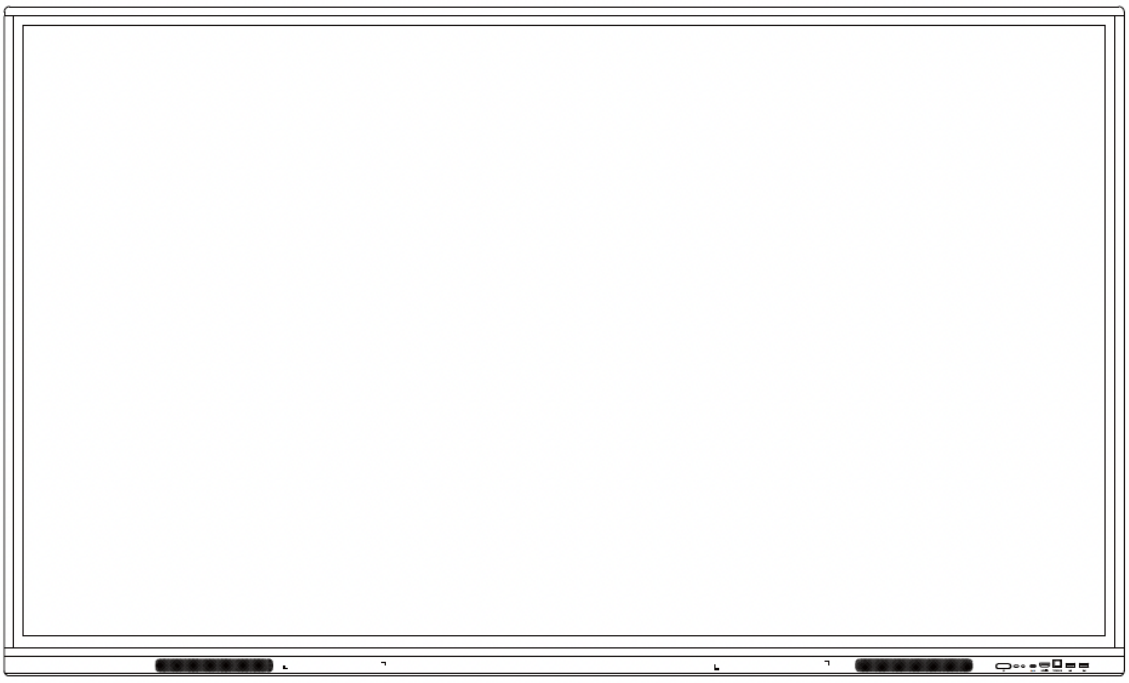

avocor

S10 SERIES USER MANUAL

For Models AVS-6510, AVS-7510, and AVS-8610

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SAFETY WARNING

Before operating, please read this manual thoroughly and keep it for future reference. Images shown in this manual are indicative only. There may be differences between the pictures and the actual product.

PLACEMENT

DO NOT put heavy objects on top of the unit.

DO NOT put the unit near appliances that generate magnetic fields.

DO NOT expose the unit to direct sunlight and other sources of heat.

DO NOT place the unit on an unstable cart, stand, tripod, bracket, table, or shelf.

DO NOT put any liquid near or on the unit; make sure not to spill any liquid inside the unit.

POWER SUPPLY

Please keep the power cable from physical or mechanical damage.

Please check and ensure the AC source is connected to the ground.

The power cable with this device is made exclusively for this device only.

Please unplug the power supply if there is a thunder or lightning storm.

Check that the unit's operating voltage is identical to your local power supply.

Please use the original power cable from the accessory bag; don't modify or lengthen it.

Please unplug the power supply when nobody is home, or the unit will be idle for a long time.

This product is a CLASS I device. Please use the power cable delivered with the device.

Before powering on the system, ensure that the power supply system is properly grounded. If the product is not grounded, there may be risk of leakage, abnormal function, or performance degradation.

LED SCREEN

Unplug the power cable before cleaning.

Clean the screen with a soft, dustless, and dry cloth.

For deep cleaning, please contact an authorized service center.

Never use water or spray-type detergent to clean the unit.

Never use sharp objects to replace the touch pen.

Do not display high-brightness images for too long to preserve the panel's lifetime and performance.

TEMPERATURE

Normal operating temperature is 0 ~ 40℃.

DO NOT place the unit near or over a radiator or a heater.

If your unit is suddenly moved from a cold to a warm place, please unplug the power cable and do not turn it on for at least 2 hours. This ensures the moisture inside the unit is evaporated.

HUMIDITY

Do not expose the unit to rain or place it in a humid area.

Please make sure your indoor environment is dry and cool. Normal operating humidity is 10%~90%RH.

VENTILATION

Please place the unit in a well-ventilated area, so heat from the device can be released quickly.

Ensure that the unit has enough space for ventilation. Space requirement: left, right, and back >10cm, top> 20cm.

EARPHONE

Before using an earphone, please turn down the volume in advance.

Using an earphone to listen to loud sounds for a long time might affect hearing.

STANDBY

It will enter standby mode if you do not turn off the unit after pressing the standby key.

BATTERY

Please ensure you properly dispose of or recycle the battery after using it.

Please keep the battery away from kids, and don't throw the battery into a fire.

If you replace the battery incorrectly, there is a risk of fire or explosion.

NOTES FOR CLEANING

There are vents on the back cover; please do not use liquid or spray directly on the screen during cleaning.

POWER SWITCH STATUS SIGNS

“I” means power on, “O” means power off.

NOTES FOR MAINTENANCE

This machine can only be maintained by a certified engineer.

GRAPHIC CONVENTIONS

The following symbols may appear throughout this manual to emphasize key points. Keep these in mind to avoid problems with your display or personal injury.

TIP — Highlights helpful guidelines and best practices for using certain features.

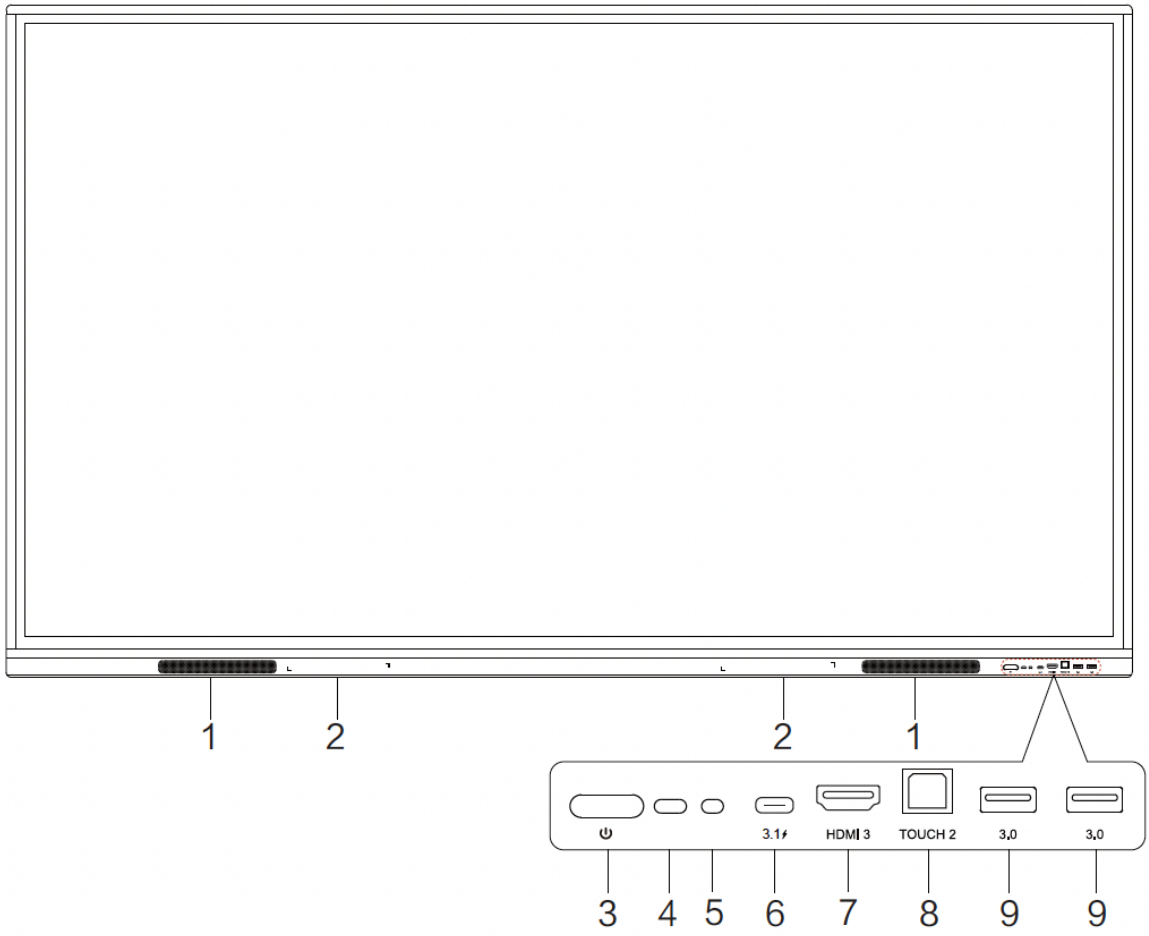
NOTE — Provides supplemental information and emphasizes text of special significance.

CAUTION — Alerts that certain actions may degrade the display's performance or cause a malfunction.

WARNING — Alerts that a given action may damage equipment or cause personal injury.

DANGER — Alerts that a given action may cause a serious personal injury or death.

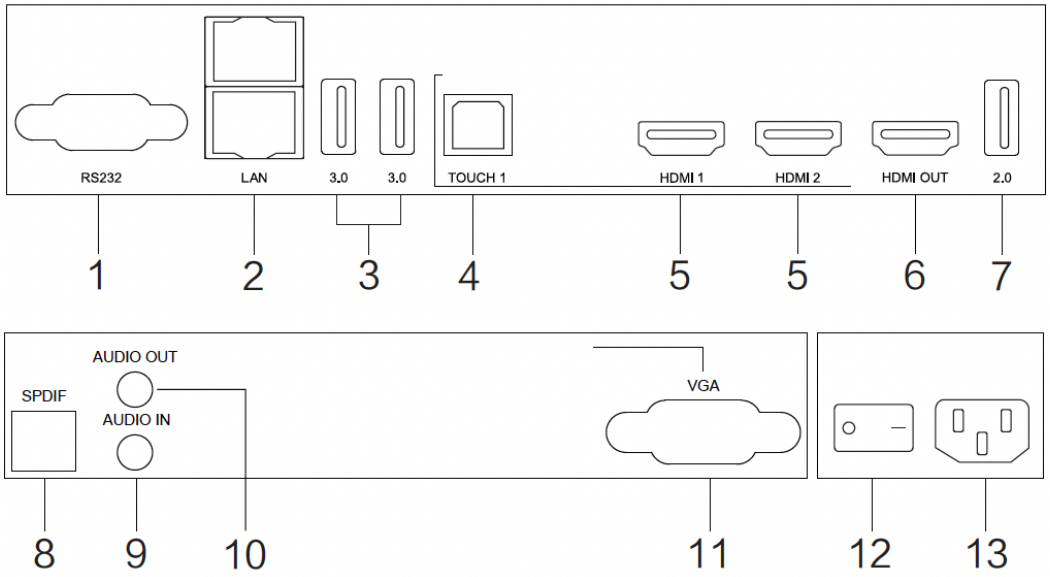
PREPARE TO INSTALL



#	Items	Function description
1	Loudspeaker	Amplify audio.
2	Magnetic zone	Area for placing the absorptive magnetic pen.
3	⏻	Tap to enter energy-saving mode and press for at least 2 seconds to enter standby mode.
4	Remote control signal receiver	Receive the remote-control signal.
5	Light Sensor	Identify the brightness of ambient light.

6	3.1	Support charging, data transmission, extension for audio and video output interface, etc Note: The maximum rated power of the USB Type-C port of this product is 65W. When using this port to charge electronic devices, the charging power of the electronic device cannot exceed the rated power of this port. If the charging power of the electronic device exceeds the rated charging power of this port, please Do not directly use this port for charging.
7	HDMI 3	High-definition multimedia interface signal input, connect to devices with HDMI output interface (personal computer with HDMI output, set-top box, or another video device).
8	TOUCH 2	Touch signal output to the external computer.
9	3.0	Connect USB devices such as mobile hard disk, U disk, USB keyboard and mouse, USB drives, etc.

TERMINAL INTERFACE



#	Items	Function description
1	RS232	Serial interface, used for mutual transfer of data between devices.
2	LAN	Connect RJ45 terminals.
3	3.0	Connect USB devices such as mobile hard disk, U disk, USB keyboard and mouse, USB drives, etc.

4	TOUCH 1	Touch signal output to the external computer.
5	HDMI 1/2	High-definition multimedia interface signal input, connect to devices with HDMI output interface (personal computer with HDMI output, set-top box or another video device).
6	HDMI OUT	Connect to the devices with HDMI input function.
7	2.0	Connect USB devices such as mobile hard disk, U disk, USB keyboard and mouse, USB drives, etc.
8	SPDIF	Carries multichannel sound via optical signals.
9	AUDIO IN	External computer audio input.
10	AUDIO OUT	Audio output to the external speaker.
11	VGA	External computer image input.
12	AC SWITCH	To open or shut down the AC power supply. “I” means power on, “O” means power off
13	AC IN	AC power input, connecting AC power supply

Note: [*] Indicates partial terminals are optional

REMOTE CONTROL

Button	Description
	Power Turns the display screen on and off
	Home Switch to *Favorite Source* input (*Home* by default).
	Source Selects a media source
	Navigation arrows Navigates through submenus and settings
	OK Confirms the selection
	Exit Exits the OSD menu
	Volume down Turns down the volume
	Volume up Turns up the volume
	Menu Opens the OSD menu

REMOTE CONTROL BATTERIES

To install batteries in the remote control:

1. Press down the tab on the cover plate and pull the cover plate up.
2. Insert the included batteries. Ensure that the polarities match the (+) and (-) markings inside the battery compartment.
3. Insert the lower tab of the cover into the opening and press down the cover until it clicks in place.

Notes on Batteries

- Please only use approved AAA-type batteries.
- Do not mix an old battery with a new one or different types of batteries.
- If you do not use the remote control for a long time, remove the batteries to avoid damage from battery leakage.
- Do not expose batteries to excessive heat, such as from sunshine or fire.
- Don't recharge, heat, disassemble, short, or throw batteries into a fire.

Notes on Remote Control Operation

- Ensure that nothing obstructs the infrared beam between the remote control and the IR receiver on the display.
- If the effective range of the remote control decreases or stops working, replace the batteries with new ones.
- The remote control may fail to operate if the infrared remote sensor is exposed to bright sunlight or fluorescent lighting.
- Ambient conditions may impede the operation of the remote control. If this happens, point the remote control at the display and repeat the operation.

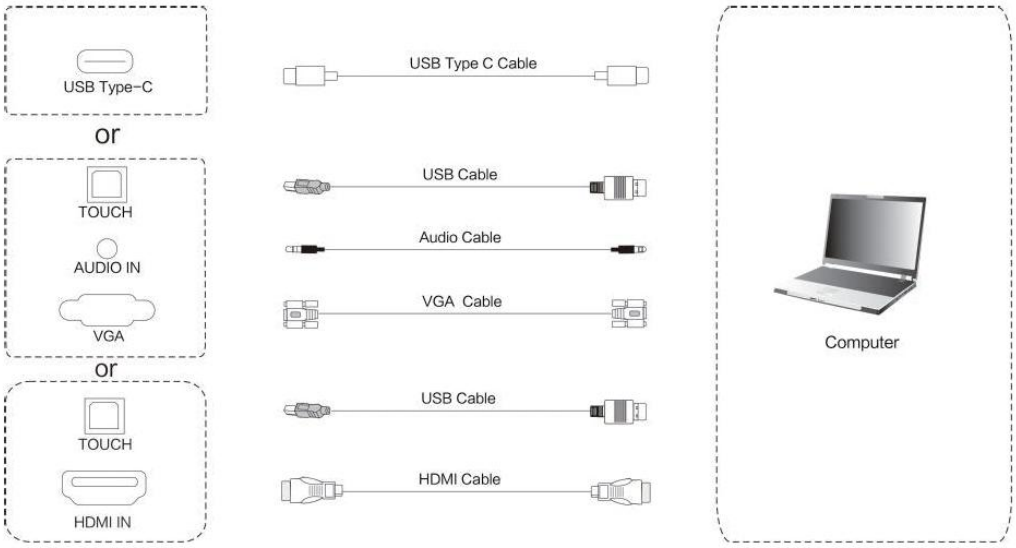
Remote Control Sensor

- The effective area of the remote control includes the vertical distance within five meters in front of the display and the area within an angle of 30 degrees from the vertical point to the left and the right.

CONNECTION AND SETTING

⚠ Please do not connect any power plug before connecting for your safety and the machine's safety.

EXTERNAL COMPUTER AND TOUCH CONNECTION



1. Use a USB Type-C cable to connect to a computer (Or use a VGA cable to connect to the VGA output port of an external computer. Use headphones to connect to an external computer audio output interface and use a USB cable to connect to an external computer USB port. You can also use an HDMI cable to connect to an HDMI output port of an external computer and use a USB cable to connect to an external computer USB port).
2. After the cable is connected, plug in the power cord and switch the power on.
3. Start up your external computer.
4. Press ⏻ the key and make sure the equipment is powered on.
5. Switch the input source to the USB Type-C/HDMI /Display Port channel in the main menu.

NOTE: For the external computer input, the equipment's best resolution is 3840*2160.

RECOMMENDED COMPUTER CONFIGURATION:

1GB Available Hard Drive

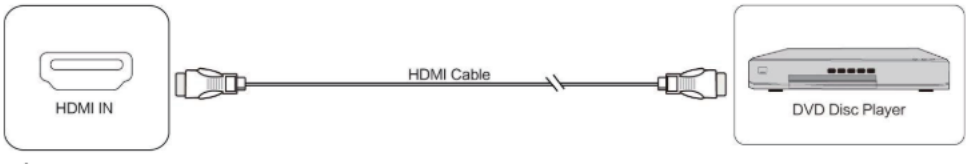
2.0GHz Processor, 1GB Memory

More than 256 color display cards

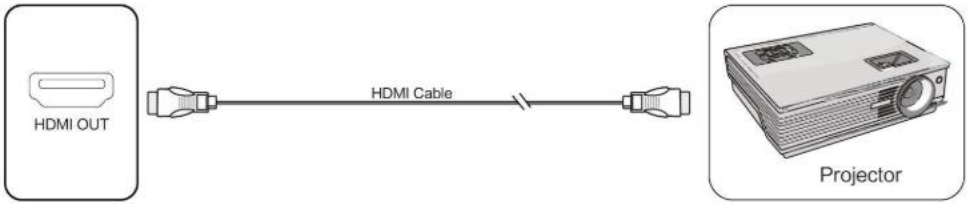
USB Type-C / VGA OUT / HDMI OUT, Audio-OUT, USB Interface

Support Resolution ：800×600, 1024×768

AUDIO AND VIDEO EQUIPMENT

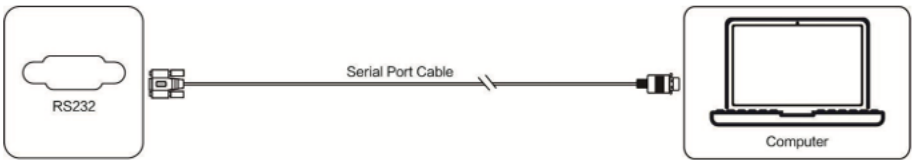


1. Use an HDMI cable to connect the audio and video equipment to the HDMI output.
2. After the cable is connected, plug in the power cord and switch the power on.
3. Press ⏻ to turn the equipment on.
4. Switch the input source to the HDMI channel in the main menu.



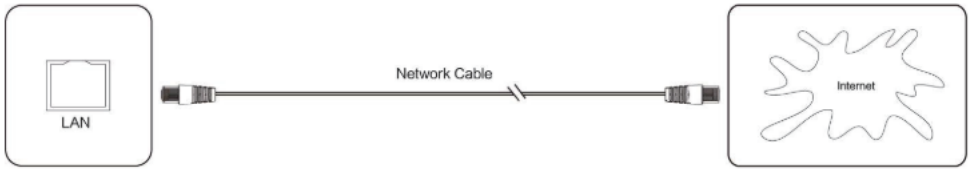
1. Use the HDMI cable to connect the audio and video equipment to the HDMI input.
2. After the cable is connected, plug in the power cord and switch the power on.
3. Press ⏻ to turn the equipment on.

RS232 CONNECTION

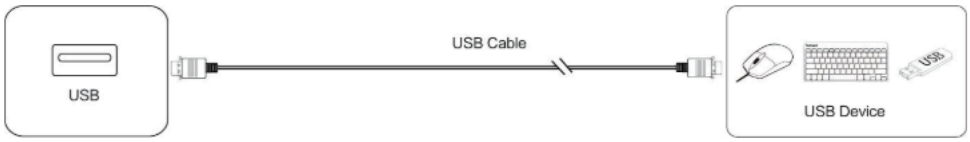


After using the serial port cable to connect the central control equipment and the machine, certain functions can be controlled with the central control equipment, such as machine ON/OFF, the adjustment of sound volume, etc.

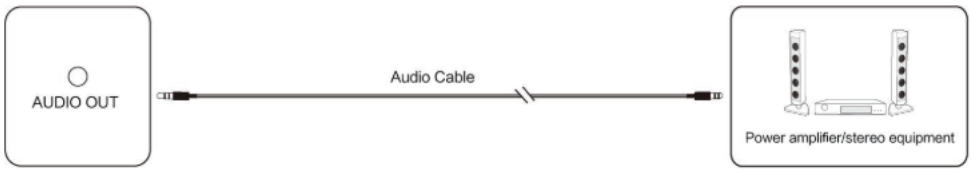
LAN CONNECTION



USB CONNECTION

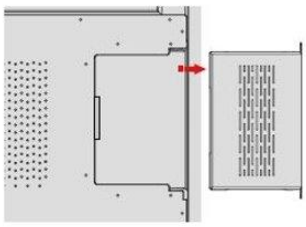


AUDIO OUT CONNECTION

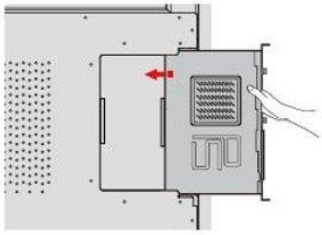


OPS MODULE INSTALLATION

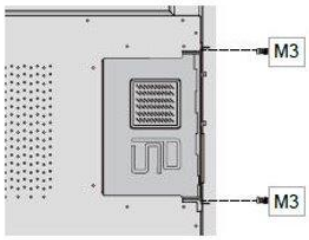
1. Ensure that the display is turned off.
2. Use a Philips screwdriver to unscrew the OPS slot shield on the display input panel. Do not lose the screws that are removed.



3. Install the OPS module by sliding it into the OPS slot until you hear a click, indicating the module is securely inserted. When using an Avocor OPS PC, the fan should be visible.



4. Secure the OPS module in position by screwing it onto the display input panel using the screws that were removed earlier.



5. Ensure the installation is complete before turning on the power.

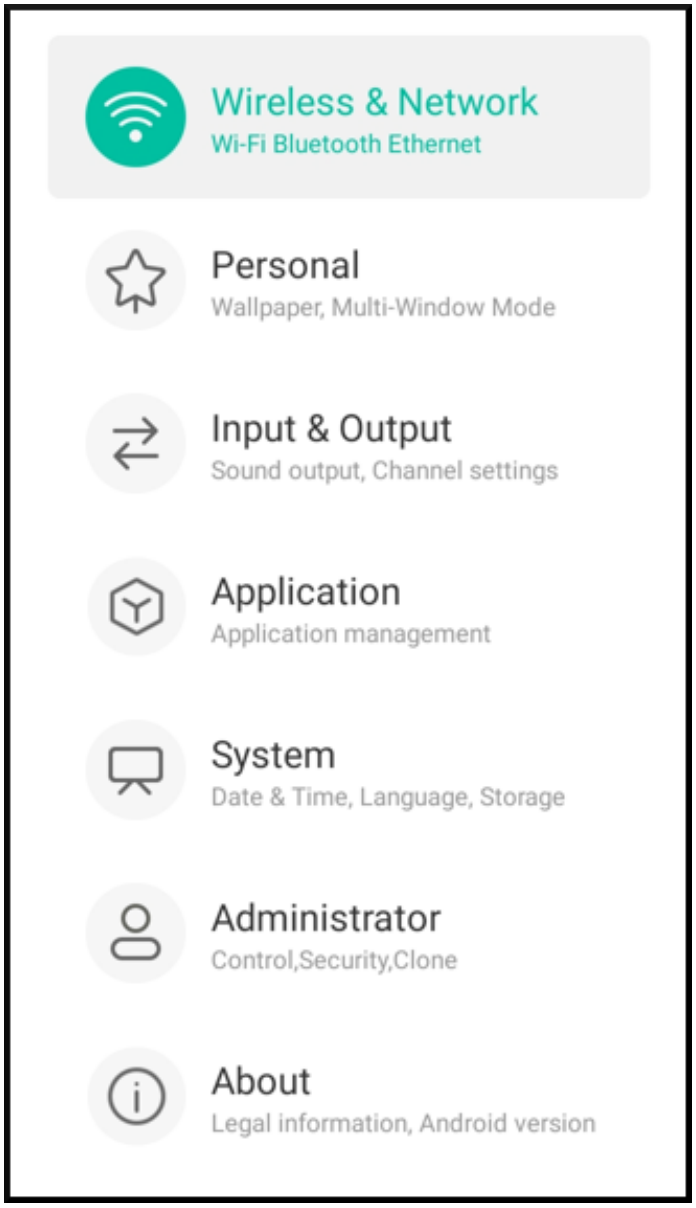
6. Turn on the display. When using an Avocor OPS PC you should see a green light on the side of the OPS, this will indicate that the OPS PC is switched on and operational.

When installing or de-installing an OPS PC, the display must be switched off. If the display is on when performing the installation or deinstallation of the OPS PC, this could cause damage to either the display or OPS PC invalidating the warranty for both.

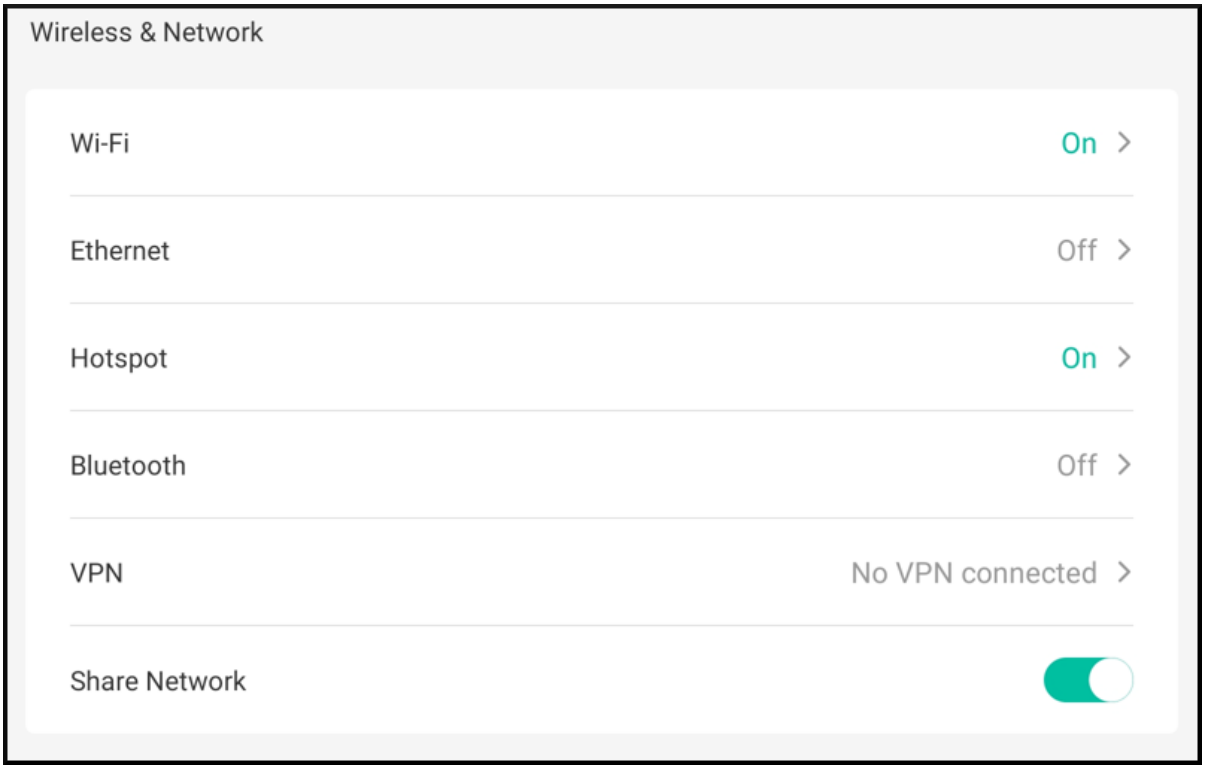
The L-series supports OPS modules that follow the OPS standard.

OPERATION & SETTINGS

DEVICE SETTINGS

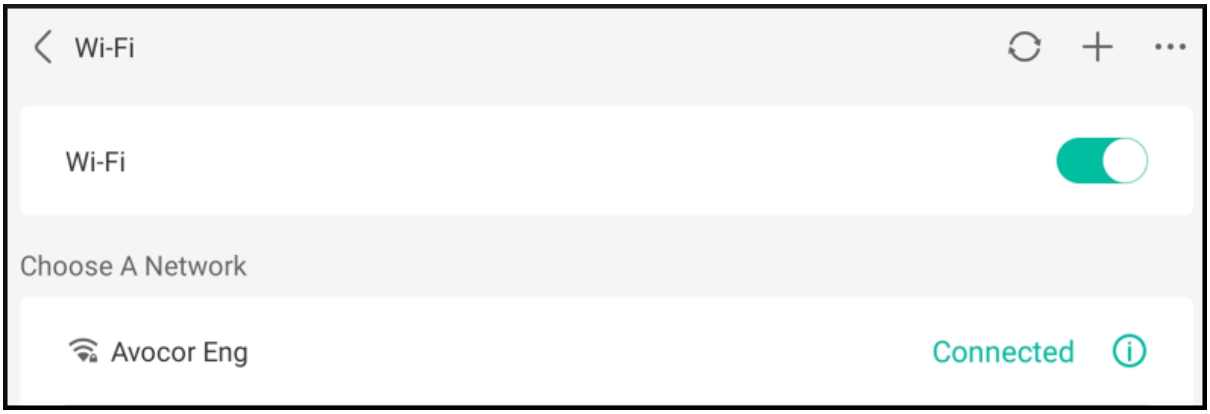


WIRELESS & NETWORK



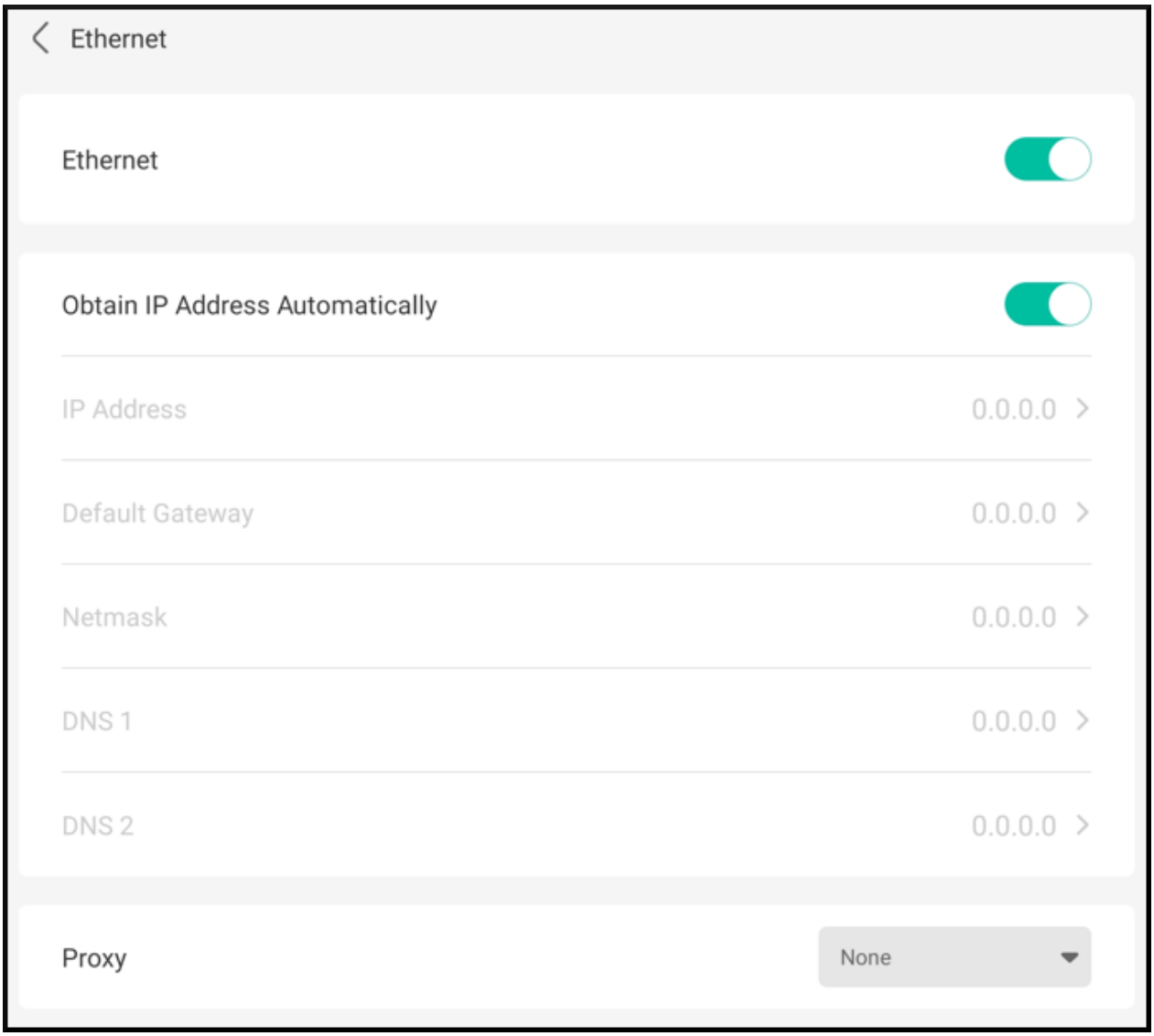
WI-FI

- Toggle on, choose a network, and enter the security key to connect; “Connected” status will appear next to the chosen network when successful.



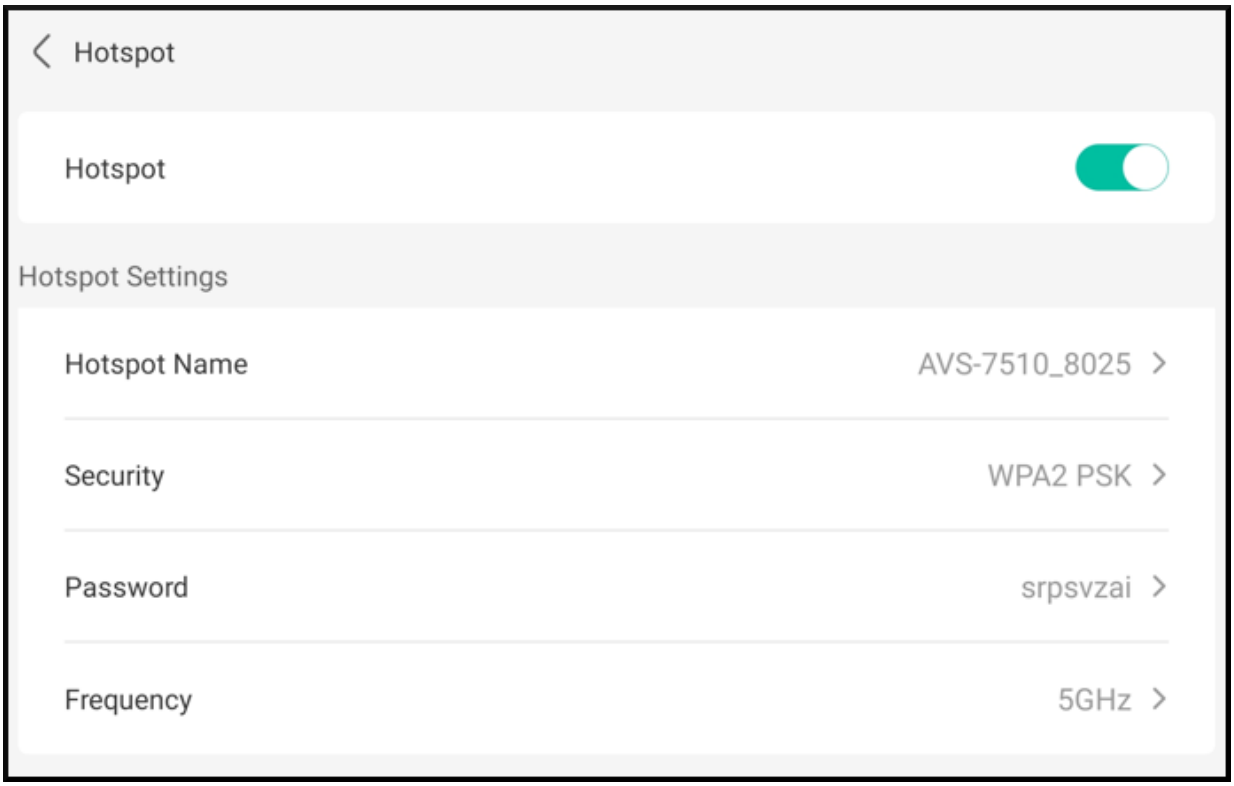
ETHERNET

- Toggle on and choose whether to **Obtain IP Address Automatically** via DHCP, or configure a static IP address.
- **Proxies** can also be set here.



HOTSPOT

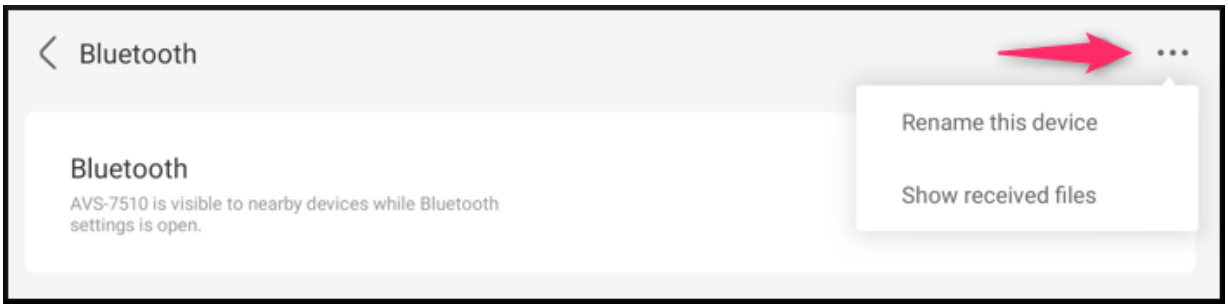
- **Hotspot:** toggle to enable / disable the hotspot.
- **Hotspot Settings:** configure the **Hotspot Name**, **Security** protocol, **Password**, and **Frequency**.



BT

- **BT:** toggle the display's visibility to nearby devices while BT settings are open.
- **Available Device:** tap to connect to nearby available BT devices.

- **Rename this device:** rename the display's BT identifier.
- **Show received files:** view any files received from connected devices.



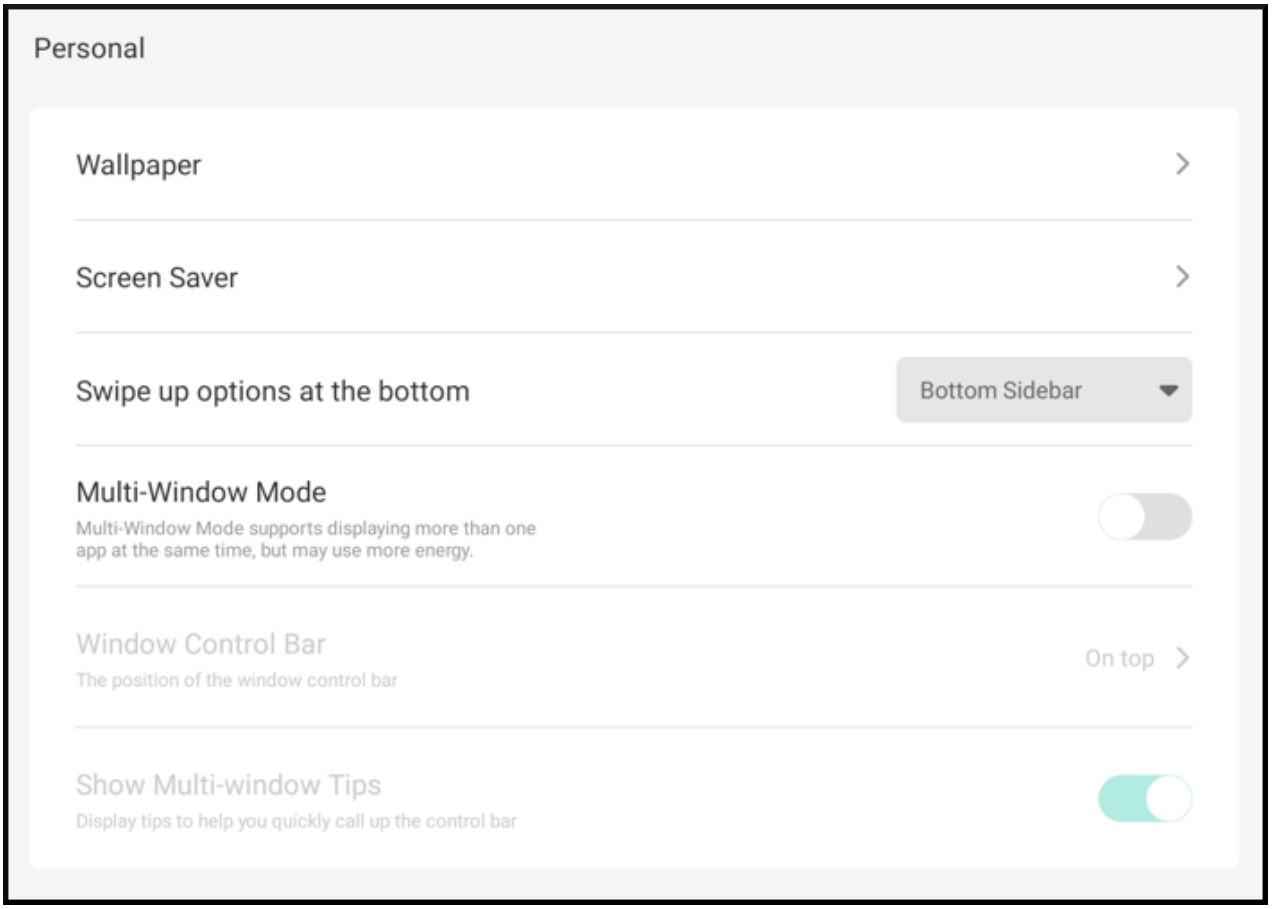
VPN

- Add and configure a VPN profile.

SHARE NETWORK

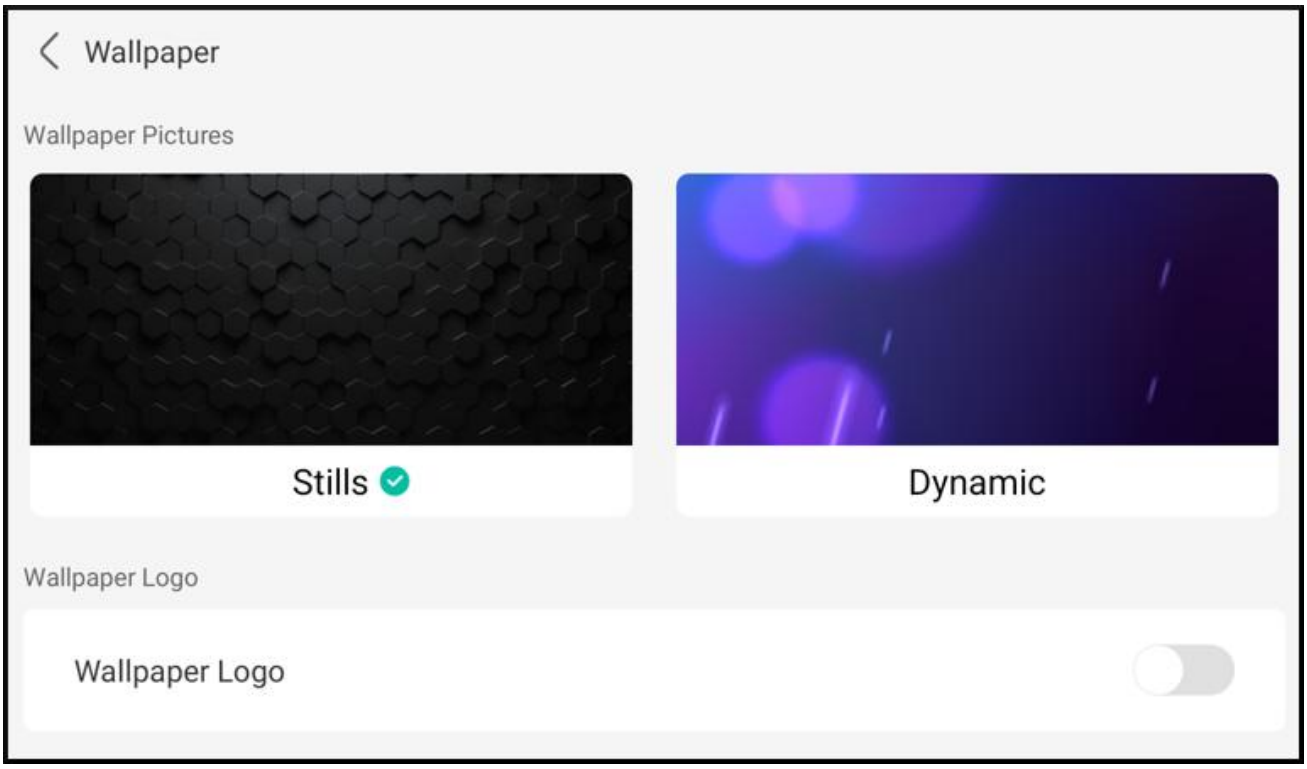
- Toggle to set the display's visibility over the network.

PERSONAL


Personal
Wallpaper
Screen Saver
Swipe up options at the bottom
Bottom Sidebar
Multi-Window Mode
Multi-Window Mode supports displaying more than one app at the same time, but may use more energy.
Window Control Bar
The position of the window control bar
On top
Show Multi-window Tips
Display tips to help you quickly call up the control bar

WALLPAPER

- **Wallpaper Pictures:** choose from a preloaded set of **Stills,** or **Dynamic** wallpapers.
- Set or replace the **Wallpaper Logo** with a custom image file.

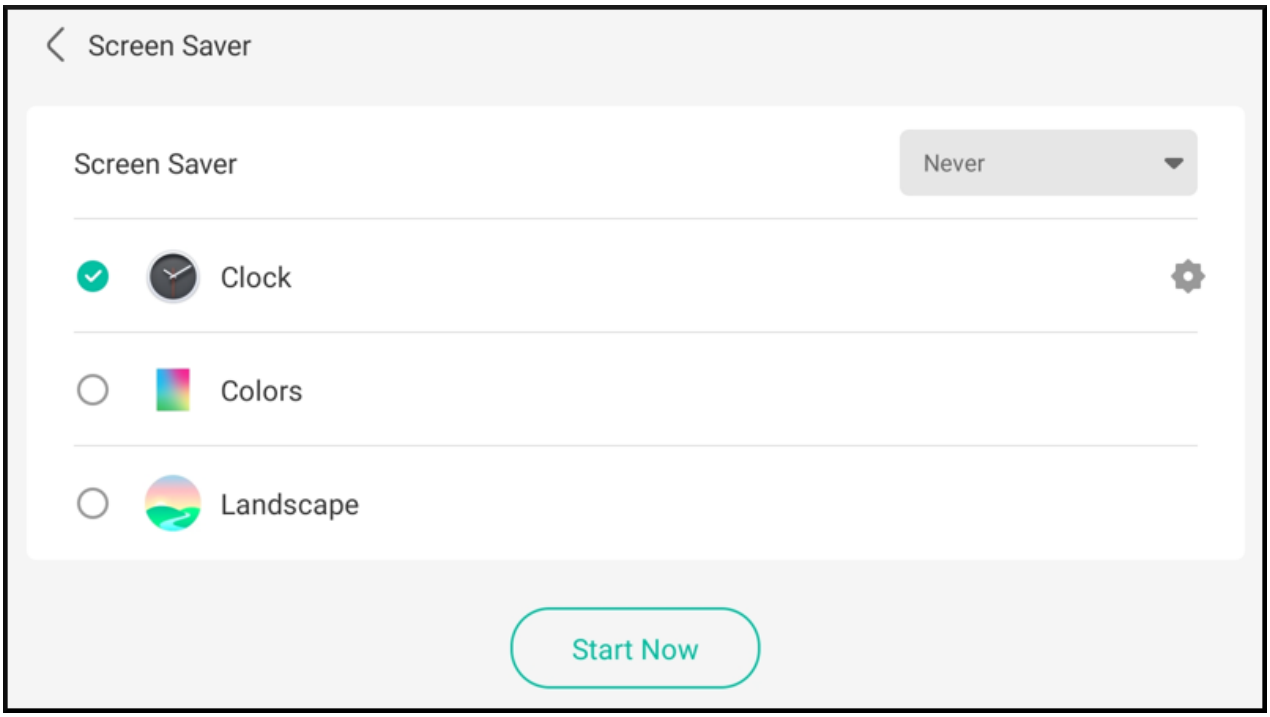


How to set a Custom Wallpaper

1. Load desired wallpaper image onto a USB storage device.
2. Insert the USB device into one of the USB-A ports of the display.
3. Open the **Finder** on the display**.**
4. Find and open the wallpaper image in your storage device's directory.
5. Tap "Settings"
6. Tap "Set as Wallpaper"

SCREENSAVER

- Screen Saver timeout: **Never**, **15 min**, **30 min**, **60 min**, **90 min**.
- Screen Saver type: **Clock**, **Colors**, **Landscape**
    - **Clock** has additional configurations: “Style” and “Night Mode”



SWIPE UP OPTIONS AT THE BOTTOM

- Choose whether the “Swipe up from the bottom of the screen” gesture will reveal the **Bottom Sidebar** or the **Source Menu**

MULTI-WINDOW MODE

- Toggle on to allow multiple app windows to be open at the same time.
- Windows can be moved, maximized, minimized, and closed individually.

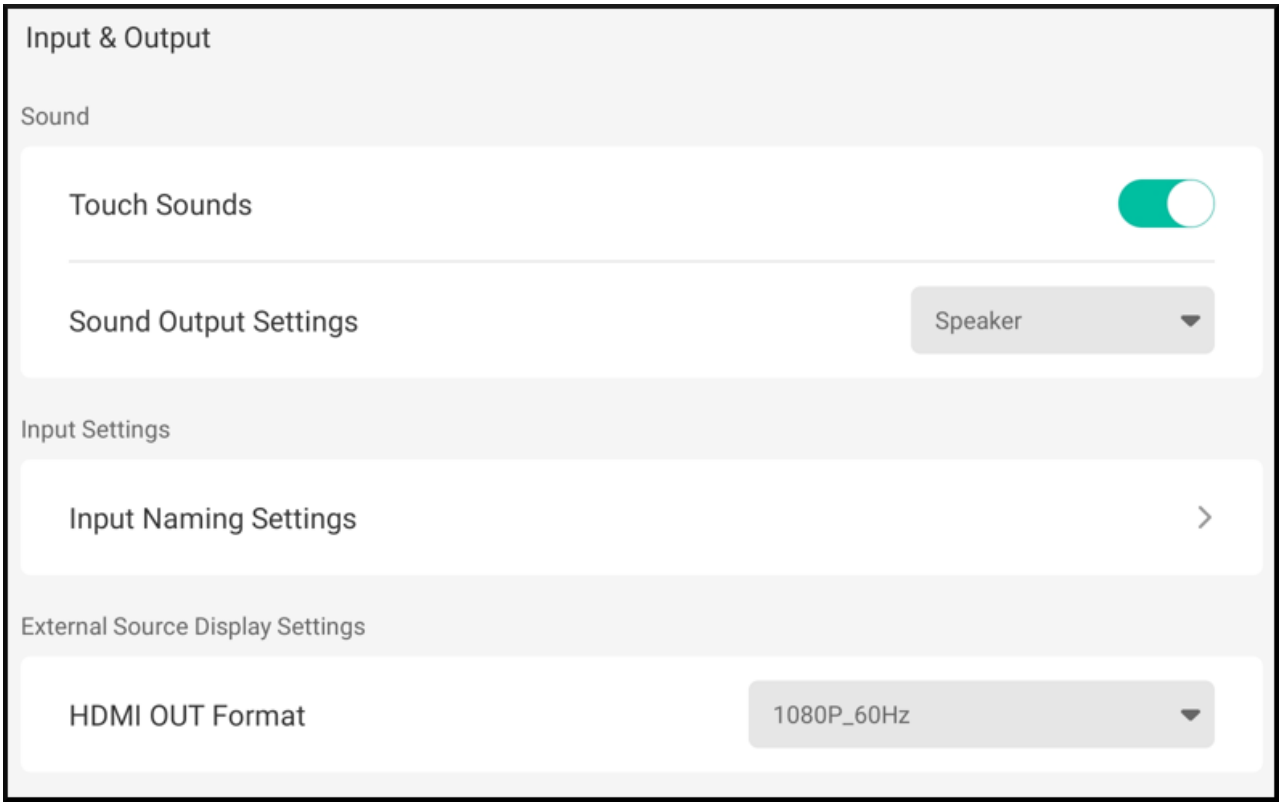
WINDOW CONTROL BAR

- Set the position of the Window Control Bar to the **Top**, **Left side**, or **Right side** of the window.

SHOW MULTI-WINDOW TIPS

- Display tips to help you quickly call up the control bar.

INPUT & OUTPUT



TOUCH SOUNDS

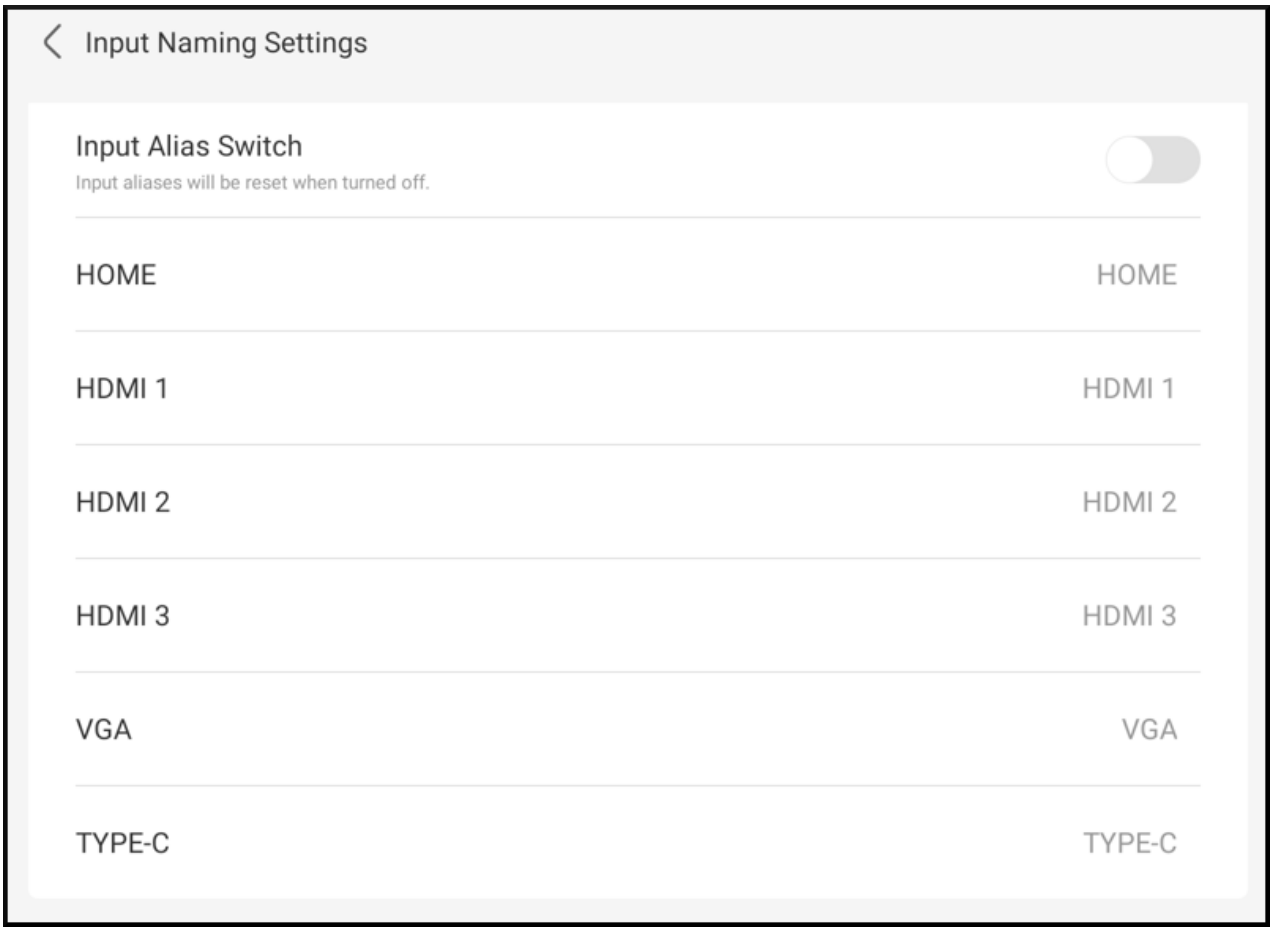
- Toggle to enable or disable touch-feedback sounds.

SOUND OUTPUT SETTINGS

- **Speaker**: switches the audio channel to the display's internal speakers.
- **Lineout**: switches the audio channel to the AUX OUT 3.5mm jack.
- **Mixed**: enables both the internal speakers and Aux Out 3.5mm jack at the same time.

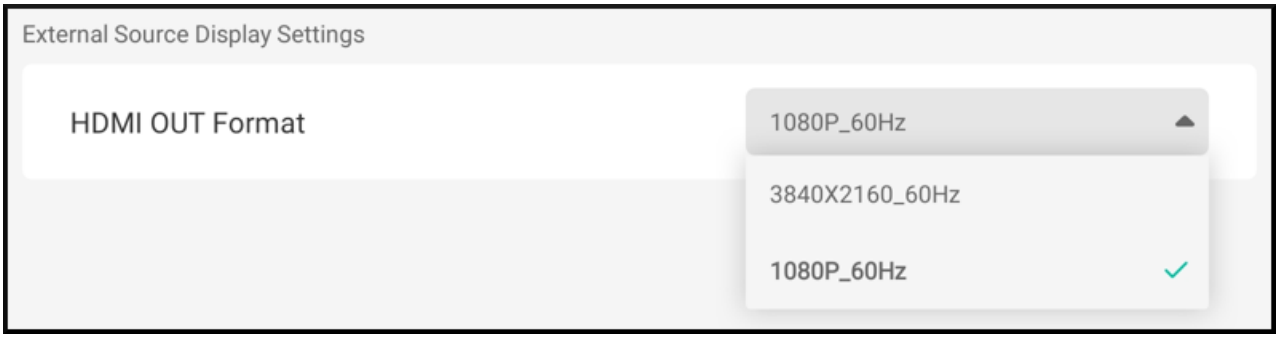
INPUT NAMING SETTINGS

- Toggle on **Input Alias Switch** to enable custom aliases for desired inputs.
    - Aliases will show on the right-hand side.
- Toggle off **Input Alias Switch** to reset aliases to their default.



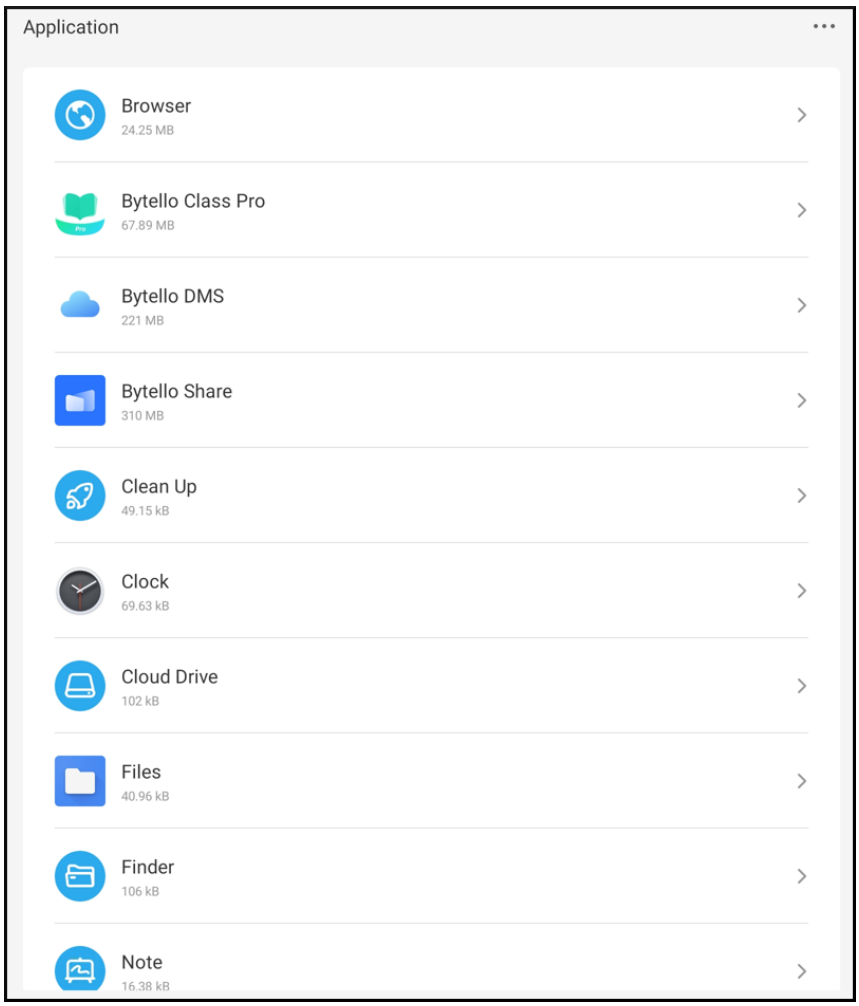
EXTERNAL SOURCE DISPLAY SETTINGS

- **HDMI Out Format:** set the resolution of the HDMI Out port to either **1080P_60Hz** (default) or **3840X2160_60Hz**.



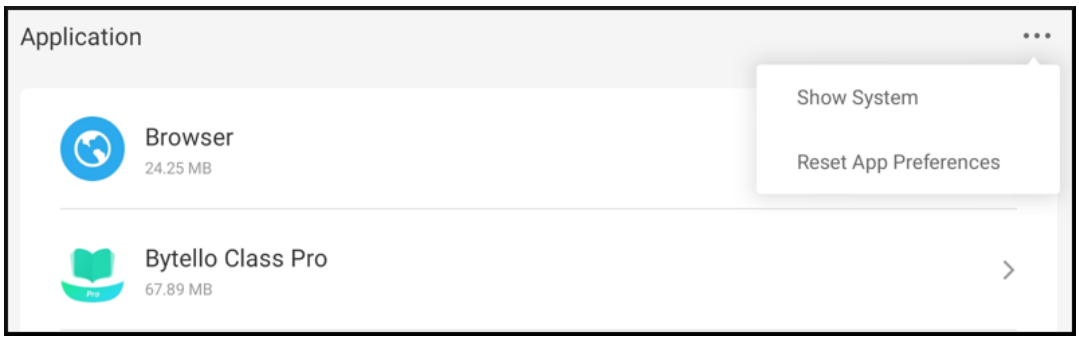
APPLICATION

- Here you can access app-specific settings. To begin, tap an app you would like to configure.

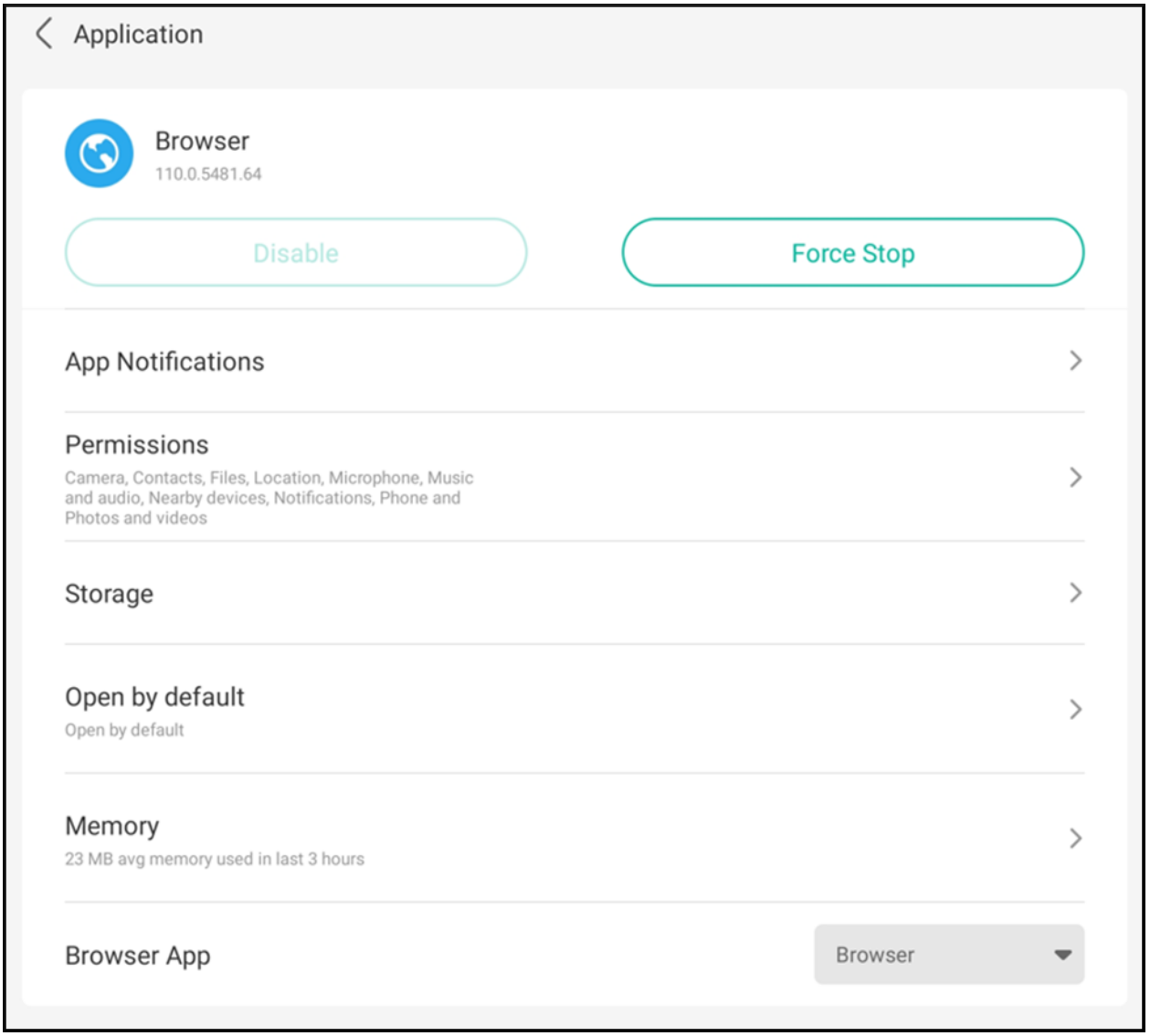


Show System** and **Reset App Preferences

- **Show System:** reveals the Android System applications.
- **Reset App Preferences:** restores all app configurations to their defaults.



APP CONFIGURATION

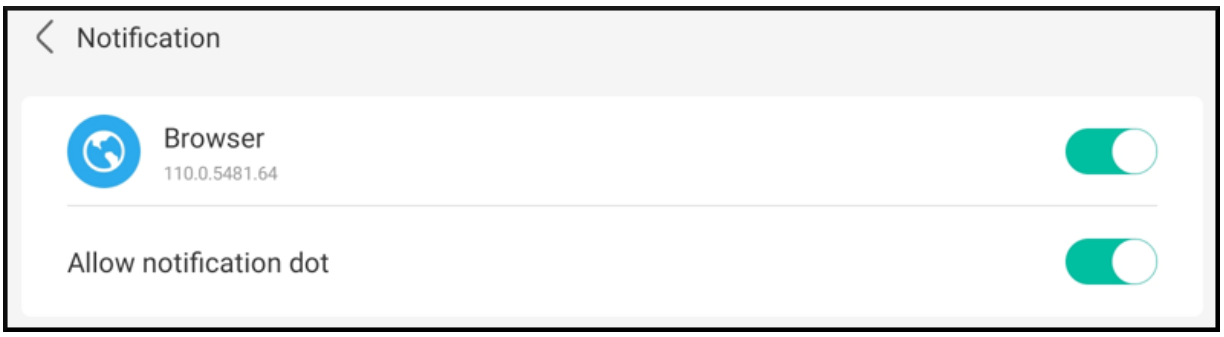


Disable / Force Stop

- **Disable:** renders the app unopenable by users.
- **Force Stop:** forcibly closes the application.

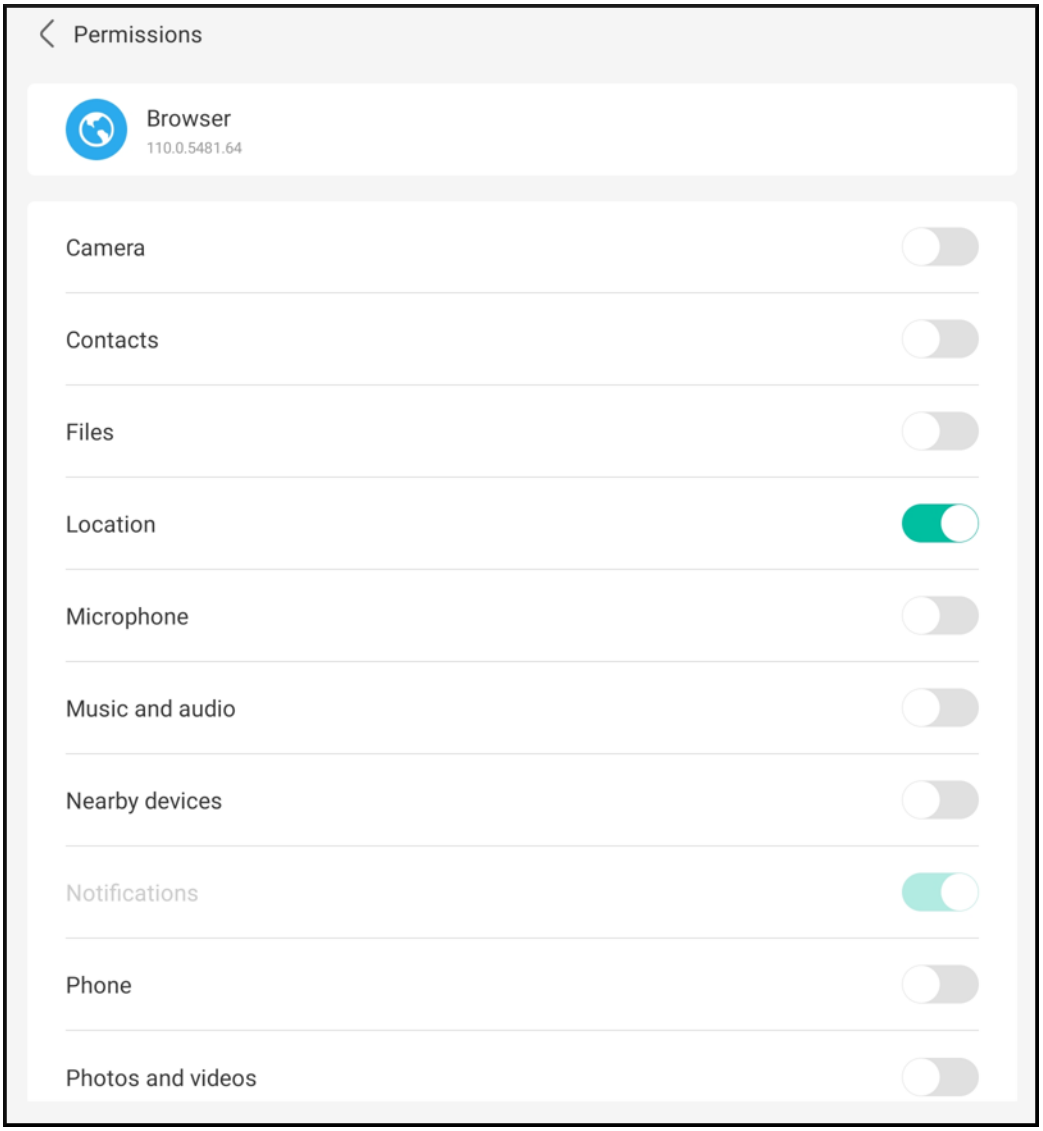
App Notifications

- **Toggle notifications:** toggle to enable or disable notifications for the app.
- **Allow notification dot:** toggle to enable or disable notification dots from appearing.



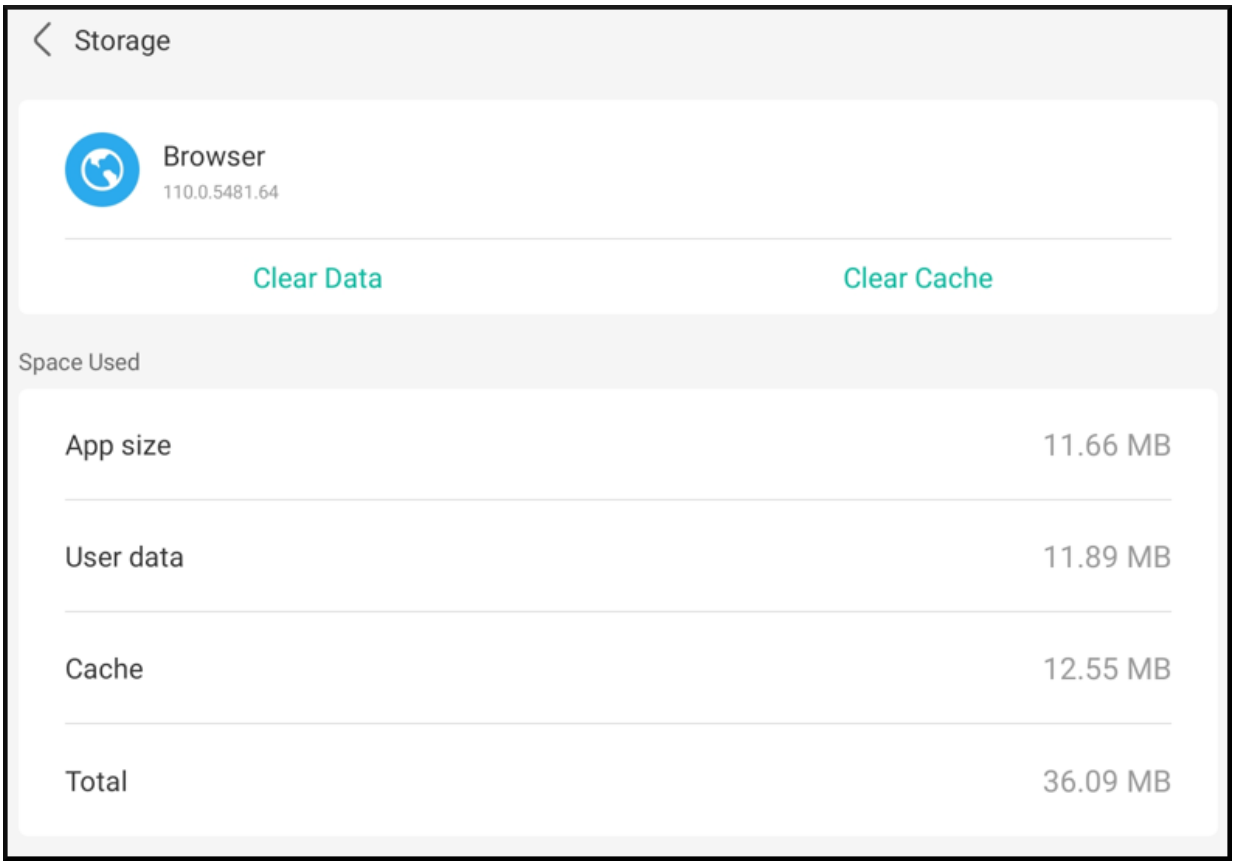
Permissions

- Toggle to enable or disable app permissions for the following:
    - **Camera**
    - **Contacts**
    - **Files**
    - **Location**
    - **Microphone**
    - **Music and audio**
    - **Nearby devices**
    - **Notifications**
    - **Phone**
    - **Photos and videos**



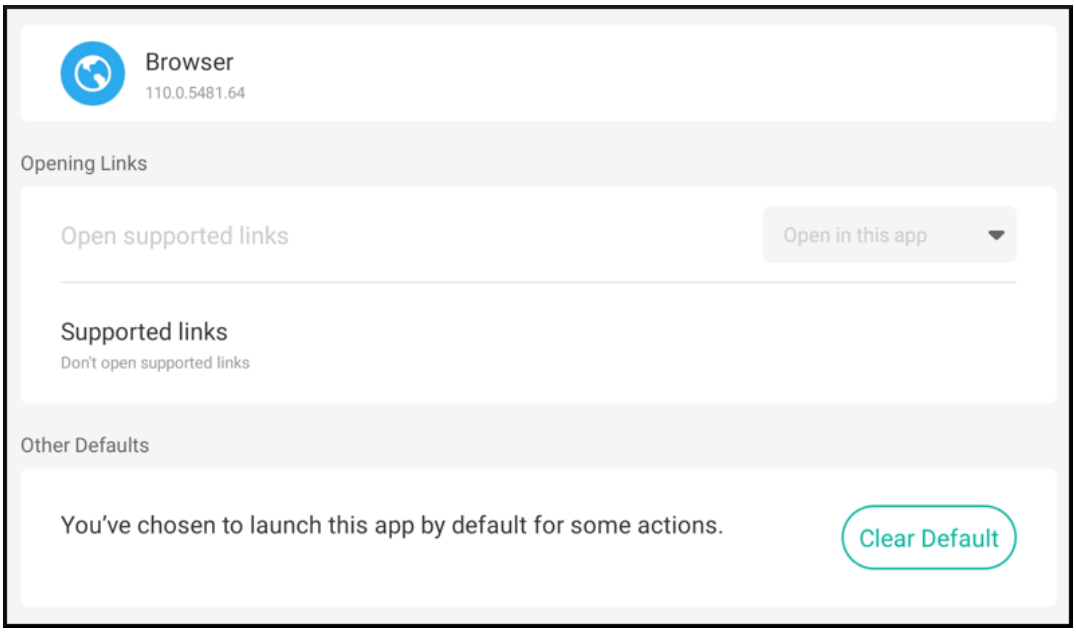
Storage

- **Clear Data** deletes all information stored by the app.
- **Clear Cache** removes temporary files and data stored by the app.
- **Space Used: App size**, **User data**, **Cache**, and **Total** storage allocation can be viewed here.



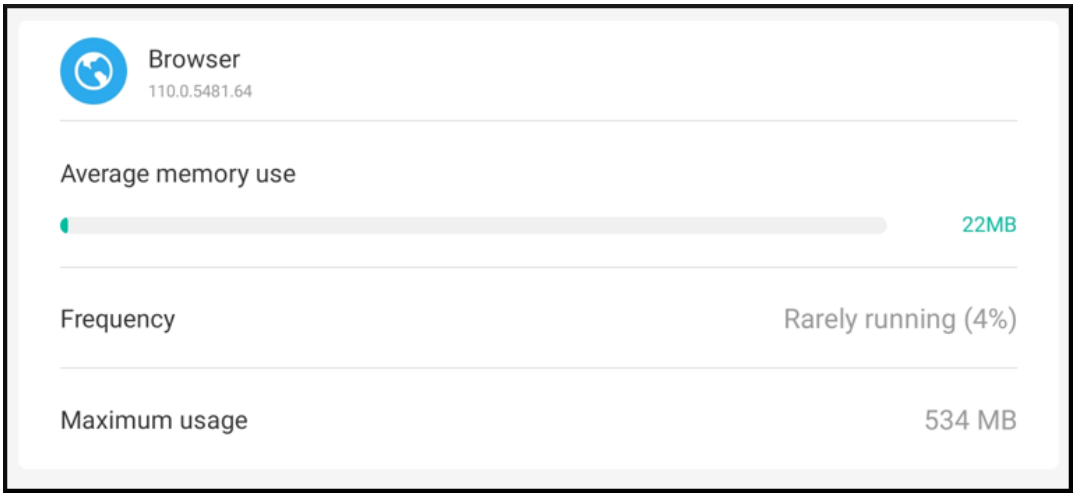
Open by default

- Configure **Supported Links** that the app will open by default.
- Choose how the app **Opens supported links**, if possible.
- **Clear Default** configurations for the app.



Memory

- View an app's **Average memory usage**, usage **Frequency**, and **Maximum usage**.



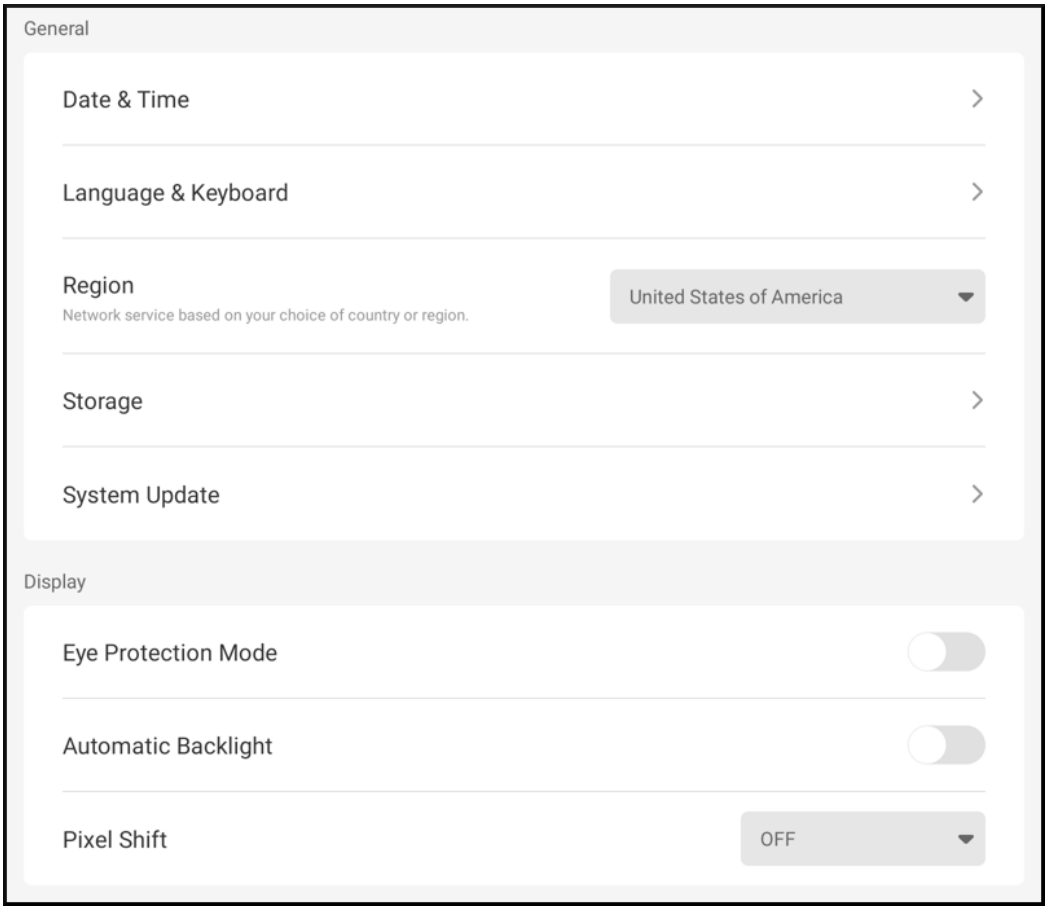
Install unknown apps

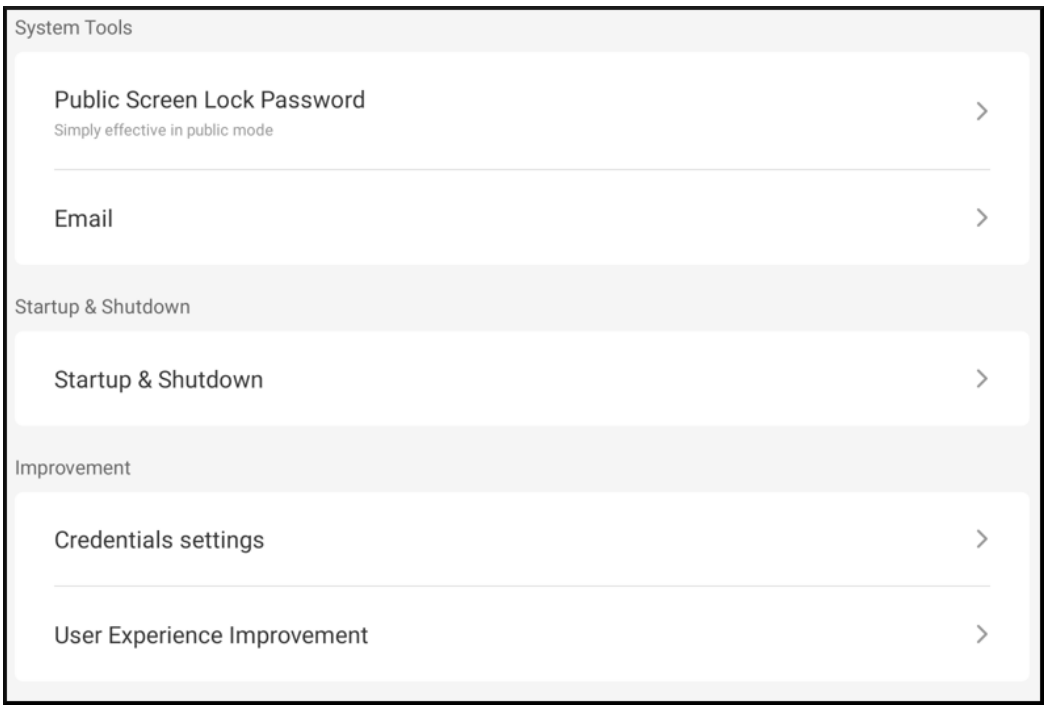
- Toggle to enable or disable specific apps from downloading unknown apps.
    - Note: your device and personal data are more vulnerable to attack by unknown apps. By installing apps from this source, you agree that you are responsible for any damage to your device or loss of data that may result from their use.

Modify system settings

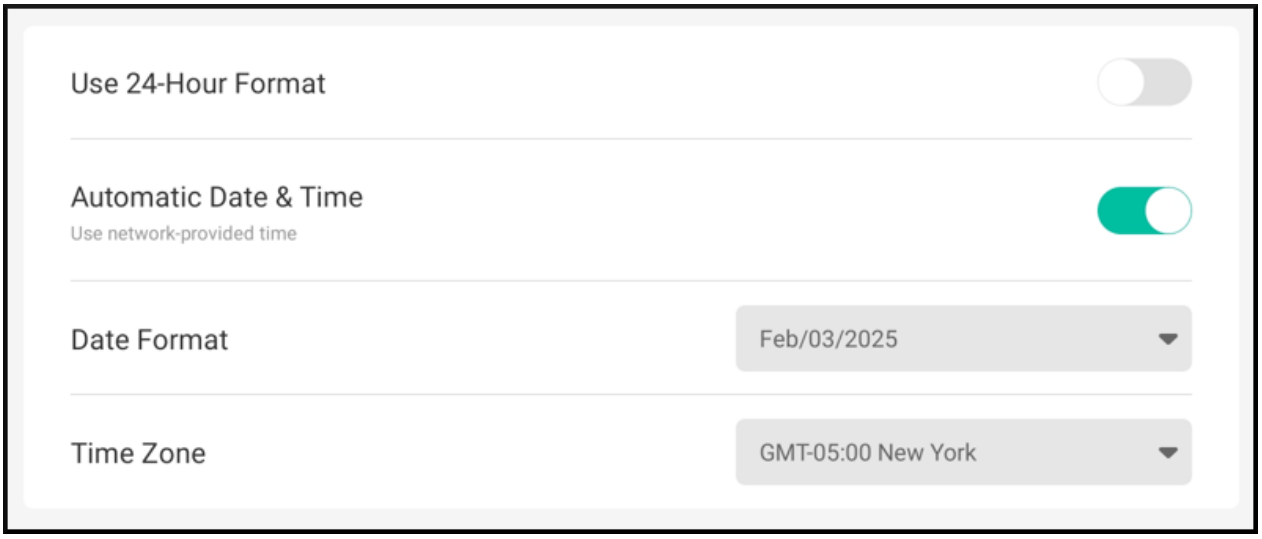
- This permission allows an app to modify system settings.

SYSTEM


General
Date & Time
Language & Keyboard
Region
Network service based on your choice of country or region.
United States of America
Storage
System Update
Display
Eye Protection Mode
Automatic Backlight
Pixel Shift
OFF


System Tools
Public Screen Lock Password
Simply effective in public mode
Email
Startup & Shutdown
Startup & Shutdown
Improvement
Credentials settings
User Experience Improvement

DATE & TIME



Use 24-Hour Format

- Toggle to enable or disable 24-hour format for the device clock.

Automatic Date & Time

- Use network-provided time.

Date Format

- Choose from three different date formats:
  - **Feb/19/2025**
  - **19/Feb/2025**
  - **2025/Feb/19**

Time Zone

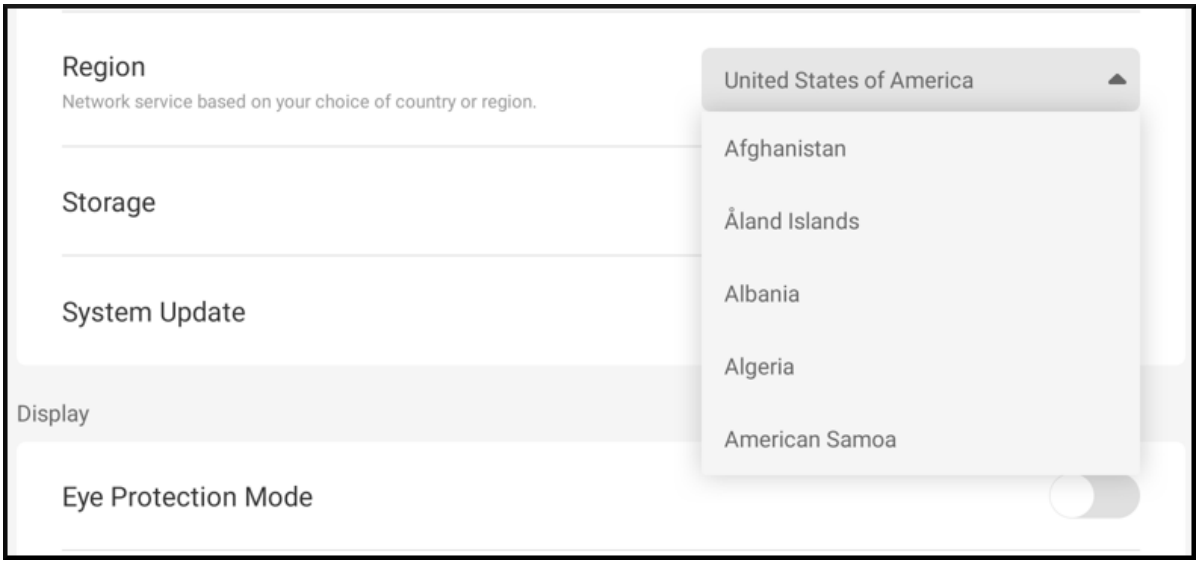
- Select a regional time zone to align with **Automatic Date & Time**.

LANGUAGE & KEYBOARD

- **Languages:** select the system language.
- **Virtual Keyboard:** configure the virtual keyboard.
- **Physical Keyboard:** configure a physically connected USB keyboard.

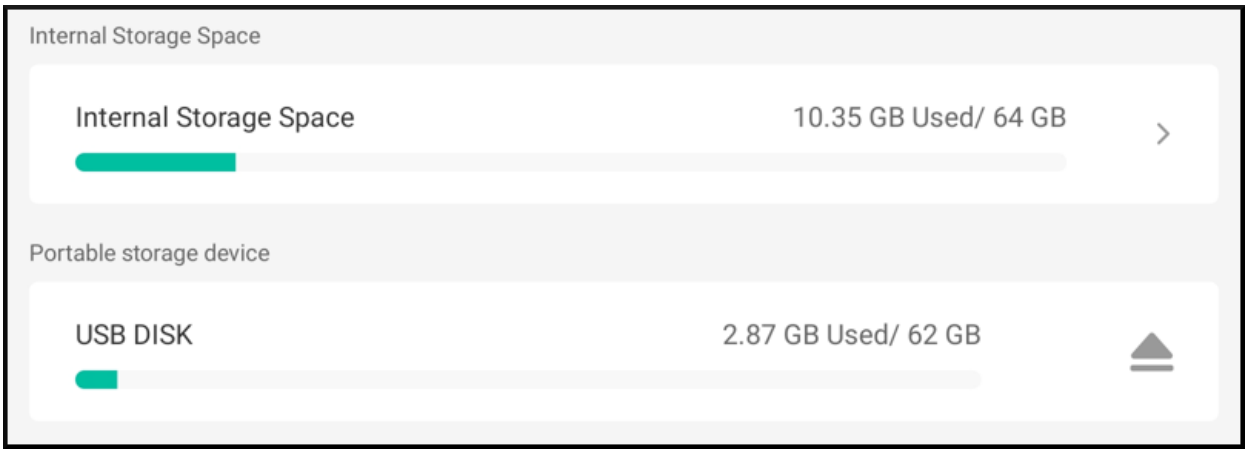
REGION

- Network service based on your choice of country or region.



STORAGE

- **Internal Storage Space:** view the internal storage device and its capacity; tap to see further details.
- **Portable storage device:** view and eject connected storage devices.

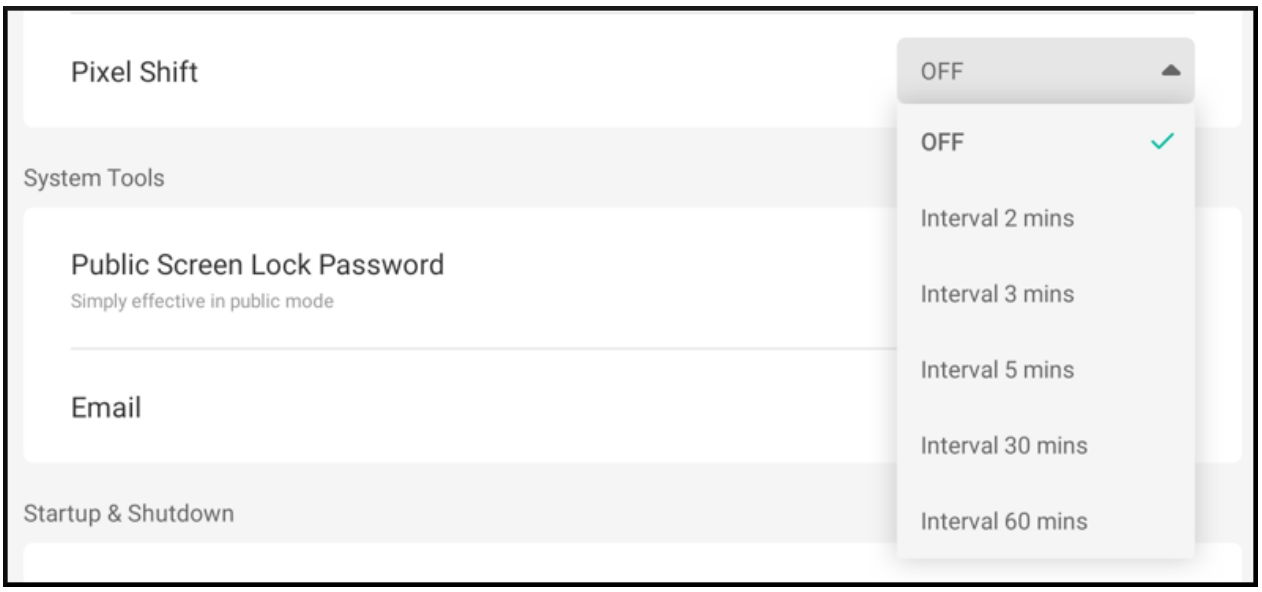


SYSTEM UPDATE

- **Current Version:** view the current OS version.
- **Check Update:** tap to check for new over-the-air updates.
    - Needed for the upgrade:
        - 2GB of free disk space or more.
        - The upgrade progress will remain powered.

PIXEL SHIFT

- To reduce the likelihood of image retention, set the interval that **Pixel Shift** will occur:
  - **OFF**
  - **Interval 2 mins**
  - **Interval 3 mins**
  - **Interval 5 mins**
  - **Interval 30 mins**
  - **Interval 60 mins**

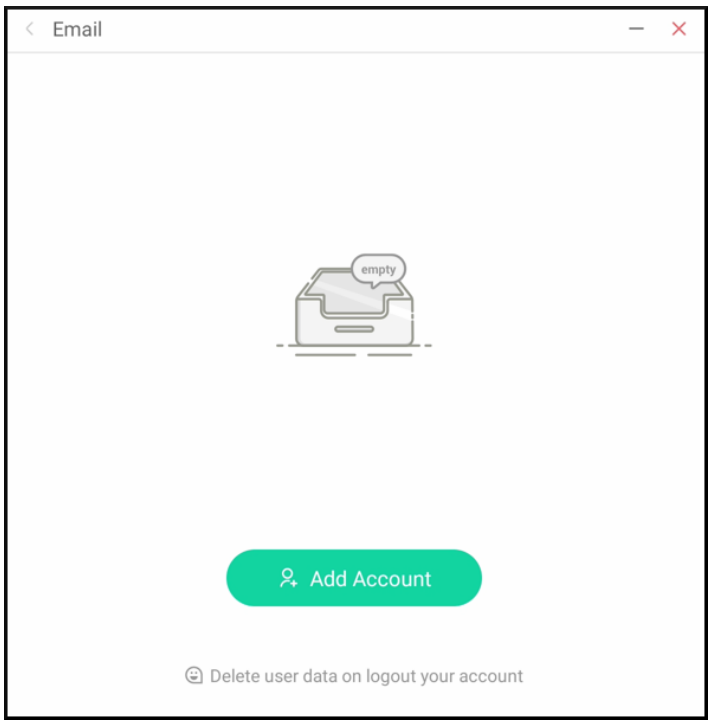


PUBLIC SCREEN LOCK PASSWORD

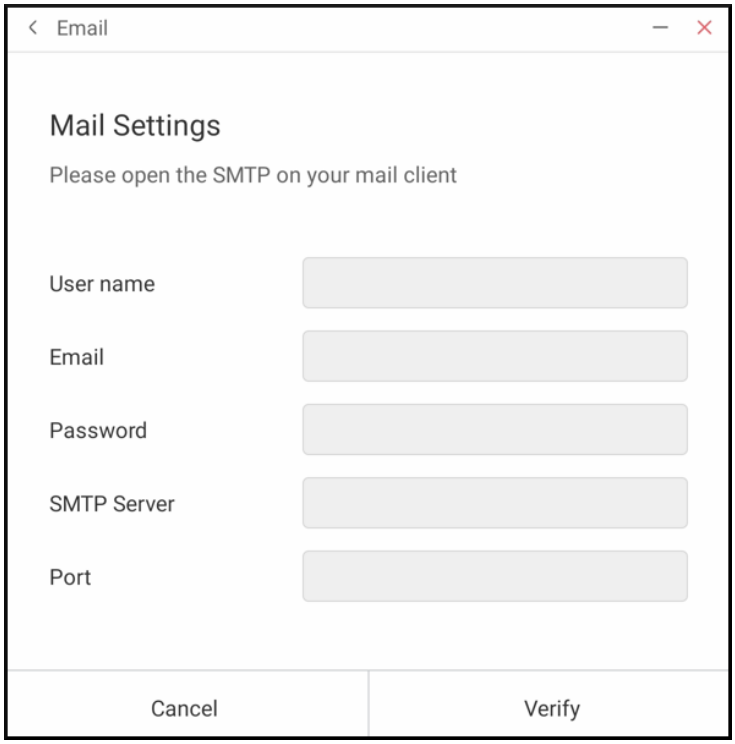
- Set the password required to unlock the screen.

EMAIL

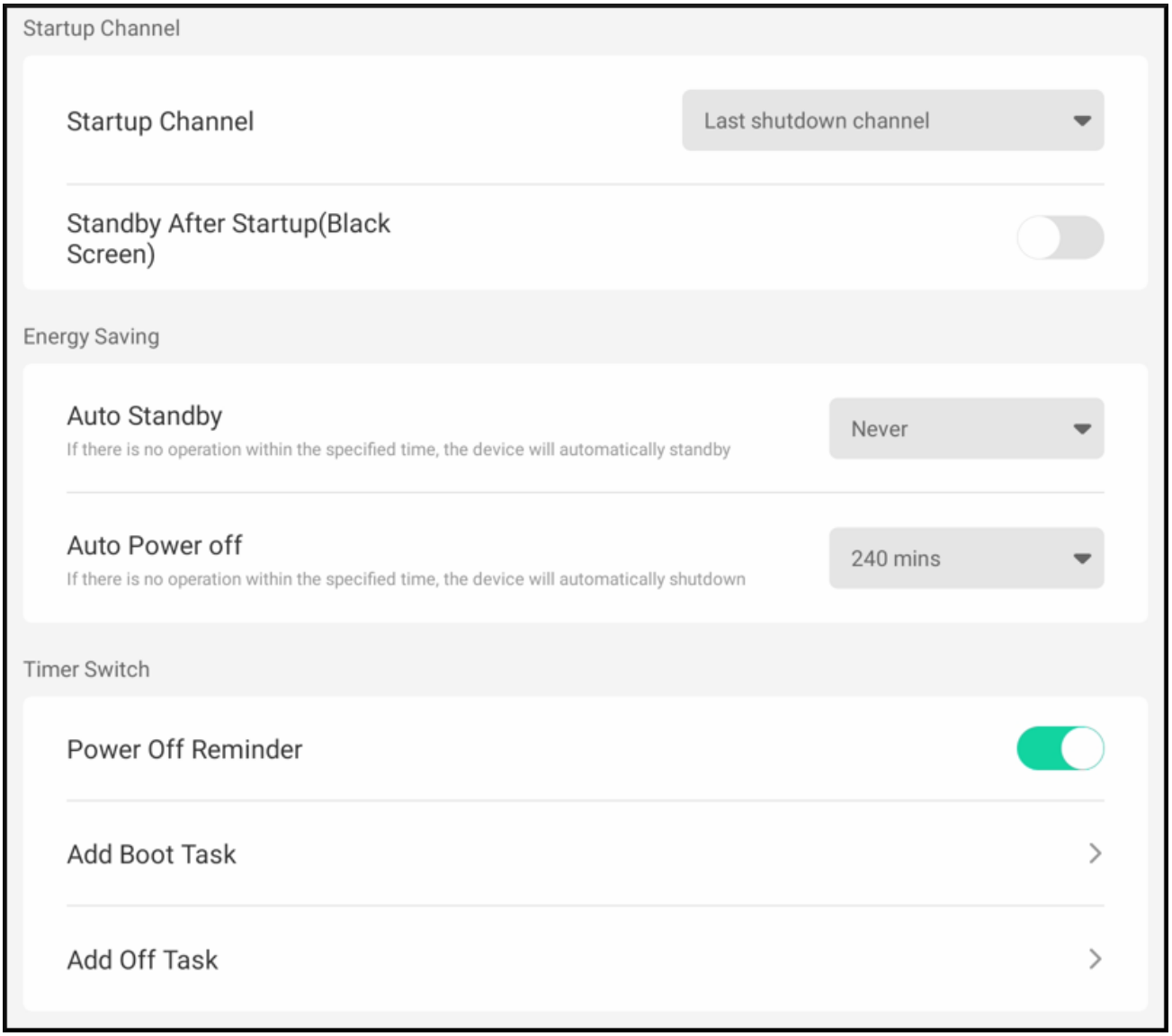
- Tap to add a new mailbox to the device.



- **User name**, **Email** address, **Password**, **SMTP Server**, and **Port** are required.



STARTUP & SHUTDOWN



Startup Channel

Startup Channel

- Set the starting source that appears when the display powers on:
  - **Last shutdown channel**
  - **HOME**
  - **HDMI 1**
  - **HDMI 2**
  - **HDMI 3**

Standby After Startup (Black Screen)

- Toggle on to make the display enter **standby mode** when powering on.

Energy Saving

Auto Standby

- If there is no operation within the specified time, the device will automatically enter **standby mode**:
  - **Never**
  - **15 mins**
  - **30 mins**
  - **60 mins**
  - **90 mins**
  - **120 mins**

Auto Power off

- If there is no operation within the specified time, the device will automatically **shut down**:
  - **Never**
  - **30 mins**
  - **60 mins**
  - **90 mins**
  - **120 mins**
  - **240 mins**

Timer Switch

Power Off Reminder

- Toggle to enable or disable a pop-up notification to appear confirming the automatic power off sequence.

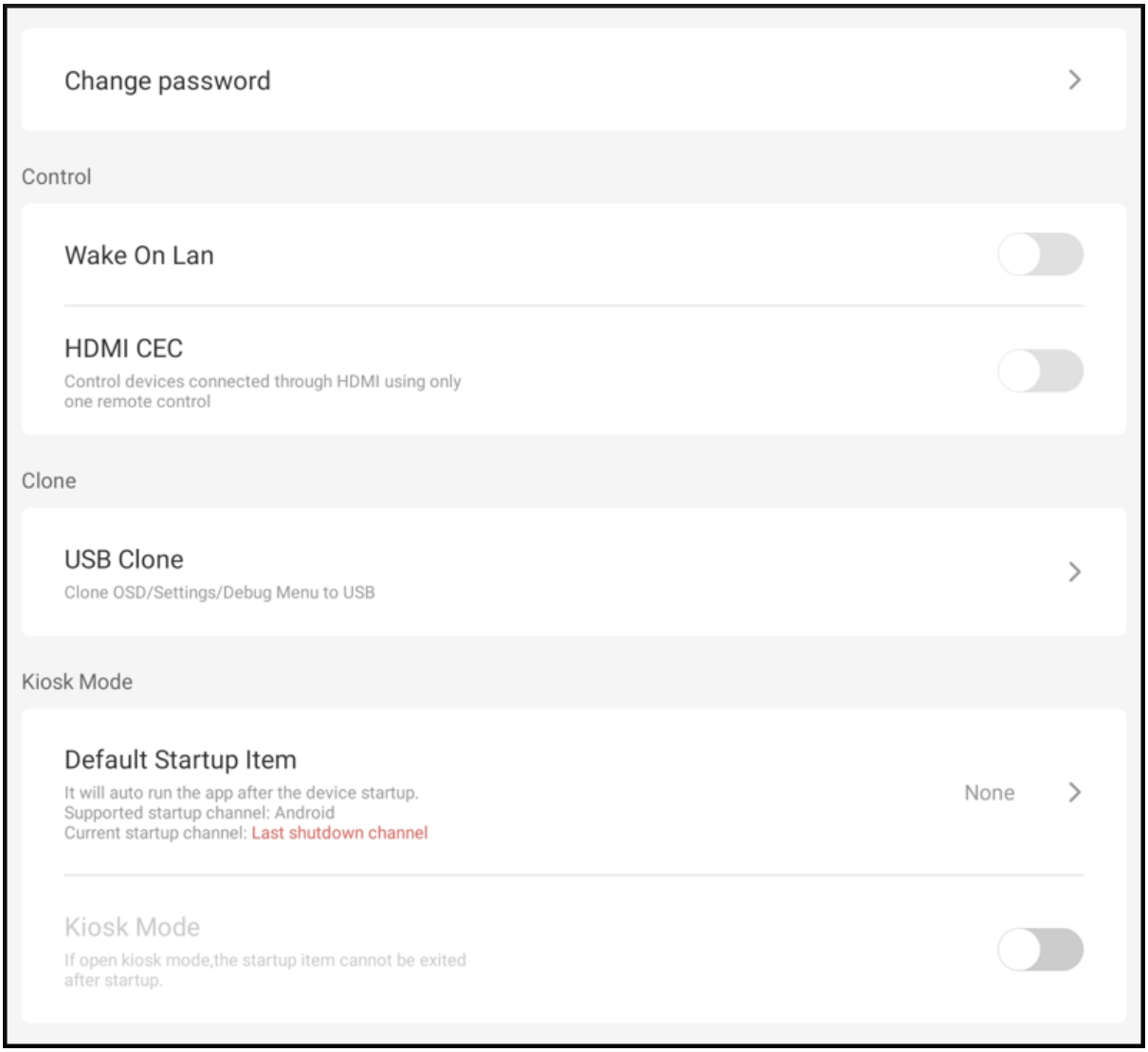
Add Boot Task

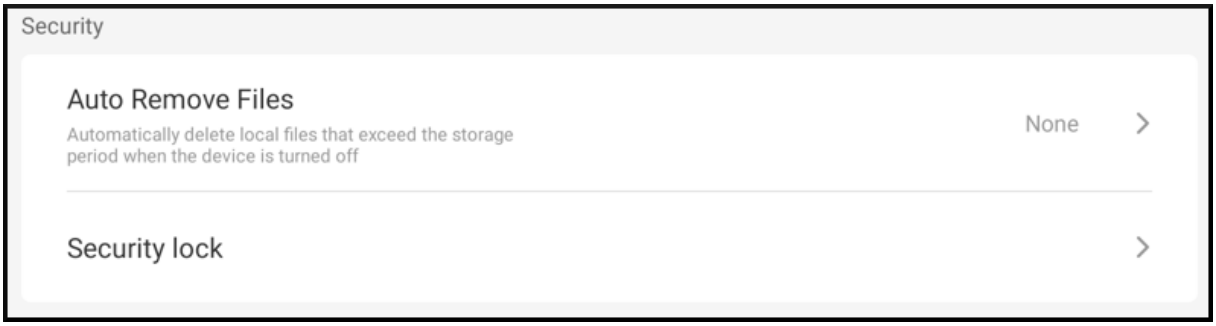
- Tap to select a time and days of the week to perform an automatic power on sequence.
- Once added, the **Boot Task** will appear in the selection below; toggle to enable/disable the boot task.

Add Off Task

- Tap to select a time and days of the week to perform an automatic power off sequence.
- Once added, the **Boot Task** will appear in the selection below; toggle to enable/disable the boot task.

ADMINISTRATOR





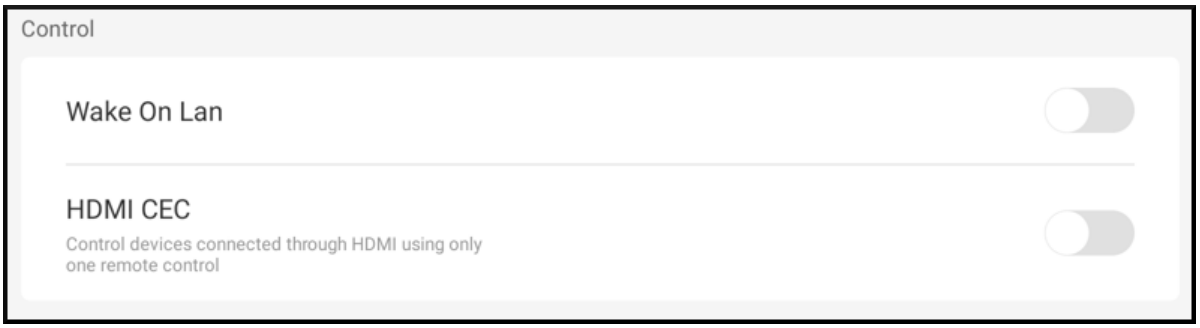
Set Administrator Password

- Administrator settings are accessible after setting the password.

Change Password

- Accessible after **Set Administrator password**; tap to change the **Administrator Password**.

Control



Wake on LAN

- Toggle to enable or disable the display to wake from standby via WOL packet.

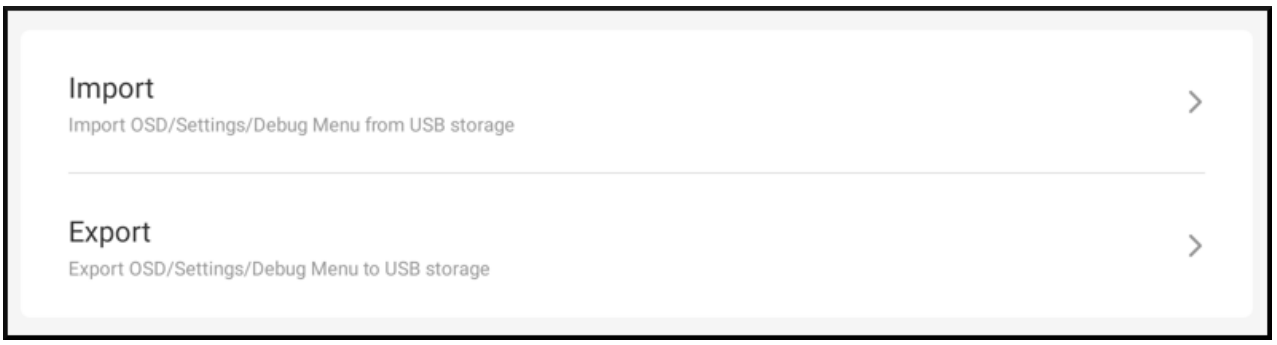
HDMI CEC

- Toggle to enable or disable display control via connected HDMI sources.

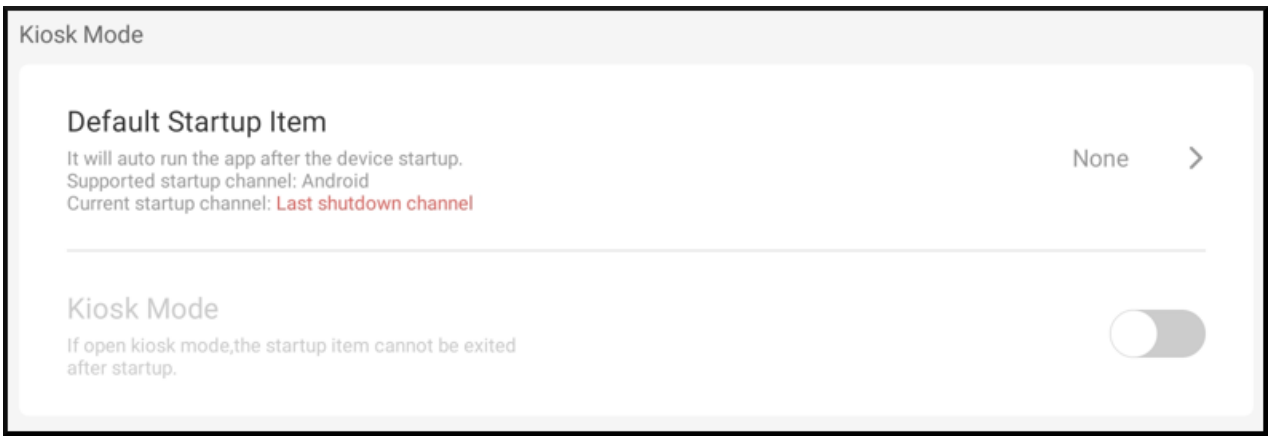
Clone

USB Clone

- **Import**: copy OSD/Settings/Debug Menu from a USB storage device to the display.
- **Export:** copy OSD/Settings/Debug Menu from the display to a USB storage device.



Kiosk Mode



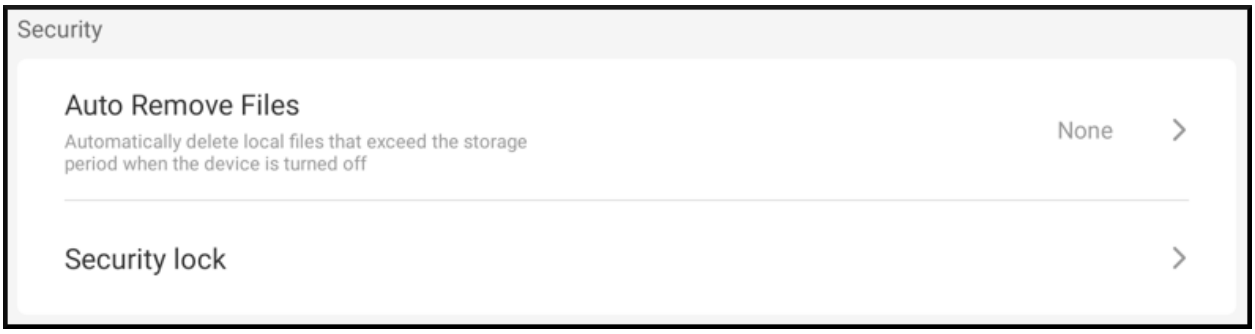
Default Startup Item

- Select an application to open automatically on startup.

Kiosk Mode

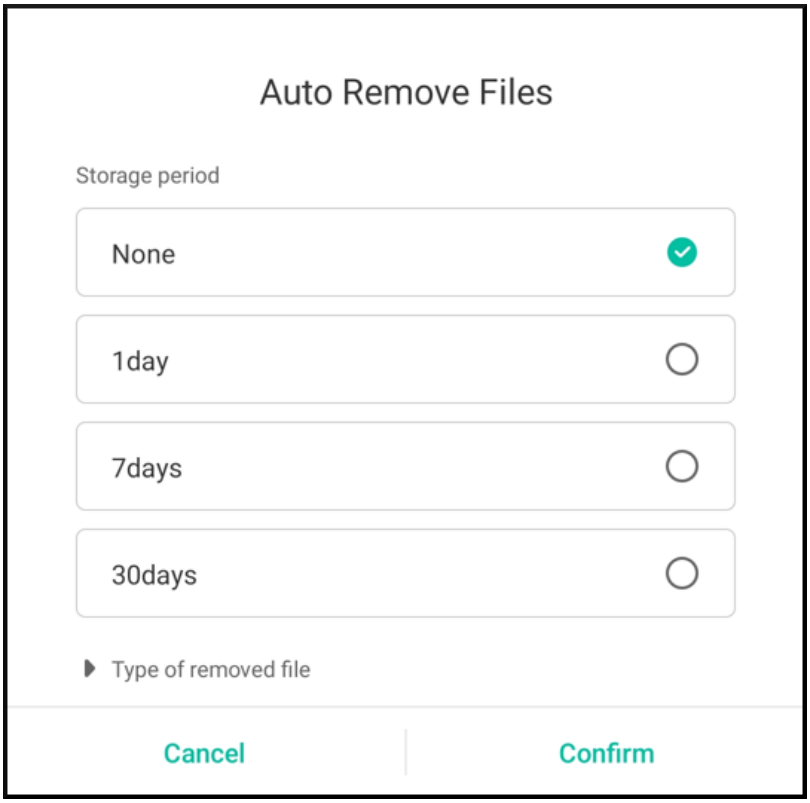
- When toggled on, the **Default Startup Item** cannot be exited after startup.

Security



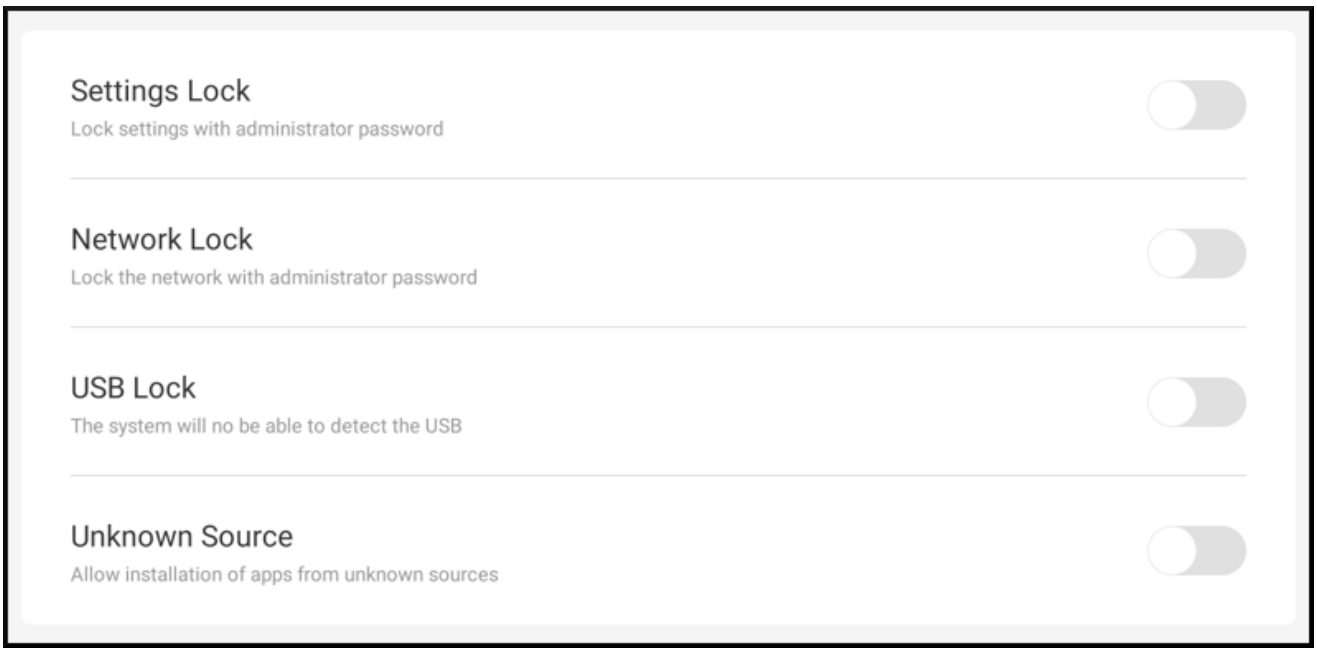
Auto Remove Files

- Automatically delete local files that exceed the storage period when the device is turned off.
- Select the storage period: **None**, **1day**, **7days**, **30days**
- Select the **Type of removed file**: **Video(mp4/mov/avi/rmvb/mkv/wmv)**, **Audio(mp3/m4a/wav/flac/MIDI/aac)**, **Images(jpg/jpeg/png)**, **Documents(enb/pdf/doc/docx/xls/xlsx/ppt/pptx)**



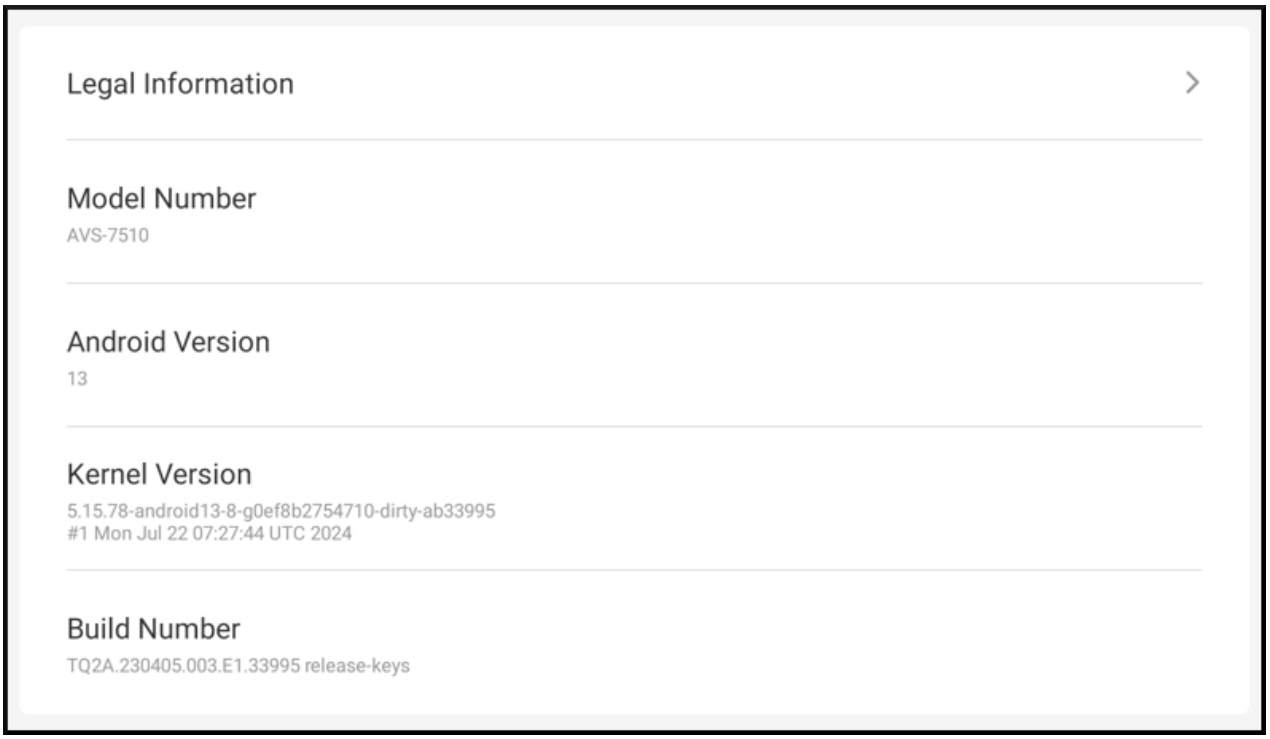
Security lock

- Toggle to lock with the administrator password: **Settings Lock**, **Network Lock**, **USB Lock**, **Unknown Source**.



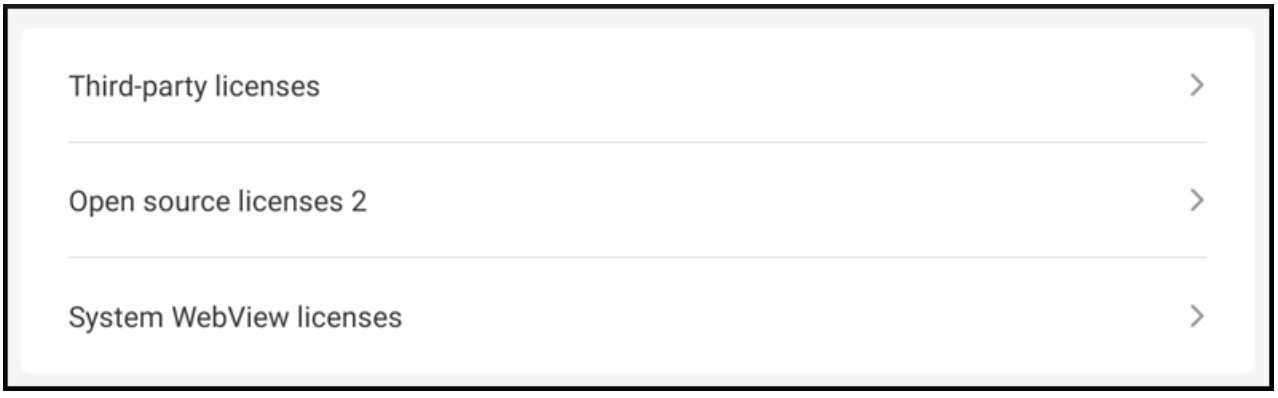
ABOUT

- View device information, such as **Legal Information**, **Model Number**, **Android Version**, **Kernel Version**, and **Build Number**.



Legal Information

- Tap to view license information by type:
  - **Third-party licenses**
  - **Open source licenses 2**
  - **System WebView licenses**



EXTERNAL CONTROL

This section provides information on external control setup for room control systems. RS232 and LAN control options are supported.

RS232 CONNECTION AND PORT CONFIGURATION

Connect your control system or PC to the **RS232** input of the display via a 9-pin **male-to-female crossover** connector cable and set the **baud rate to 9600** on your controller device.

LAN CONTROL CONFIGURATION

Connect your network, control system, or PC to the display's **LAN** port via a CAT5 cable. The display must be connected to the network and must have a valid IP address. Configure your control system to run through **Port 4664**.

COMMAND AND RESPONSE FORMAT

Any commands sent from an automation/control system or PC to an Avocor display must have the following format:

[byte1] [byte2] [byte3] [byte4] [byte5] [byte6] [byte7] [byte8] [byte9]

- [byte1] indicates the start of the command data (always 3A).
- [byte2] & [byte3] are always 30 & 31, respectively; calls for the machine ID, 1.
- [byte4] defines the command type:
    - 53 = SET command
    - 47 = GET command
- [byte5] is the parameter (Param) setting for the command.
- [byte6], [byte7], [byte 8] are variable data inputs.
- [byte9] indicates the end of the command string, always 0D.

SERIAL COMMAND LIST – SET COMMANDS

Event	Cmd(Hex)	Value	Command（HEX, Default ID is 1）
Power	30	000: backlight off	3A 30 31 53 30 30 30 30 0d
		001: backlight on	3A 30 31 53 30 30 30 31 0d
		002: power off	3A 30 31 53 30 30 30 32 0d
		003: power on	3A 30 31 53 30 30 30 33 0d
Treble	31	-xx: -5~0	3A 30 31 53 31 2D 30 33 0d
		+xx: 0~5	3A 30 31 53 31 2B 30 33 0d
Bass	32	-xx: -5~0	3A 30 31 53 32 2D 30 35 0d
		+xx: 0~5	3A 30 31 53 32 2B 30 35 0d
Balance	33	-xx: -50~0	3A 30 31 53 33 2D 35 30 0d
		+xx: 0~50	3A 30 31 53 33 2B 32 30 0d
Contrast	34	000 ~ 100	3A 30 31 53 34 30 35 30 0d
Brightness	35	000 ~ 100	3A 30 31 53 35 30 35 30 0d
Sharpness	36	000 ~ 100	3A 30 31 53 36 30 31 30 0d
Sound Mode	37	001: Standard	3A 30 31 53 37 30 30 31 0d
		002: Custom	3A 30 31 53 37 30 30 32 0d
		003: Classroom	3A 30 31 53 37 30 30 33 0d
		004: Meeting	3A 30 31 53 37 30 30 34 0d
Volume	38	000 ~ 100	3A 30 31 53 38 30 35 30 0d
Mute	39	000: Off	3A 30 31 53 39 30 30 30 0d
		001: On	3A 30 31 53 39 30 30 31 0d
Video Source	3A	000: VGA	3A 30 31 53 3A 30 30 30 0d
		001: HDMI1	3A 30 31 53 3A 30 30 31 0d
		002: HDMI2	3A 30 31 53 3A 30 30 32 0d
		021: HDMI3	3A 30 31 53 3A 30 32 31 0d

		101: Android (HOME)	3A 30 31 53 3A 31 30 31 0d
		103: Slot in PC	3A 30 31 53 3A 31 30 33 0d
		104: Type-C1	3A 30 31 53 3A 31 30 34 0D
Language	3C	000: English	3A 30 31 53 3C 30 30 30 0d
		001: Français	3A 30 31 53 3C 30 30 31 0d
		002: Español	3A 30 31 53 3C 30 30 32 0d
		003: 繁中	3A 30 31 53 3C 30 30 33 0d
		004: 简中	3A 30 31 53 3C 30 30 34 0d
		005: Português	3A 30 31 53 3C 30 30 35 0d
		006: German	3A 30 31 53 3C 30 30 36 0d
		007: Dutch	3A 30 31 53 3C 30 30 37 0d
		008: Polish	3A 30 31 53 3C 30 30 38 0d
		009: Russia	3A 30 31 53 3C 30 30 39 0d
		010: Czech	3A 30 31 53 3C 30 31 30 0d
		011: Danish	3A 30 31 53 3C 30 31 31 0d
		012: Swedish	3A 30 31 53 3C 30 31 32 0d
		013: Italian	3A 30 31 53 3C 30 31 33 0d
		014: Romanian	3A 30 31 53 3C 30 31 34 0d
		015: Norwegian	3A 30 31 53 3C 30 31 35 0d
		016: Finnish	3A 30 31 53 3C 30 31 36 0d
		017: Greek	3A 30 31 53 3C 30 31 37 0d
		018: Turkish	3A 30 31 53 3C 30 31 38 0d
		019: Arabic	3A 30 31 53 3C 30 31 39 0d
		020: Japanse	3A 30 31 53 3C 30 32 30 0d
		021: Ukraine	3A 30 31 53 3C 30 32 31 0d
		022: Korean	3A 30 31 53 3C 30 32 32 0d
		023: Hungarian	3A 30 31 53 3C 30 32 33 0d
		024: Perisan	3A 30 31 53 3C 30 32 34 0d
		025: Vietnamese	3A 30 31 53 3C 30 32 35 0d
		026: Thailand	3A 30 31 53 3C 30 32 36 0d
		027: Catalan	3A 30 31 53 3C 30 32 37 0d
		028: Lithuanian	3A 30 31 53 3C 30 32 38 0d
		029: Croatian	3A 30 31 53 3C 30 32 39 0d
		030: Estonian	3A 30 31 53 3C 30 33 30 0d
Picture Mode	3D	000: standard	3A 30 31 53 3D 30 30 30 0d
		001: bright	3A 30 31 53 3D 30 30 31 0d
		002: soft	3A 30 31 53 3D 30 30 32 0d

		003: customer	3A 30 31 53 3D 30 30 33 0d
Hue (Color)	3E	000 ~ 100	3A 30 31 53 3E 30 33 30 0d
Backlight	3F	000 ~ 100	3A 30 31 53 3F 30 35 30 0d
Color Temp	40	000: Cool	3A 30 31 53 40 30 30 30 0d
		001: Standard	3A 30 31 53 40 30 30 31 0d
		002: Warm	3A 30 31 53 40 30 30 32 0d
Remote control command	41	000: Vol +	3A 30 31 53 41 30 30 30 0d
		001: Vol -	3A 30 31 53 41 30 30 31 0d
		010: Up	3A 30 31 53 41 30 31 30 0d
		011: Down	3A 30 31 53 41 30 31 31 0d
		012: Left	3A 30 31 53 41 30 31 32 0d
		013: Right	3A 30 31 53 41 30 31 33 0d
		014: Enter	3A 30 31 53 41 30 31 34 0d
		020: Menu	3A 30 31 53 41 30 32 30 0d
		021: Input	3A 30 31 53 41 30 32 31 0d
		022: Back/Exit	3A 30 31 53 41 30 32 32 0d
		031: Blank	3A 30 31 53 41 30 33 31 0d
		032: Freeze	3A 30 31 53 41 30 33 32 0d
		033: Mute	3A 30 31 53 41 30 33 33 0d
		034: Home	3A 30 31 53 41 30 33 34 0d
IR	42	000: Enable	3A 30 31 53 42 30 30 30 0d
		001: Disable	3A 30 31 53 42 30 30 31 0d
Speaker	43	000: off	3A 30 31 53 43 30 30 30 0d
		001: on	3A 30 31 53 43 30 30 31 0d
Touch	44	000: off	3A 30 31 53 44 30 30 30 0d
		001: on	3A 30 31 53 44 30 30 31 0d
Screen	45	000: off	3A 30 31 53 45 30 30 30 0d
		001: on	3A 30 31 53 45 30 30 31 0d
No signal power off	46	000: off	3A 30 31 53 46 30 30 30 0d
		001: 1 minute	3A 30 31 53 46 30 30 31 0d
		003: 3 minutes	3A 30 31 53 46 30 30 33 0d
		005: 5 minutes	3A 30 31 53 46 30 30 35 0d
		010: 10 minutes	3A 30 31 53 46 30 31 30 0d
		015: 15 minutes	3A 30 31 53 46 30 31 35 0d
		030: 30 minutes	3A 30 31 53 46 30 33 30 0d
		045: 45 minutes	3A 30 31 53 46 30 34 35 0d

		060: 60 minutes	3A 30 31 53 46 30 36 30 0d
On/Off Timer	47	Byte1~Byte15 (1) Byte1: Decide which Timer is selected Byte1=0x1~0x07. There are totally 7 Timers, this value is used to decide which Timer is (2) Byte2: 0x00 or 0x01, 0x00:Sunday disable; 0x01:Sunday enable (3) Byte3: 0x00 or 0x01, 0x00:Monday disable;0x01:Monday enable (4) Byte4: 0x00 or 0x01, 0x00:Tuesday disable; 0x01:Tuesday enable (5) Byte5: 0x00 or 0x01, 0x00:Wednesday disable; 0x01:Wednesday enable (6) Byte6: 0x00 or 0x01, 0x00:Thursday disable; 0x01:Thursday enable (7) Byte7: 0x00 or 0x01, 0x00:Friday disable; 0x01:Friday enable (8) Byte8: 0x00 or 0x01, 0x00:Saturday disable; 0x01:Saturday enable (9) Byte9: 0x00 or 0x01, 0x00: On Timer is disable; 0x01:On Timer is enable (10) Byte10: The Hour of the On Timer. Byte3=0x10~0x27. (decimal range: 16-39, Our program will subtract 16, the	On Timer: 09:08 sun 3A 30 31 53 47 01 01 00 00 00 00 00 00 01 19 18 00 00 00 00 0D Off Timer: 10:10 mon/frday 3A 30 31 53 47 02 00 01 00 00 00 01 00 00 00 00 01 1A 1A 00 0D Onf/Off Timer: 09:08/10:10 sun 3A 30 31 53 47 01 01 00 00 00 00 00 00 01 19 18 01 1A 1A 00 0D

		hour range is 0 to 23) (11) Byte11: The Minute of the On Timer. Byte4=0x10~0x4B. (decimal range: 16-75, Our program will subtract 16, the minute range is 0 to 59) (12) Byte12: 0x00 or 0x01, 0x00: Off Timer is disable; 0x01:Off Timer is enable (13) Byte13: The Hour of the Off Timer. Byte5=0x10~0x27. (decimal range: 16-39, Our program will subtract 16, the hour range is 0 to 23) (14) Byte14: The Minute of the Off Timer. Byte6=0x10~0x4B. (decimal range: 16-75, Our program will subtract 16, the minute range is 0 to 59) (15) Byte15: Treserved, and should be 0x00. If both byte9 and byte12 are set to disabled, it will delete the target timer if it exists	

SERIAL COMMAND LIST – GET COMMANDS

Event	Cmd (Hex)	Value	Command（HEX，Default ID is 1）
Power	30	000 : backlight off 001 : backlight on 002 : power off	3A 30 31 47 30 30 30 30 0D
Treble	31	-05 ~ +05	3A 30 31 47 31 30 30 30 0D
Bass	32	-05 ~ +05	3A 30 31 47 32 30 30 30 0D
Balance	33	-50 ~ +50	3A 30 31 47 33 30 30 30 0D
Contrast	34	000~100	3A 30 31 47 34 30 30 30 0D
Brightness	35	000~100	3A 30 31 47 35 30 30 30 0D
Sharpness	36	000~100	3A 30 31 47 36 30 30 30 0D
Sound Mode	37	000 : Movie 001 : Standard 002 : Custom 003 : Classroom 004 : Meeting	3A 30 31 47 37 30 30 30 0D
Volume	38	000~100	3A 30 31 47 38 30 30 30 0D
Mute	39	000: Off 001: On	3A 30 31 47 39 30 30 30 0D
Video Source	3A	000 : VGA 001 : HDMI1 002: HDMI2 003 : AV	3A 30 31 47 3A 30 30 30 0D

		022 : HDMI4 021 : HDMI3 031 : VGA2 032 : VGA3 051 : ATV 101 : Android 103 : Slot in PC 007 : Display Port 102 : Android Slot 104 : Type C1 105 : Type C2 106 : DTV 107 : YPRBR	3A 30 31 47 3A 30 30 30 0D
Aspect Ratio	3B	000 : 16:9 001 : 4:3 002 : PTP	3A 30 31 47 3B 30 30 30 0D
Language	3C	000: English 001: Français 002: Español 003: 繁中 004: 简中 005: Português 006: German 007: Dutch 008: Polish	3A 30 31 47 3C 30 30 30 0D

		009: Russia	3A 30 31 47 3C 30 30 30 0D
		010:Czech	
		011:Danish	
		012:Swedish	
		013:Italian	
		014:Romanian	
		015:Norwegian	
		016:Finnish	
		017:Greek	
		018:Turkish	
		019:Arabic	
		020:Japanse	
		021:Ukraine	
		022:Korean	
		023:Hungarian	
		024:Perisan	
		025:Vietnamese	
		026:Thailand	
		027:catalan	
		028:Lithuanian	
		029:Croatian	
		030:Estonian	
Picture Mode	3D	000 : standard	3A 30 31 47 3D 30 30 30 0D
		001 : bright	
		002 : soft	

		003 : customer	
Hue (Color)	3E	000~100	3A 30 31 47 3E 30 30 30 0D
Backlight	3F	000~100	3A 30 31 47 3F 30 30 30 0D
Color Temp	40	000 : Cool	3A 30 31 47 40 30 30 30 0D
		001 : Standard	
		002 : Warm	
Reomte comtrol(IR)	42	000: Enable	3A 30 31 47 42 30 30 30 0D
		001: Disable	
Spearker	43	000 : off	3A 30 31 47 43 30 30 30 0D
		001 : on	
HDCP1.X	0x53	000	3A 30 31 47 53 30 30 30 0D
HDCP2.X		001	3A 30 31 47 53 30 30 31 0D
Machine SN		002	3A 30 31 47 53 30 30 32 0D
MAC		003	3A 30 31 47 53 30 30 33 0D
Model Name		004	3A 30 31 47 53 30 30 34 0D
Model Version		005	3A 30 31 47 53 30 30 35 0D
Board SN		006	3A 30 31 47 53 30 30 36 0D
Region		007	3A 30 31 47 53 30 30 37 0D
Touch	44	000 : off	3A 30 31 47 44 30 30 30 0D
		001 : on	
Screen	45	000 : off	3A 30 31 47 45 30 30 30 0D
		001 : on	
No Singal power off	46	0~60	3A 30 31 47 46 30 30 30 0D

On/Off Timer	47	(1) Byte1[3:0]: The Number of the On/Off Timer. There are totally 7 On/Off Timers, and this byte is used to selected which timer is going to be accessed. (2) Byte1[7:4] is reserved, should be 0. (3) Byte2~15 are reserverd, should be 0x00.	3A 30 31 47 47 01 00 00 00 00 00 00 00 00 00 00 00 00 00 0D
HDMI out	48	000 : off 001 : on	3A 30 31 47 48 30 30 30 0D
HDMI encryption	49	000 : off 001 : on	3A 30 31 47 49 30 30 30 0D
HDMI out encryption mode	50	000 : off 001 : auto 002 : hdcp1.4 003 : hdcp2.2	3A 30 31 47 50 30 30 30 0D

SIMPLE TROUBLESHOOTING

MACHINE FAILS TO WORK NORMALLY

Remote control failure	Check whether there are other objects between the remote control and the equipment control receiving window, thus leading to the failure of the remote control.
	Check whether the battery electrode in the remote control is correct.
	Check whether the remote-control battery needs to be replaced.
The machine automatically shuts down	Check whether it is set to sleep or not.
	Check whether there was a sudden power outage.
	The system will automatically shut down if the interactive intelligent Panel's external channel loses signal for 5 minutes. Please check the signal input and connection.

PC MODE

Signal out of range	Check whether the display is set correctly.
	Check whether the resolution is the best.
	Adjust line and field synchronization in the menu.
The background has vertical lines or streaks	Adjust the clock and phase position in the menu.
	Select automatic correction in the menu.
The image lacks color; the color is incorrect	Check whether the VGA is not well connected or has a quality problem.
	Adjust chromatic and brightness or contrast in the menu.
Display format that is not supported	Select automatic correction in the menu.
	Adjust the clock and phase position in the menu.

TOUCH FUNCTION

The touch function is invalid	Check whether the size of the article touched is comparable with a finger.
Touch positioning is not correct	Check whether the touch pen is facing the screen.

VIDEO FUNCTION CAN'T WORK NORMALLY

No picture and no sound	Check whether the machine is in a started state.
	Check whether the signal wire is well plugged and whether INPUT corresponds.
	If in internal computer mode, check whether the internal computer is started.
With horizontal or vertical stripes or image dithering	Check whether the signal wire is well connected.
	Check whether other electronic equipment or power tools are placed around the machine.
No color, color is weak, or image is weak	Adjust chromatic and brightness or contrast in the menu.
	Check whether the signal wire is well connected.

AUDIO FUNCTION CAN'T WORK NORMALLY

With image but without sound	Check whether the mute button is pressed.
	Press VOL + / - to adjust the volume.
	Check whether the audio line is connected correctly.
Only one speaker has sound	Adjust the sound balance in the menu.
	Check whether the computer sound control panel only sets up one sound channel.
	Check whether the audio line is connected correctly.
HDMI output without sound	Check whether the external device is connected.

USB FIRMWARE UPDATE

The following procedure should only be performed as a troubleshooting step, or when no network is available. It is generally recommended to update via OTA, whenever possible.

All user data stored on the device will be erased because of this procedure.

THE PROCEDURE, STEP-BY-STEP:

1. Download the firmware from **Avocor Support**
    a. "AVOCOR_●●●●●●●.zip"
2. Format a USB drive as FAT32.
3. Extract the contents of the .zip file to the USB drive in the root directory.
4. Your USB drive should have only one folder in it called "upgrade_982"
5. Insert USB disk into the USB2.0 port of the display mainboard
6. Power off, then power on the panel via the A/C switch.
7. Observe that the display is in standby with a red power LED
8. Press and hold the power button until the LED twinkles red and white.
9. The power LED will keep twinkling red and white during the upgrade. It will take approximately 4 minutes to complete the upgrade procedure.
10. Done

Reach out to service@avocor.com if you have any questions or need any assistance with this procedure.

MAINTENANCE

Proper maintenance can avoid many early faults, and regular, careful cleaning can make the machine feel brand new. Please unplug the power before cleaning and maintenance to prevent electric shock.

CLEAN SCREEN

Please mix and stir a little fabric softener or tableware detergent with alcohol.

Please use a soft cloth and completely soak it in the mixture. Please remove the cloth and twist it to a half-dry state to wipe the machine screen.

Repeat this several times, and make sure not to squeeze the water into the machine when cleaning.

CLEAN FACE FRAME

Please wipe the front frame with a dry, soft, lint-free cloth.

NO USE OF MACHINE FOR A LONG TIME

If you haven't used the machine for a long time, such as during the holiday, please unplug the machine to prevent any possible dangers from lightning caused by the power supply ripple.

This symbol affixed to the product or its packaging indicates that it must not be processed with household waste. It must be brought to an electric and electronic waste collection point for recycling and disposal. By disposing of this product appropriately, you can also help prevent potentially negative environmental and human health consequences. Recycling materials helps preserve our natural resources. For further information regarding the recycling of this product, please contact your municipality, local waste disposal center, or the store where the product was purchased.

AVOCOR: THREE-YEAR LIMITED WARRANTY

Congratulations on purchasing an Avocor S10-Series display! Avocor is pleased to extend the following limited warranty to the original end-user customer of our products.

COVERAGE

Avocor warrants to the first end user customer that the product, when shipped in its original container, will be free from defective workmanship and materials, and agrees that it will, for a period of **three (3) years** from the date of purchase, repair or replace the defective product or part thereof, at Avocor's discretion, with a new or equivalent at no charge to the customer. Advanced Field Replacement (AFR) service is included as part of this warranty. Except as specified herein, this warranty covers all defects in material or workmanship in the product. AVOCOR'S LIABILITY FOR ANY DEFECTIVE PRODUCT IS LIMITED TO THE REPAIR OR REPLACEMENT OF THE PRODUCT AT AVOCOR's DISCRETION. REPLACEMENT PARTS OR PRODUCTS MAY BE NEW OR 'LIKE NEW' UNDER THE CONDITIONS SPECIFIED BELOW. All parts or products removed under this warranty become the property of Avocor.

The replacement part or product is warranted for the remainder of the original limited warranty period or thirty days from shipment, whichever is longer.

LIMITATIONS ON WARRANTY COVERAGE, DURATION, AND SERVICES MAY SOMETIMES VARY BASED ON THE LAWS OF SPECIFIC REGIONS, STATES, AND COUNTRIES. THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY HAVE OTHER RIGHTS WHICH VARY FROM JURISDICTION TO JURISDICTION.

EXCLUSIONS

This warranty does not apply to any cosmetic or consumable items of the Product or if the serial number or model number affixed to the Product has been removed, defaced, changed, altered or tampered with.

This warranty does not cover installation, signal reception problems, potential incompatibility with peripheral devices, or acts of nature. Avocor does not warrant nor shall it be liable for Products which have been subject to abuse, including, but not limited to, improper voltage, accident, misuse, negligence, lack of reasonable care, alteration, modification, tampering, improper installation, shipping damage, operation or maintenance or any damages or defects caused by repairs or attempted repairs performed by anyone other than Avocor personnel or an Avocor-authorized servicer. This warranty also excludes any damage to product glass due to pressure, abrasion, scratches, or actions otherwise

beyond normal operation of the product that would cause screen mura and image retention. Please refer to Avocor's pixel policy for warranty guidelines on pixel related issues.

CONCEALED DAMAGE

It is the customer’s responsibility to inspect new product(s) at the time of delivery.

If packaging is found damaged *at the time of delivery*, the Customer should refuse delivery and note on the delivery receipt the product and details pertaining to damage. The Customer may accept packages with minor damage but must take note of product details and damage on the delivery receipt.

If patent or obvious physical damage is detected *after delivery is accepted* and a “clean” or unmarked delivery receipt was returned, it is the customer’s responsibility to file an insurance claim to the shipping provider according to the requirements set forth in the shipping provider's policy.

If the product packaging is clean and undamaged, but patent or obvious physical damage is found on the product, the customer must report the damages to their product distributor, shipper, or seller, within the policy guidelines of the distributor, shipper, or seller.

If freight was arranged by Avocor, and patent or obvious physical damage to the packaging is not detected but found on the product or product accessories upon inspecting the product, the customer must report the damages to Avocor within 10 calendar days after the delivery date to receive warranty services.

CUSTOMER DATA

If the customer’s product is capable of storing software programs, data, and other information, it is the customer’s responsibility to protect its contents against operational failure. It is also the customer’s responsibility to keep a separate backup of the contents and remove all personal information and disable security passwords prior to delivering a product for warranty service. ANY PERSONAL CONTENT WILL BE DELETED AND STORAGE MEDIA WILL BE REFORMATTED IN THE COURSE OF WARRANTY SERVICE.

AVOCOR SHALL NOT BE LIABLE, OR IN ANY WAY RESPONSIBLE, FOR ANY INCIDENTAL OR CONSEQUENTIAL ECONOMIC OR PROPERTY DAMAGE. SOME REGIONS DO NOT ALLOW LIMITS ON WARRANTIES OR ON REMEDIES FOR BREACH IN CERTAIN TRANSACTIONS; IN SUCH REGIONS, THE LIMITS HEREIN MAY NOT APPLY. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. AVOCOR DISCLAIMS ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY, AND FITNESS FOR A PARTICULAR PURPOSE.

SERVICES

Technical Support: The Customer must contact Avocor Technical Support, via email at service@avocor.com in order to initiate an RMA or another warranty service. As part of this agreement, the Customer agrees to cooperate with Avocor: (A) to notify Avocor promptly of any defect, error or Hardware Product malfunction and to submit to Avocor such information that Avocor may reasonably require to reproduce the error or Hardware Product malfunction was discovered; (B) to follow Avocor's guidelines to troubleshoot reported faults on the defective product(s); (C) to install, if requested by Avocor and within Customer security guidelines, a network connection that will be made available to Avocor for the purpose of resolving problems, reviewing Customer use of software, or for any other reasonable purpose; (D) to have a certified technician repair or replace defective parts under Avocor's guidance; (E) to notify Avocor of any additional hardware or software not purchased from Avocor that may be used in conjunction with the Hardware Product.

Onsite services: If Avocor deems the Product repairable, it will, at its discretion, send a technical support representative and/or technician to provide onsite repair or replacement service for any repairable or replaceable parts. The customer may be asked to provide access to, and to assist in the handling of, the Product as deemed necessary by Avocor, under the instruction of the field representative or technician.

Return merchandise authorization / Return To Base (RMA / RTB): Avocor may, at its discretion, ship the Product to an Avocor Service Center for inspection, troubleshooting, and the replacement or repair of parts. If the product is deemed unrepairable, Avocor may, at its discretion, provide the customer with an equivalent, like-new, replacement product, or a credit for the cost of purchase.

RMA/RTB Terms:

1. The Customer must submit the RMA Agreement form with a valid proof of purchase to Avocor Support before receiving warranty services.
2. The Customer bears the cost of shipping faulty product to the designated Avocor Service Center, and Avocor bears the cost of shipping repaired product back to the Customer. Packing material may be provided by Avocor at a cost to the Customer if the Customer does not have suitable material (factory carton and a suitable pallet).
3. The Customer bears all responsibility and cost for the de-installation and packing of faulty product, and the unpacking and installation of repaired product.

Advance Field Replacement (AFR): Avocor will ship a like-new or refurbished replacement product to the customer, at its discretion, if the product defect is determined to be unrepairable. The Customer must provide the display model and serial number and will be asked to provide

contact details for the shipment. Upon approval, Avocor will ship the replacement product to the customer's site.

AFR Terms:

1. The Customer must submit the AFR Agreement form with a valid proof of purchase to Avocor Support before receiving warranty services.
2. Avocor bears responsibility for all costs related to shipping faulty or repaired product, however, packing material may be provided by Avocor at a cost to the Customer if the Customer loses the replacement product's carton, carton-contents, and/or pallet.
3. At the time of the new product's arrival to the customer, it is the customer's responsibility to facilitate the deinstallation of the defective product, installation of the replacement product, and packing of the defective product in either its original packaging or the packaging of the replacement. IF THE PRODUCT IS NOT RETURNED TO AVOCOR WITHIN 21 CALENDAR DAYS, AVOCOR HOLDS THE RIGHT TO CHARGE THE CUSTOMER IN FULL FOR THE REPLACEMENT PRODUCT AND RELATED SHIPPING COSTS.

SHIPMENTS TO CERTAIN INTERNATIONAL LOCATIONS MAY NOT BE SUBJECT TO THE ABOVE AFR GUIDELINES. CONTACT SUPPORT FOR FURTHER DETAILS. Shipping and/or handling charges may apply, at Avocor's discretion, to remote or secluded destinations where common commercial couriers do not deliver; to the shipment of large, oversized, cubed, or heavy items; or to items that require special handling.

Our delivery service is limited to the first floor of the delivery address. We are unable to deliver products that require removal of the product from the pallet. CONTACT SUPPORT FOR FURTHER DETAILS.

Defective on Arrival (DOA): If the Product is determined by Avocor to be defective within the first 90 days of the initial purchase by the Customer, it is deemed Defective on Arrival (DOA). In the case of a DOA, the Customer will be provided a brand-new equivalent Product. In the case that an RMA is issued after the 90 DOA period, the defective product will be replaced with a refurbished "like new" equivalent product, if available.

Repair with Expired Warranty: Avocor offers repair services, at cost to the Customer based on time and materials, for products with expired warranty. Customer will be responsible for all shipment costs.