid Red	Standby mode
Solid White	Power on
Flash Red then Blue continuously	Backlight off

Troubleshooting

If you experience a problem with your device, please refer to the following information. If a problem persists, please contact your local reseller or service center.

- No picture or sound.
 - Make sure all signal and power connections are properly connected.
 - Make sure the correct input mode is selected. Refer to the "Shortcut Menu" section.
 - Make sure the IFP is not turned off.
 - Turn off the mute function.
 - Make sure the volume is not set to the minimum level.
- The IFP automatically shuts down.
 - Check whether there is a sudden power outage.
 - Make sure the power cord is not disconnected.
- The signal is out of range
 - The signal may be incompatible. Refer to the "Supported Timing List" section.
 - For the VGA input source, try the automatic screen adjustment or adjust the Frequency and Phase settings in OSD > Signal menu.
- The touch panel does not respond
 - Make sure the screen is not exposed to direct sunlight or other strong light.
 - For the external device connection, make sure the USB cable is properly connected to the Touch USB port of the IFP.
- If the remote control does not work
 - Check that the operating angle of the remote control is pointed within ±30° to the IR receiver on the IFP.
 - Make sure there are no obstructions between the remote control and the IFP. The distance between the remote control and the IR sensor window should not be longer than 8 meters.
 - Make sure batteries are inserted correctly and replace the batteries if they are depleted. Refer to the "Installing/Replacing the Remote Control Batteries" section.

Maintenance

Proper routine maintenance can help with early fault detection and keep the IFP looking like new.

IMPORTANT! Before cleaning and performing any maintenance task, make sure to unplug the power cord from the power outlet to prevent electric shock.

Cleaning the Screen

- · When the screen requires cleaning, please unplug the power cord first.
- Please use a soft, dust-free, dry cloth to wipe the screen.
- · Do not use water or a spray cleaner to clean the IFP.
- · Please contact the service center for internal cleaning of the IFP.

Clean the Front Frame

Use a dry, soft, lint-free cloth to wipe the front frame.

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