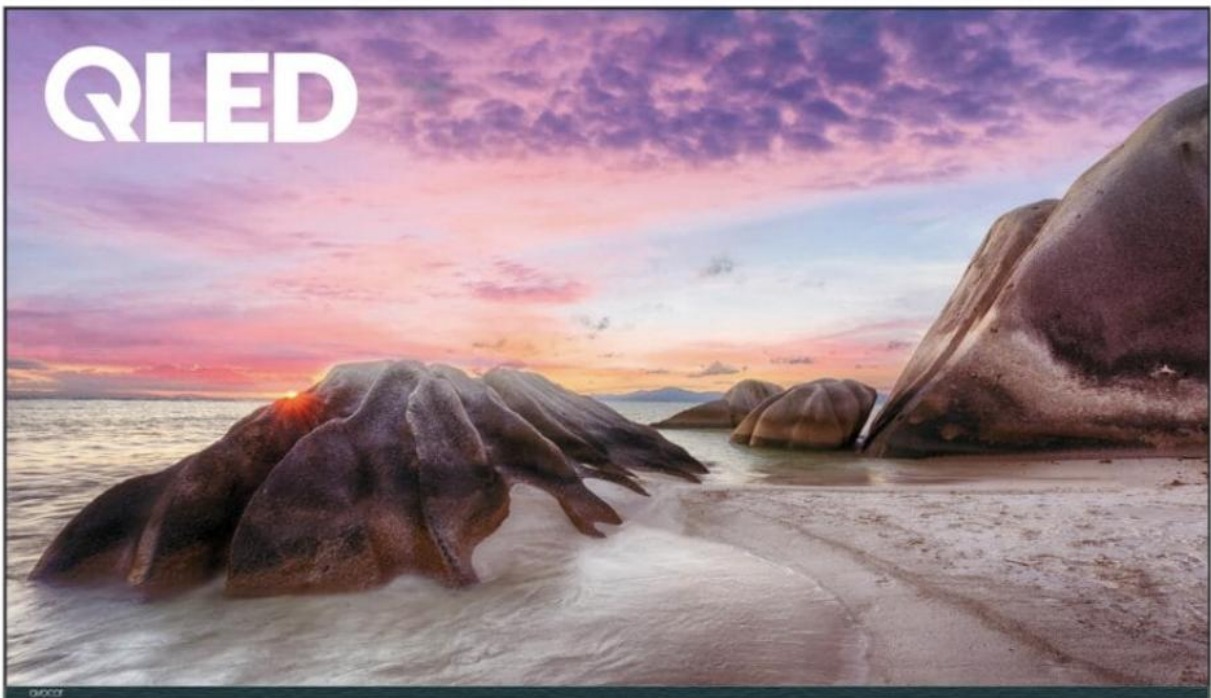


# avocor

## K-SERIES USER MANUAL



for models AVK-5510 | AVK-5610 | AVK-7510 | AVK-8510 | AVK-9810

# TABLE OF CONTENTS

<b>IMPORTANT SAFETY INSTRUCTIONS.....</b>	<b>3</b>
<b>Battery Disposal .....</b>	<b>4</b>
<b>Precautions .....</b>	<b>4</b>
Product.....	4
Power and Plug.....	4
Power Cord and Signal Cable .....	5
Use Environment.....	5
Cleaning .....	5
<b>Remote Control .....</b>	<b>6</b>
<b>General Operation .....</b>	<b>8</b>
Switching On.....	8
Switching Off .....	8
<b>Troubleshooting .....</b>	<b>9</b>
<b>User Interface .....</b>	<b>10</b>
The Out-of-box Experience .....	10
System Mode Explained .....	13
Avocor UiQ - Home Screen .....	14
Avocor UiQ - Settings .....	15
<b>External Control.....</b>	<b>25</b>
RS232 Control Configuration .....	25
LAN Control Configuration .....	25
Serial Command List.....	26
<b>Avocor: Three-year Limited Warranty .....</b>	<b>29</b>

## IMPORTANT SAFETY INSTRUCTIONS

The lightning with arrow symbols inside the equilateral triangle is designed to remind users that there is a non-insulating "dangerous voltage" inside the product casing, which may be strong enough to constitute a risk of electric shock.

1. To reduce the risk of electric shock, do not remove the cover (or back), as there are no user-repairable components inside. Transfer the repair to qualified personnel.
2. The exclamation mark inside the equilateral triangle is intended to alert users of important operation and maintenance instructions in the literature accompanying the device.
3. Do not install this device in enclosed or building spaces such as bookcases or similar devices and maintain good ventilation in open spaces. The ventilation openings should not be impeded by items such as newspaper tablecloths, curtains, etc.
4. Before installing or operating the device, refer to the information on the external bottom casing for electrical and safety information.
5. The power plug/electrical pair is used as a disconnected device and should remain operable.
6. To reduce the risk of fire or electric shock, do not expose this device to rainy or damp environments. The device shall not drip or splash, and objects filled with liquid (such as vases) shall not be placed on the device.
7. Batteries (batteries or battery packs) should not be exposed to excessive heat, such as sunlight or sparks.
8. Do not place the device in an unstable position. The device may fall, causing serious personal injury or death. Many injuries, especially to children, can be avoided by taking simple preventive measures, such as:
  - Do not place open flames on the device, such as lighting candles.
  - The exclamation mark inside the equilateral triangle is intended to alert users of important operation and maintenance instructions in the literature accompanying the device.
  - Use cabinets or brackets recommended by the device manufacturer.
  - Only use furniture that can safely support the device.
  - Do not place the device on tall furniture (such as cabinets or bookcases) without fixing the furniture and device on suitable brackets. Do not place the device on the cloth or other materials between the device and the supporting furniture.
  - Educate children about the dangers of climbing onto furniture when coming into contact with the device or its control devices. If your existing device is retained and located, the same precautions should be applied as mentioned
9. Do not place open flames on the device, such as lighting candles.
10. Keep a minimum distance of 5cm around all edges of the device for sufficient ventilation.
11. Hanging the device on the wall.

Warning: this operation requires two people.

To ensure a safe installation, observe the following safety notes:

- Check that the wall supports the device's weight and mount assembly.
- Follow the mounting instructions provided. The device must be installed on a vertical wall.

- Make sure to use screws only suitable for the material of the wall.
- Ensure the cables are placed so there is no danger of tripping over them. All other safety instructions about our device are also applicable here.

## BATTERY DISPOSAL

The batteries used in this device contain chemicals that are harmful to the environment. To preserve our environment, dispose of used batteries according to local laws or regulations. Do not dispose of batteries with regular household waste. For more information, please contact the local authority or the retailer where you purchased the device. All trademarks are the property of their respective owners, and all rights are acknowledged.



This device is a Class II or double-insulated electrical appliance. It has been designed not to require a safety connection to the electrical earth.



Always keep candles or other open flames away from this device to prevent a prolonged fire.



Correctly dispose of this device. This marking indicates that this device should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the device was purchased. They can take the device for environmentally safe recycling.

## PRECAUTIONS

Read all the instructions before operating the device. Keep these instructions for future use.

## PRODUCT

- Do not block or cover the ventilation openings on the back cover.
- Do not push objects of any kind into the device through the cabinet slots, as they could touch the current carrying parts or short-circuit parts, resulting in fire, electric shock, or damage to the device.
- Do not attempt to open the cabinet, as this may cause damage. No parts inside you can service by yourself. Refer all servicing to qualified personnel.
- Do not scratch or mar the device screen
- Do not impact the device screen with hard pressure, as this may severely damage the screen.

## POWER AND PLUG

Unplug the device under the following conditions:

- If the device will not be used for a long period of time.
- If the power cord or the power outlet/plug is damaged.

- Follow the instructions to install and adjust the device. Adjust those controls that are covered in these operating instructions, as improper adjustment of other controls may result in damage. If this happens, unplug the device and refer to the service personnel.
- If the device is subject to impact or has been dropped to have the cabinet damaged.

## **POWER CORD AND SIGNAL CABLE**

- Do not allow anything to rest on or roll over the power cord and the signal cable.
- Protect the power cord and the signal cable from being trampled.
- Do not overload the power cord or the power outlet.
- Do not expose the power cord and the signal cable to moisture.

## **USE ENVIRONMENT**









- Do not place the device on an unstable cart, stand, or table.
- Place the device in a place that allows good ventilation.
- Do not use the device near damp and cold areas.
- Protect the device from overheating.
- Do not use the device near damp and cold areas.
- Protect the device from overheating.
- Keep the device away from direct sunlight.
- The device shall not be exposed to dripping or splashing, and no objects filled with liquids, such as vases, shall be placed on the device.
- Do not use the device near excessively dusty locations.

## **CLEANING**

- Wipe the screen and the cabinet with a soft cloth or special liquid cleaner.
- Do not apply excessive force to the screen when cleaning.
- Do not use water or other chemical cleaner to clean the screen, as this may damage the surface of the device.

## REMOTE CONTROL



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

## GENERAL OPERATION

### SWITCHING ON

- Insert two batteries into the remote control.
- Precautions on using batteries:
  - Only use the battery types specified.
  - Make sure you use the correct polarity.
  - Do not mix new and used batteries.
  - Do not use rechargeable batteries.
  - Do not expose batteries to excessive heat such as sunshine or fire, or throw them in a fire, recharge them, or try to open them, as this could cause them to leak or explode.
  - Remove the batteries from the remote control if you have not been using it for a long period of time.
- Connect the supplied power cable to the device first. Then, connect the power cable to the power outlet.
- The device should only be connected to an AC power supply. It must not be connected to the DC supply under any circumstances, as there is a risk of electric shock.
- When powered on, the device will be turned on directly or standby.

**Note:** For some models, switch the device on by pressing the power button. The device is in standby mode if the power indicator lights up red. Press the button on the remote control or the “on” button on the device to turn on.

### SWITCHING OFF

- To put the device into standby mode, press the button on the remote control or the device. The device remains powered on but consumes little energy.
- Unplug the mains socket from the mains outlet to switch off the device.

# TROUBLESHOOTING

## **No PICTURE, NO SOUND**

- Check if the fuse or circuit breaker is working.
- Plug another electrical device into the outlet to make sure it is working or turned on.
- The power plug is in bad contact with the outlet.
- Check the signal source

## **No COLOR**

- Change the color system.
- Adjust the saturation.

## **THE REMOTE CONTROL DOES NOT WORK**

- Change the batteries.
- Batteries are not installed correctly.
- The main power is not connected.

## **No PICTURE, NORMAL SOUND**

- Adjust the brightness and contrast.

## **NORMAL PICTURE, NO SOUND**

- Press the Vol+ button to increase volume.
- Change the sound system.
- Volume is set to mute; press the mute button to restore sound.

## **IF THE DEVICE CRASHED**

- Press the Power button to turn off the device; then press the Power button again to reset the device.
- Unplug the power cord, then press the Power button to reset the device.

**Note:** Please contact sales if these two methods cannot be resolved.

## USER INTERFACE

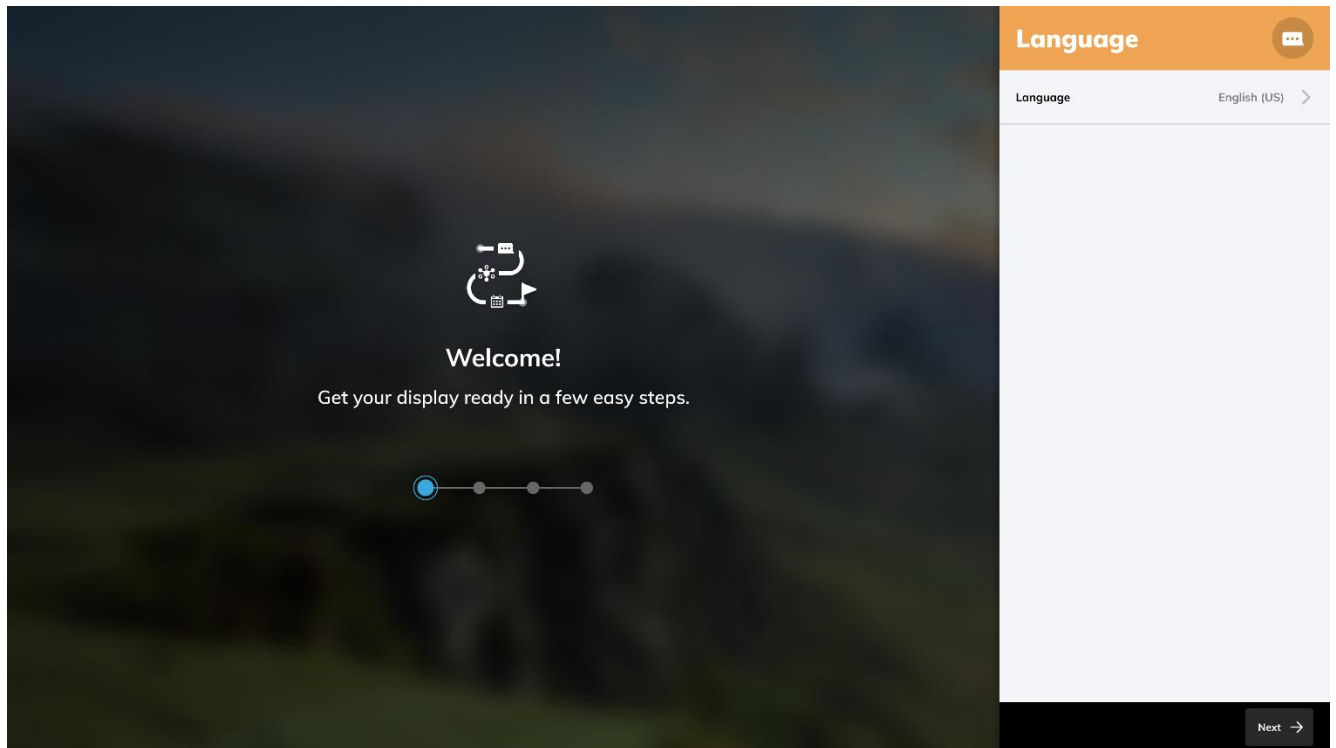
This chapter contains information regarding the operation of the display's user interface (UI) and provides details for each menu item.

### THE OUT-OF-BOX EXPERIENCE

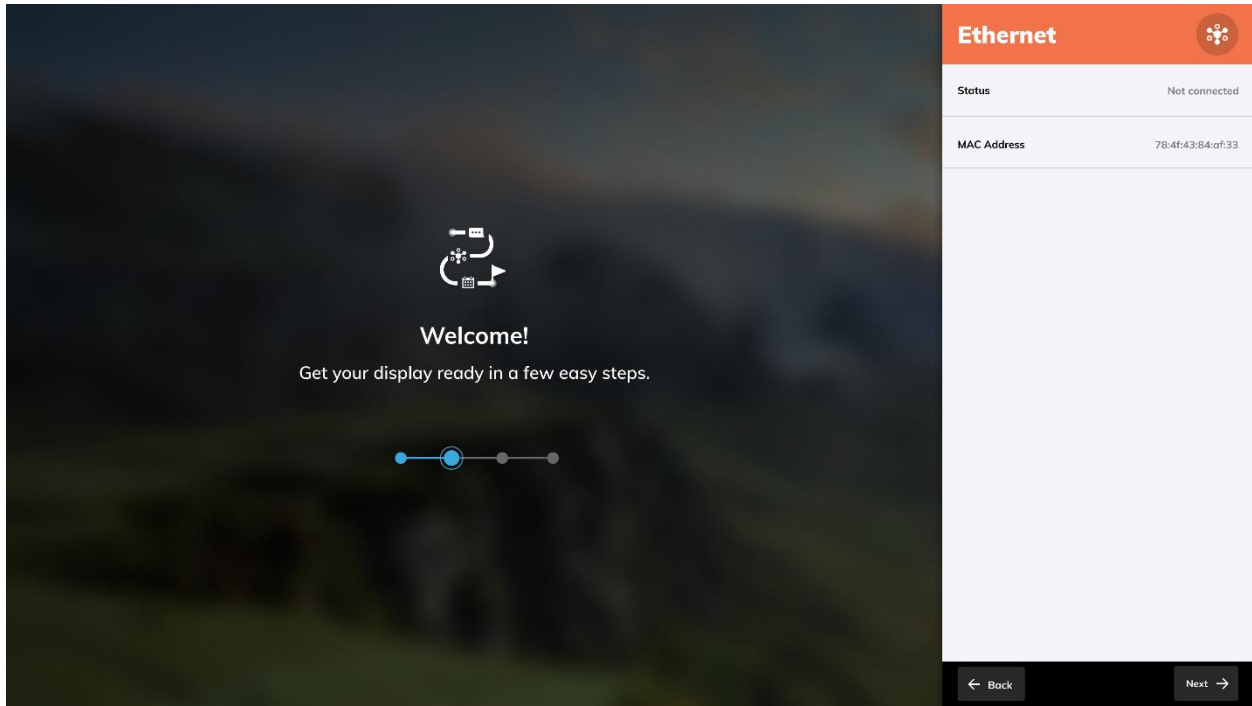
The out-of-box experience, or OOBE, takes you through important display configurations before taking you to the landing screen of your choosing.

**NOTE:** all of the following settings can be changed later, except for **System Mode** which can only be reconfigured with a **factory reset** of the display.

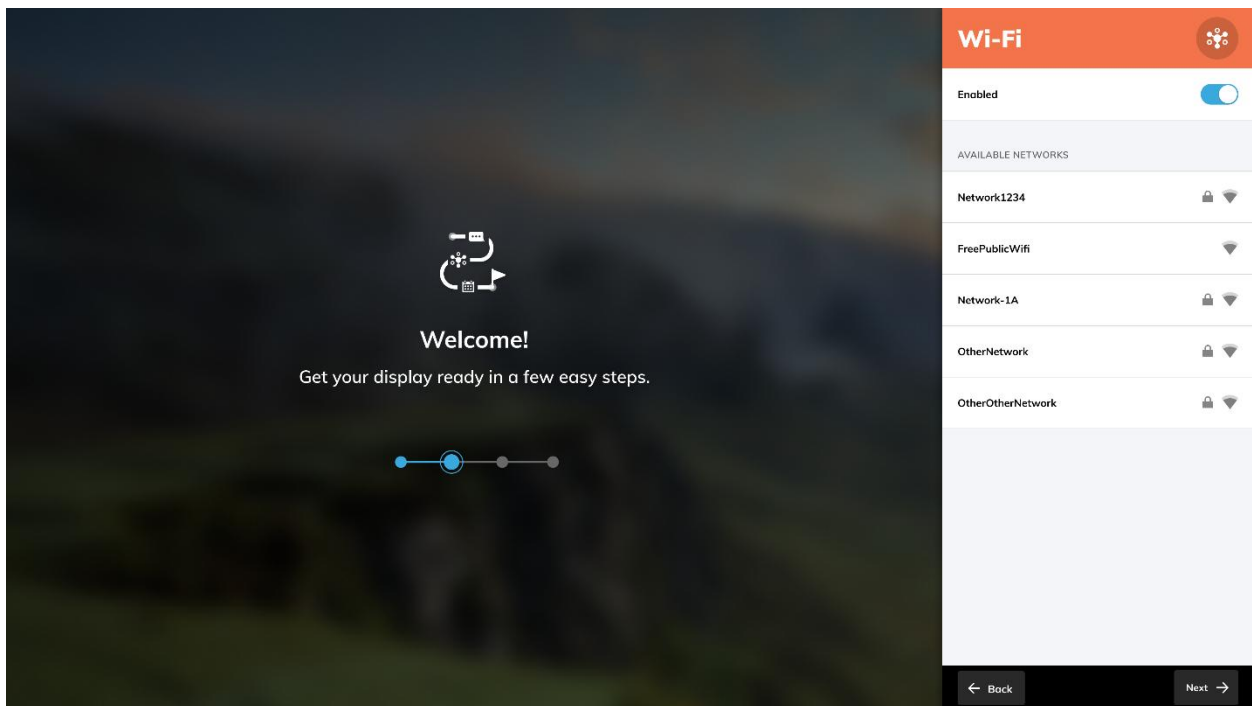
#### 1. Select your Language



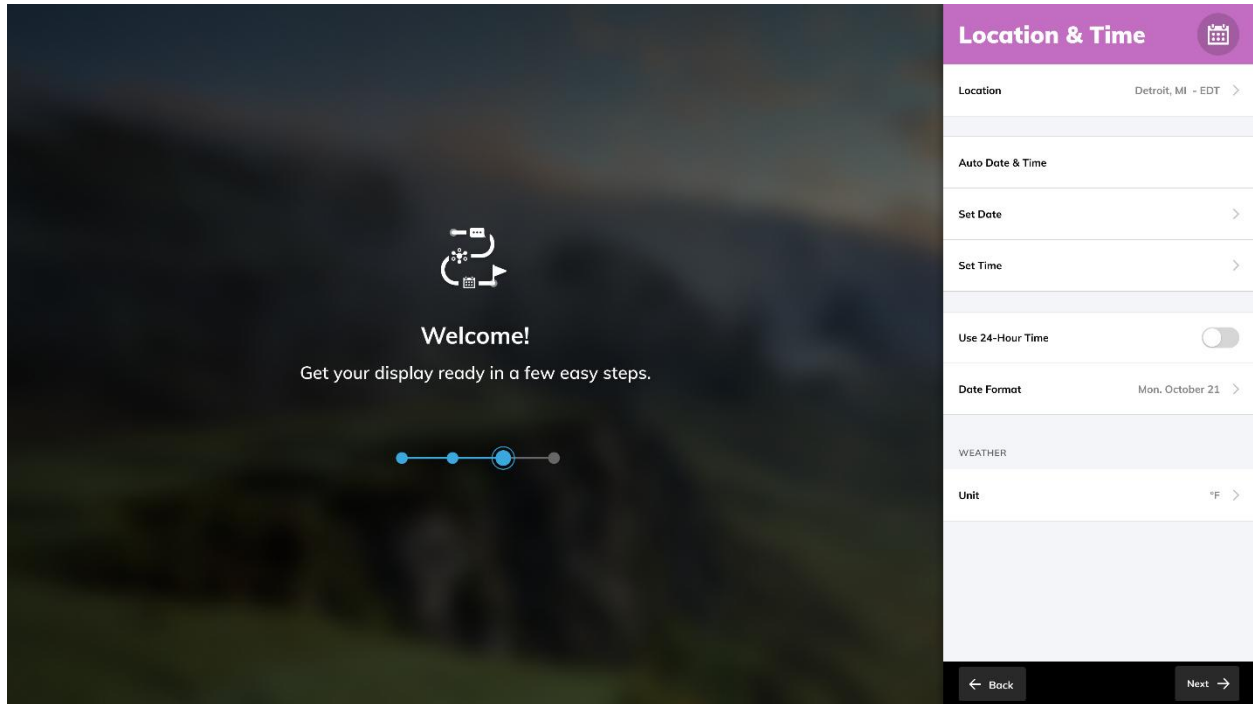
## 2. Verify your Ethernet network settings



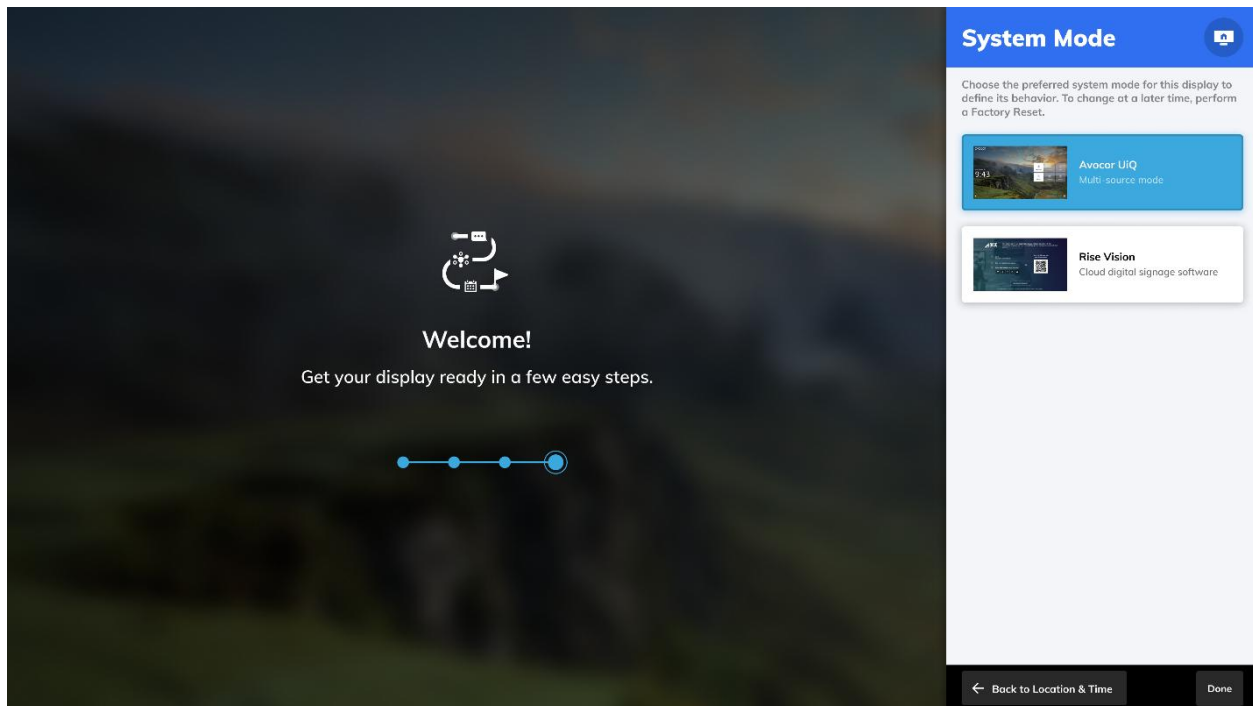
## 3. Configure your Wi-Fi network settings



#### 4. Configure Location & Time settings



#### 5. Finally, select your System Mode

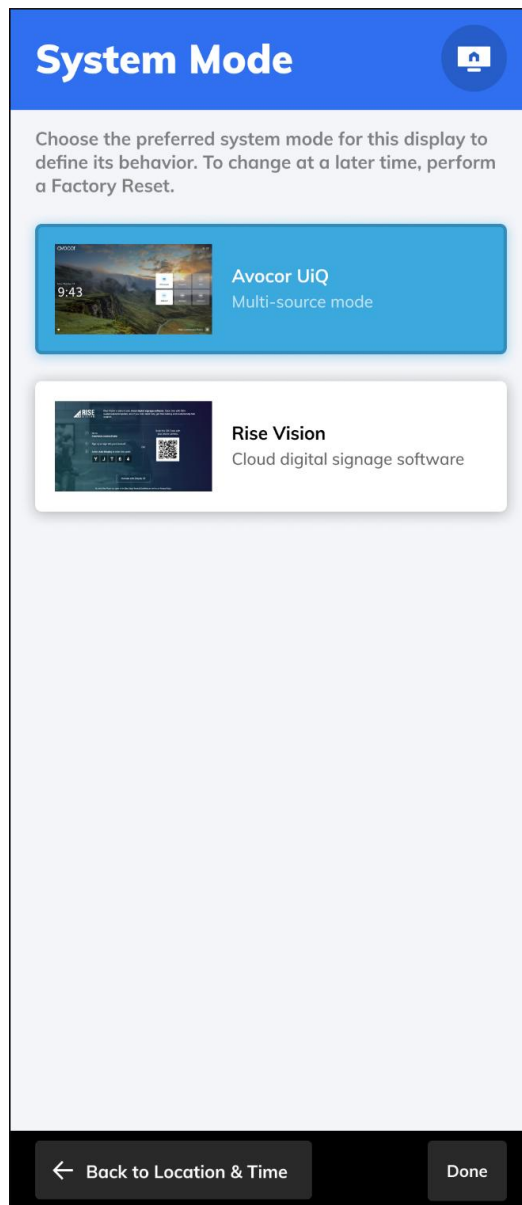


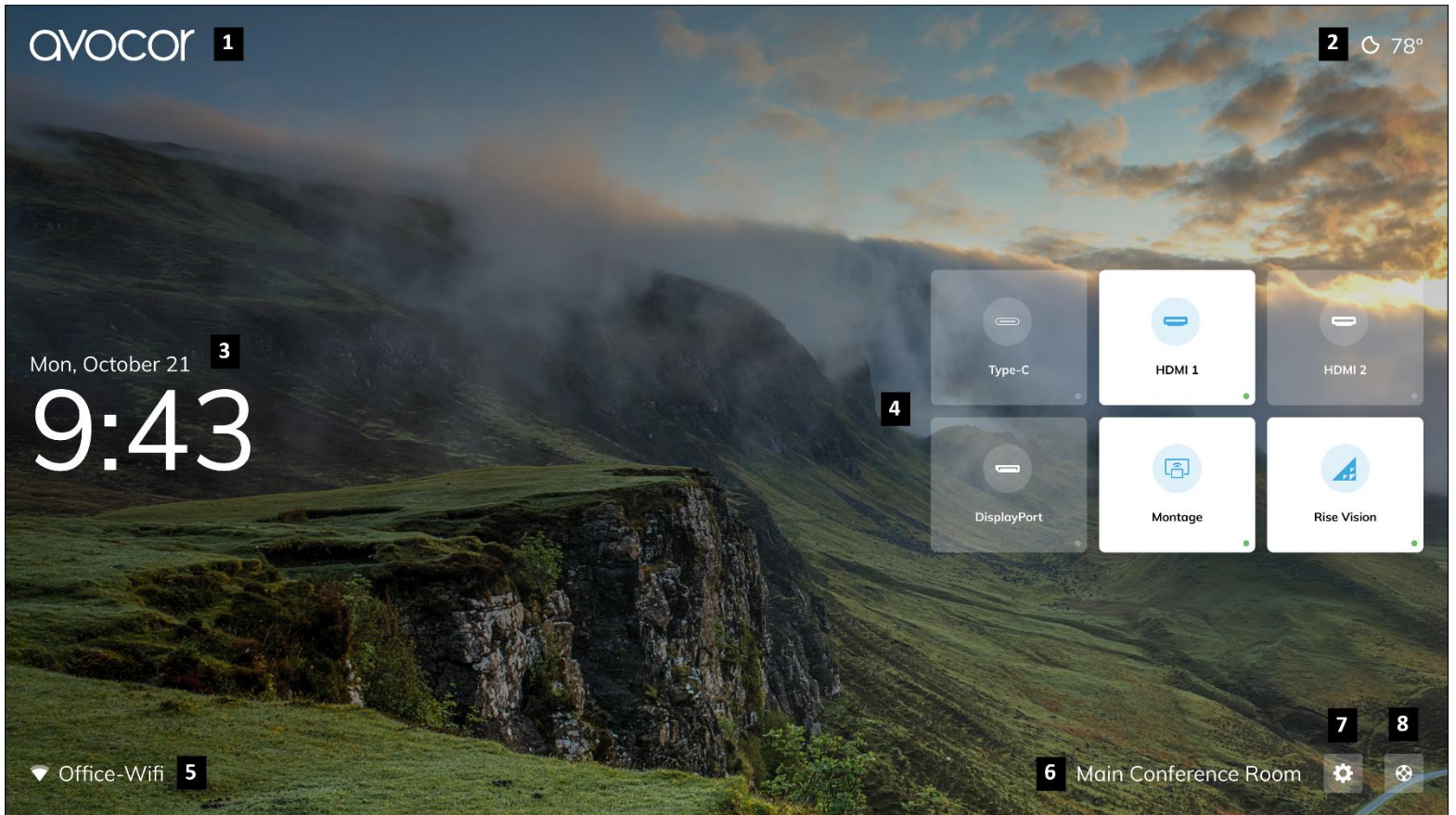
## SYSTEM MODE EXPLAINED

The system mode defines the display's base behaviour and landing **Home Screen**. Please note that System Mode can only be reconfigured with a factory reset.

Currently, there are two options to choose from to determine your system mode:

- **Avocor UiQ** – an intuitive Home screen that lays out your sources and applications in a tile format; useful for most configurations.
- **Rise Vision** – turn the display into an all-in-one digital signage solution; detailed setup instructions can be found here: <https://help.risevision.com/hc/en-us/articles/115002868706-Get-Started-in-3-Steps>

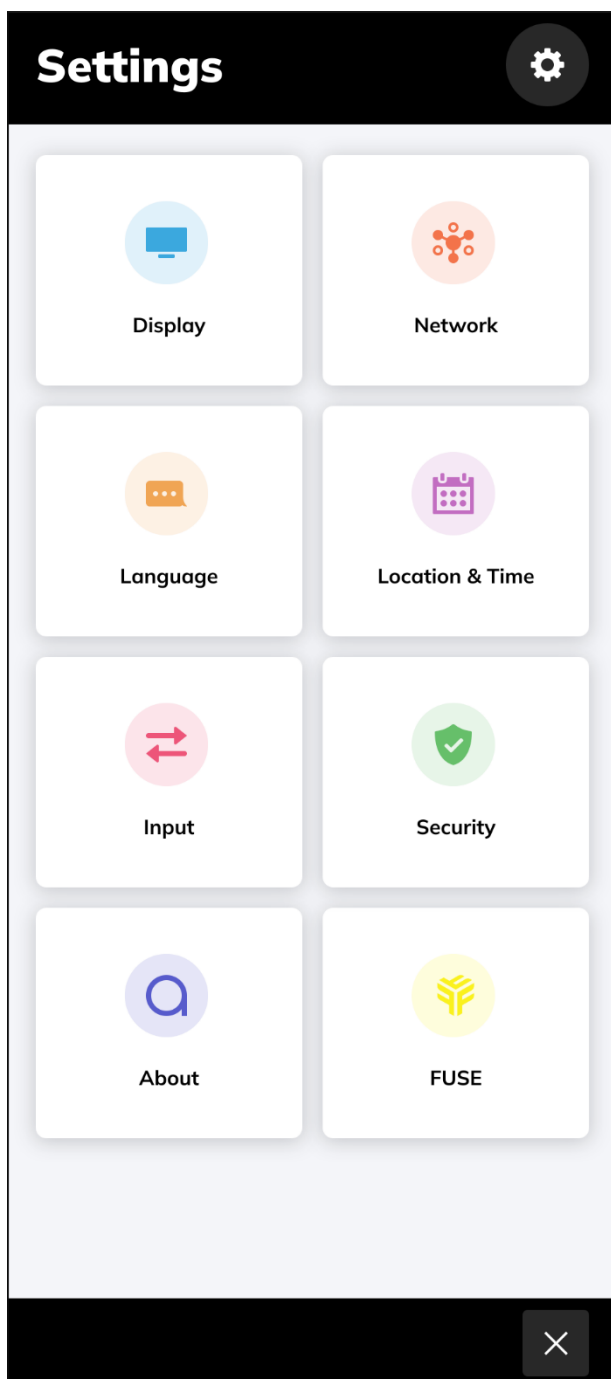




## AVOCOR UIQ – HOME SCREEN

1. **Avocor Logo:** can be toggled off in *Display* settings.
2. **Weather:** shows temperature in either degrees celsius or degrees fahrenheit depending on *Location & Time* settings.
3. **Date and Time:** can be configured in *Location & Time* settings.
4. **Source tiles:** white source tiles indicate a source device is connected to that input.
5. **Network Status:** indicates connectivity type (ethernet or Wi-Fi) and network name.
6. **Display Name:** can be configured in *Display* settings.
7. **Settings:** select to open *System Settings*.
8. **Support:** select to report a problem.

## AVOCOR UIQ - SETTINGS



**NOTE:** Not all features indicated in this manual may be available due to the software or hardware limitations of your specific product. Consult your sales or support expert for more information.

Device Settings are accessible by selecting the the gear icon on the Home Screen, or by pressing the settings button on the remote, which is also indicated by a gear icon.

**Display:** Avocor Logo, Name, Wallpaper, Energy Saving, Picture, Audio, Auto Close Menu, Overlay Buttons\*

**Network:** Status, LAN, Wi-Fi, Wake On LAN, LAN USB

**Language:** select the system language.

**Location & Time:** Location, Auto Date & Time, Set Date, Set Time, Use 24-Hour Time, Date Format, Unit

**Input:** Favorite Source, Starting Source, Timeout Source, Auto Detect New Input, Source Preview, Rename Sources, Advanced Settings.

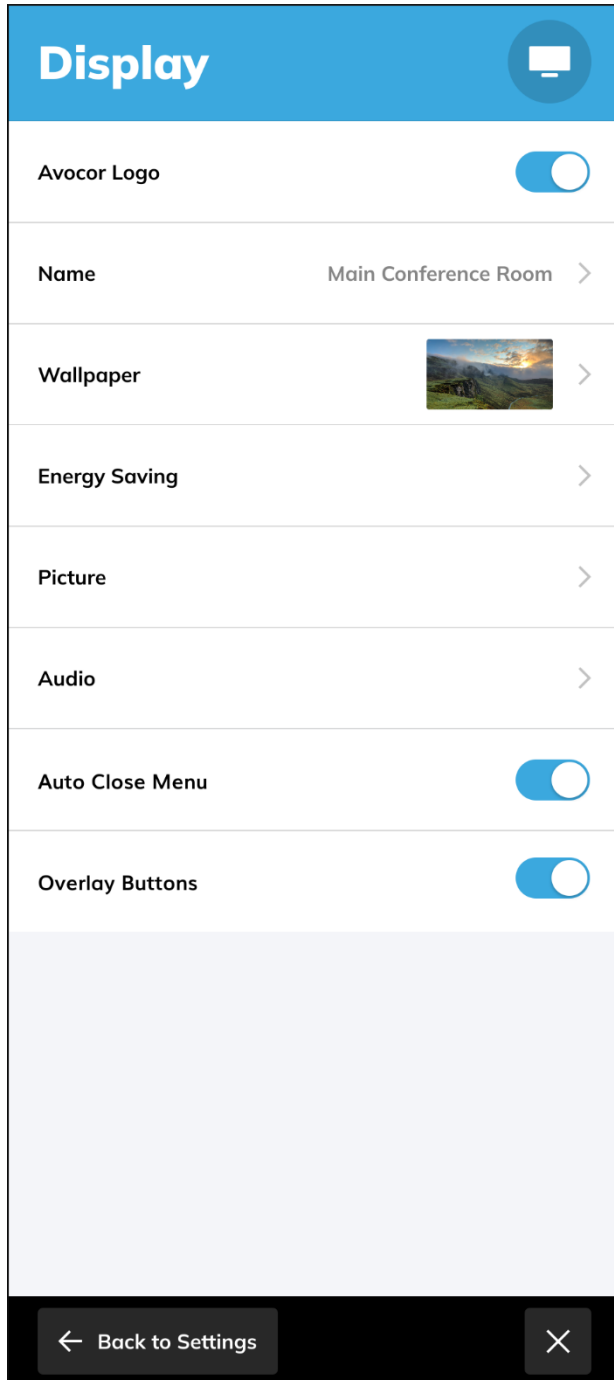
**Security:** Require Passkey, Set Passkey, Lock Front Button

**About:** Name, Firmware Version, Serial Number, Model Number, Update System, Factory Data Reset, Internal Storage, Warranty Information

**Fuse:** Claim QR Code, Status, Device Name, Space Name, Claimed By

\*Available only on applicable models.

## DISPLAY SETTINGS



**Avocor Logo:** toggle the appearance of Avocor Logo on the top-left corner of the *Home Screen*.

**Name:** the display's name indicated in the bottom-right corner of the *Home Screen*.

**Wallpaper:** configure the *Home Screen* wallpapers.

**Energy Saving:** *Auto Power Schedule, Power On Time, Power Off Time, Presence Detection\**, *Eco Mode\**, *Internal PC Always On\**

**Picture:** *Presets, Backlight, Advanced Settings*

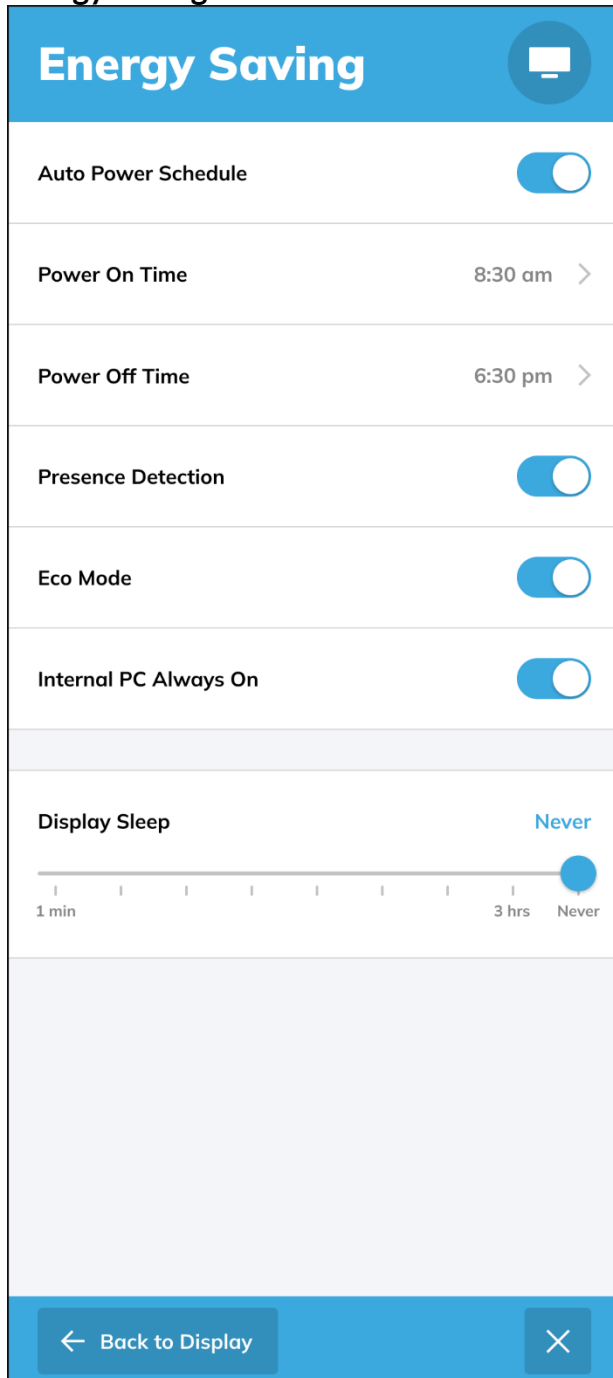
**Audio:** *Speaker Mute, Treble, Bass*

**Auto Close Menu:** toggle to enable or disable the settings menu to automatically close after a period of inactivity.

**Overlay Buttons\*:** toggle to enable or disable the overlay buttons to appear in the bottom right corner when touching the screen on an active source.

\*Available only on applicable models.

## Energy Saving



**Auto Power Schedule:** toggle to enable/disable *Power On Time* and *Power Off Time* settings.

**Power On Time:** the display will automatically power on at the selected time and days of the week; requires FUSE registration to enable.

**Power Off Time:** the display will automatically power off at the selected time and days of the week.

**Presence Detection\*:** toggle to enable/disable the display to wake on presence detection.

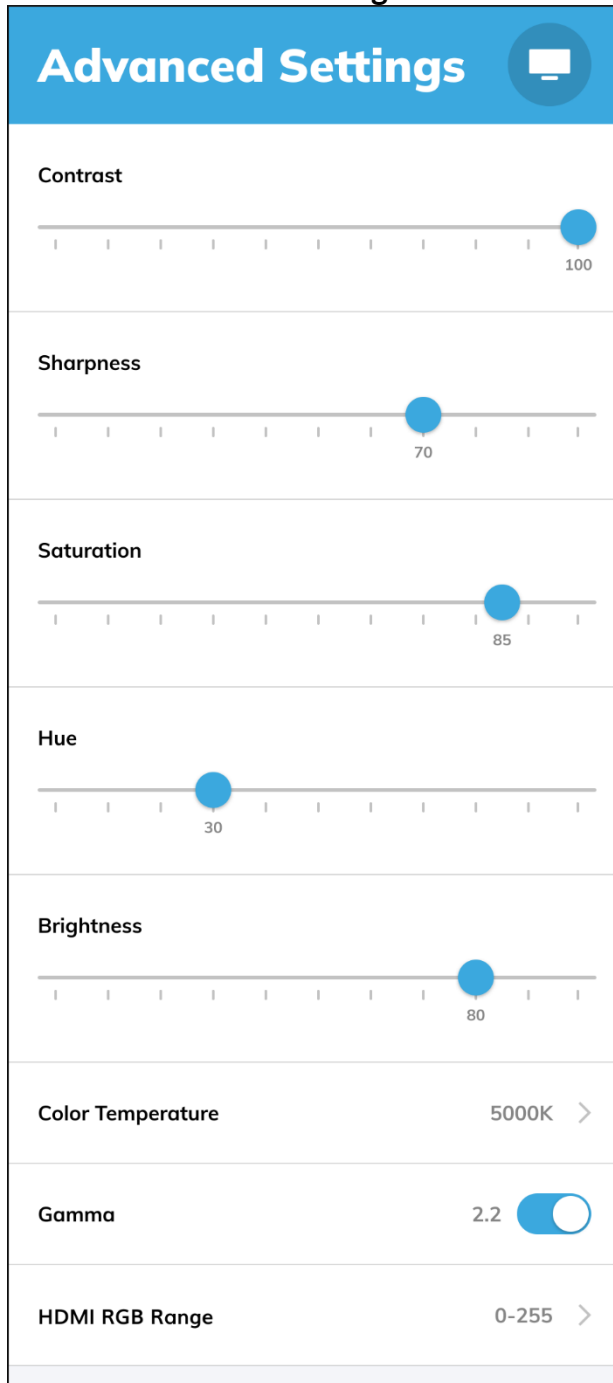
**Eco Mode\*:** toggle to enable/disable the energy efficient power state for the display (default: On).

**Internal PC Always On\*:** toggle to enable/disable the internal PC to remain powered on independent of the display's power state.

**Display Sleep:** set the period of inactivity required for the display to enter sleep/standby (default: Never).

\*Available only on applicable models.

## Picture - Advanced Settings



**Contrast:** adjust the contrast level between 0-100.

**Sharpness:** adjust the sharpness level between 0-100.

**Saturation:** adjust the saturation level between 0-100.

**Hue:** adjust the hue value between 0-100.

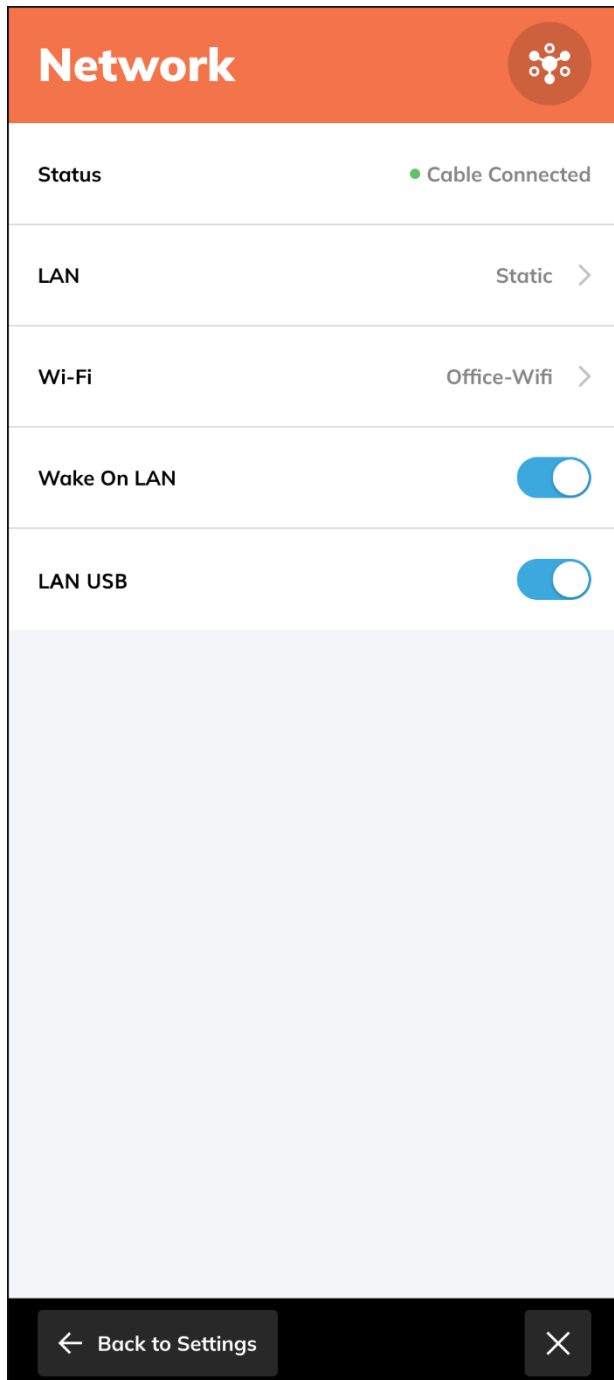
**Brightness:** adjust the brightness level between 0-100.

**Color Temperature:** set the color temperature of the image from values 5000K, 6500K, 7500K, 9300K.

**Gamma:** toggle to enable gamma 2.2.

**HDMI RGB Range:** set the HDMI RGB range from values Auto, 0-255, 16-235.

## NETWORK SETTINGS



**Status:** shows the current network connection status for the display.

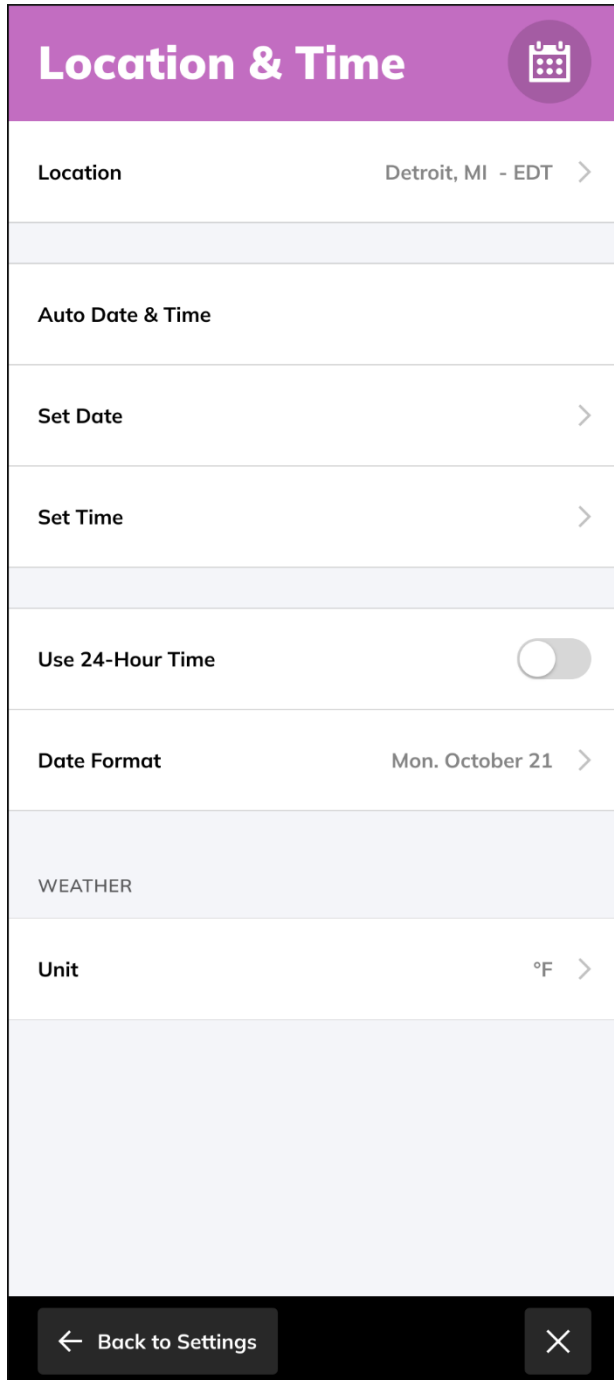
**LAN:** configure network settings for an ethernet/LAN connection.

**Wi-Fi:** configure network settings for Wi-Fi connection.

**Wake On LAN:** toggle to enable/disable wake via LAN packet.

**LAN USB:** toggle to enable/disable network connection passthrough from the display to USB-connected source devices.

## LOCATION & TIME SETTINGS



**Location:** enter a location of reference for time and weather-related settings.

**Auto Date & Time:** toggle on to acquire the date & time automatically with regards to the *Location* setting and network connection.

**Set Date:** when *Auto Date & Time* is toggled off, manually set the date on the display's internal clock.

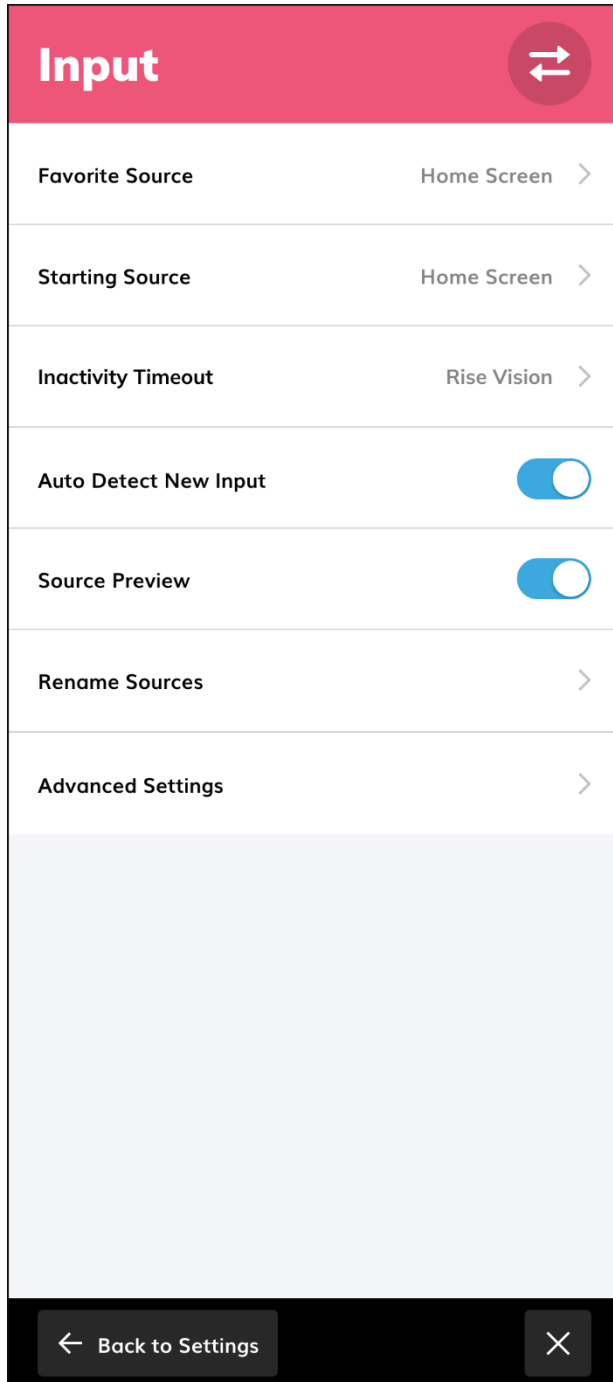
**Set Time:** when *Auto Date & Time* is toggled off, manually set the time on the display's internal clock.

**Use 24-Hour Time:** toggle to enable/disable 24-hour format for the clock.

**Date Format:** select the format of the date as it appears on the *Home Screen*.

**Weather - Unit:** select either *Degrees Celsius* or *Degrees Fahrenheit* for the weather indicator on the *Home Screen*.

## INPUT SETTINGS



**Favorite Source:** select a source input to assign to the *Home* button on the remote control (default: *Home Screen*).

**Starting Source:** select the source input to show when powering on the display (default: *Home Screen*).

**Inactivity Timeout:** select a source that the display will automatically switch to after a set period of inactivity (default: *Disabled*).

**Auto Detect New Input:** toggle to enable the display to switch to a newly connected source input automatically.

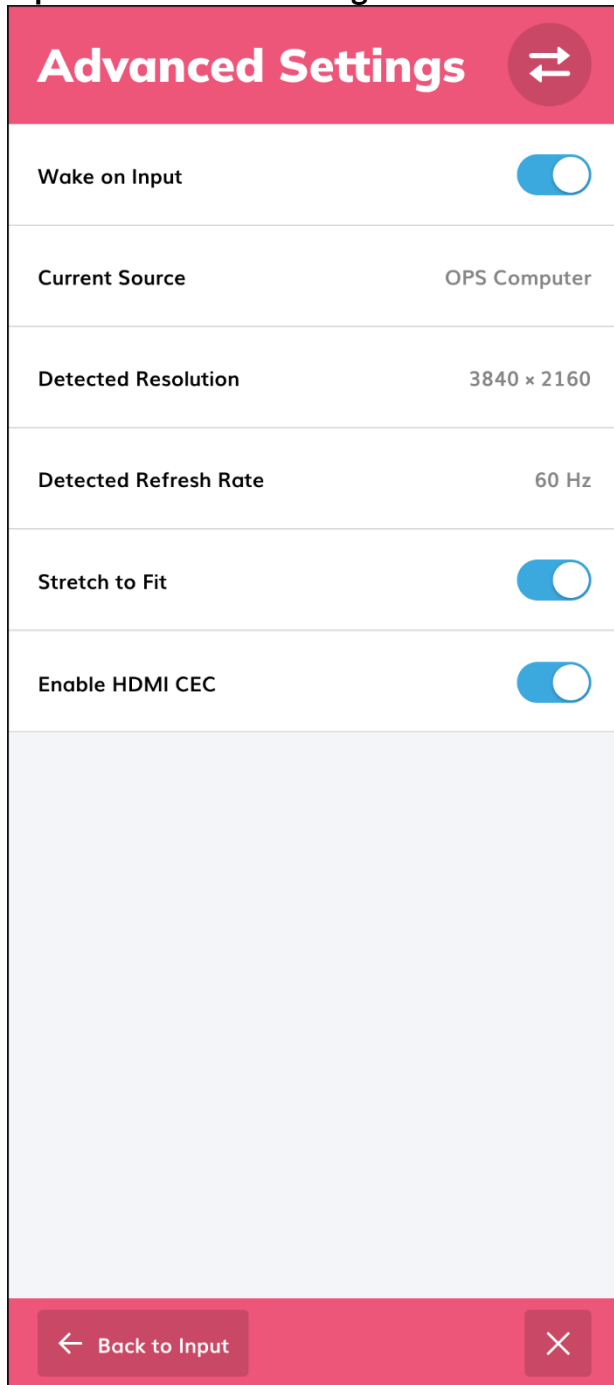
**Source Preview:** toggle to show a preview of the source when tapping on a *Source Tile* on the *Home Screen*.

**Rename Sources:** change the names of source inputs as they appear on the display and *Home Screen*.

**Advanced Settings:** *Wake on Input, Current Source, Detected Resolution, Detected Refresh Rate, Stretch to Fit\*, Enable HDMI CEC\**.

\*Available only on applicable models.

## Input – Advanced Settings



**Wake on Input:** toggle on to enable the display to wake from standby once a source device is connected.

**Current Source:** shows the name of the source currently activated on the display (read-only).

**Detected Resolution:** shows the detected resolution of the currently activated source (read-only).

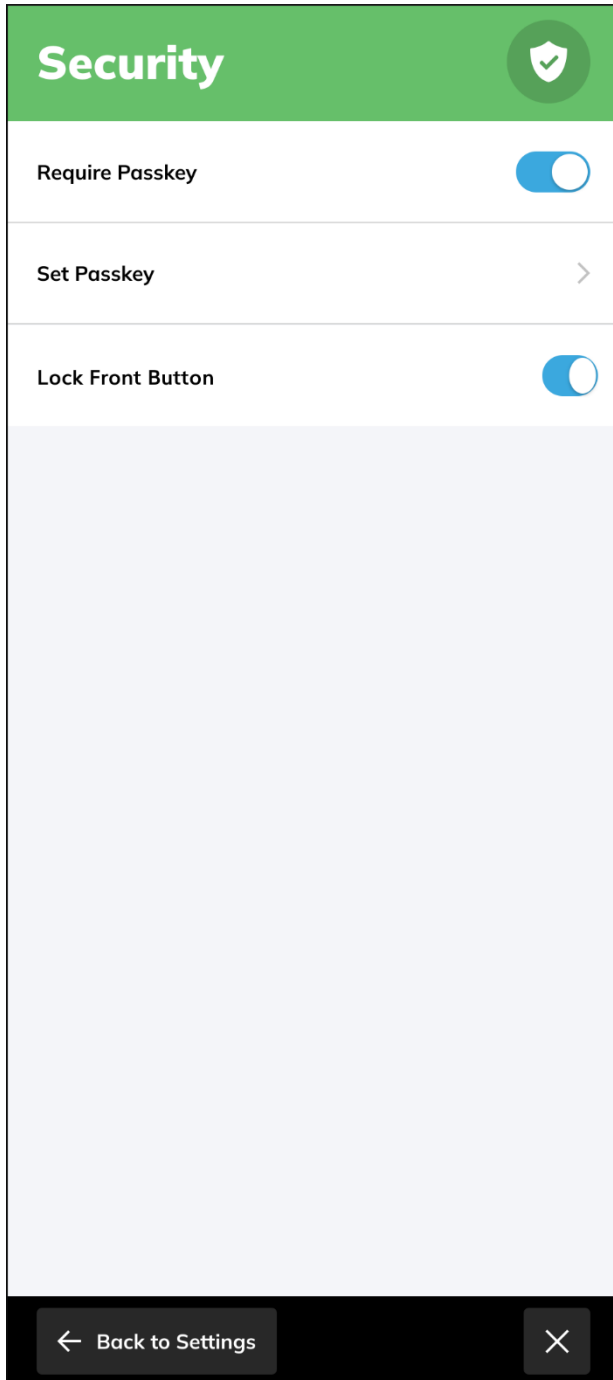
**Detected Refresh Rate:** shows the detected refresh rate of the currently activated source (read-only).

**Stretch to Fit\*:** for 21:9 displays, enable to stretch the image of a non-21:9 source to fit the entire screen.

**Enable HDMI CEC\*:** enable to allow for HDMI CEC control with applicable source devices.

\*Available only on applicable models.

## SECURITY SETTINGS

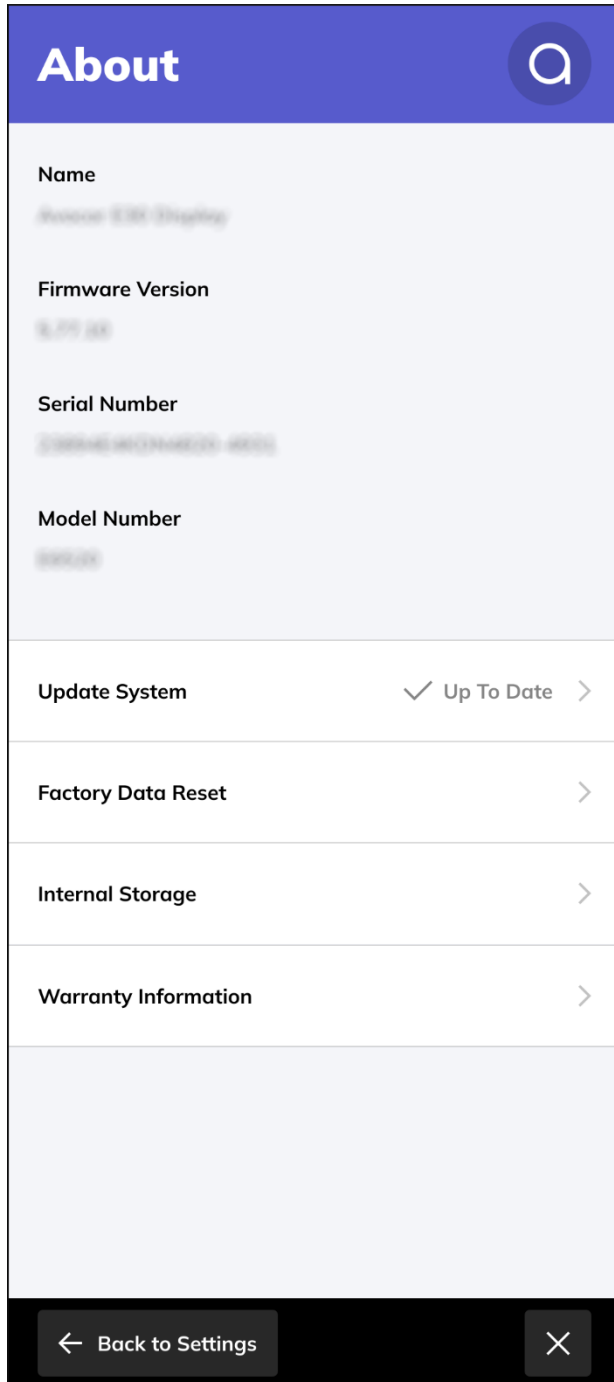


**Require Paskey:** toggle on to require a passkey to access the display's *Settings* menus (*Set Paskey* required).

**Set Paskey:** set a passkey for *Require Paskey*.

**Lock Front Button:** toggle on to lock the display keypad and panel buttons, preventing unwanted interactions with display controls.

## ABOUT



**Name:** name of the display, as configured in *Display* settings or FUSE.

**Firmware Version:** shows the current firmware version of the display.

**Serial Number:** shows the serial number of the display.

**Model Number:** shows the model number of the display.

**Update System:** indicates whether an OTA update is available for the device or if the device is up to date; select to perform a manual *USB Update*.

**Factory Data Reset:** select to begin the *Factory Reset* process.

**Internal Storage:** shows storage and memory capacity for the device.

**Warranty Information:** shows the warranty's *Effective* date, *Expiration* date, *Type*, and *Duration*.

## EXTERNAL CONTROL

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

### RS232 CONTROL CONFIGURATION

Connect your control system or PC to the Female DB9 port on the display.

Communication settings:

**Baud Rate:** 9600

**Data Bit:** 8 bit

**Stop Bit:** 1 Bit

**Parity Bit:** No Parity

*Note:* Update to [firmware version 1.1.15](#) to avoid a baud rate mismatch

### 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.

Communication settings:

**IP:** Device IP address

**Port:** 59596

## SERIAL COMMAND LIST

Event	Value	Command	Note
Power	On	55 00 8E 00 E3	Use these commands when: <b>Power Down Behavior</b> = Power off
	Off	55 00 8E 0F F2	*The setting is located at: Settings > Display > Power & Energy > Power Down Behavior
	Wake	AA 00 01 01 AC	Use these commands when: <b>Power Down Behavior</b> = Sleep
	Standby	AA 00 01 00 AB	*The setting is located at: Settings > Display > Power & Energy > Power Down Behavior
	GET Power	AA 00 02 00 AC	<b>Reply:</b> No Reply = Off AA 00 02 00 AC = Sleep AA 00 02 01 AD = On
Remote	Up	55 00 00 01 56	
	Down	55 00 00 02 57	
	Left	55 00 00 03 58	
	Right	55 00 00 04 59	
	Confirm/OK	55 00 00 00 55	
	Return/Back	55 00 0A 00 5F	
Volume	Toggle Mute	55 00 1A 00 6F	

	GET Mute	AA 00 03 00 AD	<b>Reply:</b> AA 00 03 00 AD = Not mute AA 00 03 01 AE = Mute
	Volume Up 1%	55 00 0C 00 61	
	Volume Down 1%	55 00 0E 00 63	
	SET Volume	55 00 0F XX YY	<b>XX</b> = (00-64) Desired Volume (Hex) <b>YY</b> = Checksum (Sum of Bytes mod 256)
	GET Volume	AA 00 04 00 AE	<b>Reply:</b> AA 00 04 XX YY <b>XX</b> = (00-64) Current Volume (Hex) <b>YY</b> = Checksum (Sum of Bytes mod 256)
Backlight	SET Backlight	55 00 89 XX YY	<b>XX</b> = (00-64) Desired Backlight (Hex) <b>YY</b> = Checksum (Sum of Bytes mod 256)
	GET Backlight	55 00 8B 00 E0	<b>Reply:</b> 55 00 8B XX YY <b>XX</b> = (00-64) Current Backlight (Hex) <b>YY</b> = Checksum (Sum of Bytes mod 256)
Source	Switch to Home	55 00 91 00 E6	
	Switch to HDMI 1	55 00 80 08 DD	

	Switch to HDMI 2	55 00 80 09 DE	
	Switch to TYPE-C	55 00 80 16 EB	
	GET Source	AA 00 05 00 AF	<p><b>Reply:</b></p> <p>AA 00 05 00 AF = Home</p> <p>AA 00 05 01 B0 = HDMI1</p> <p>AA 00 05 02 B1 = HDMI2</p> <p>AA 00 05 03 B2 = Type-C</p>

## AVOCOR: THREE-YEAR LIMITED WARRANTY

Congratulations on purchasing an Avocor K-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 JURISDICITON 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. 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 Repair:** 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. 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.

**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 Guidelines:** 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, and then send the defective back with the same driver that delivered the replacement product on that same day. If the customer is not able to perform the same-day swap they will incur the cost of freight. Additionally, if the product is not returned within 15 business days, the customer will be invoiced in full for the replacement product.

**SHIPMENTS TO CERTAIN INTERNATIONAL LOCATIONS MAY NOT BE SUBJECT TO THE ABOVE AFR GUIDELINES. 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.

*For more information, please email [service@avocor.com](mailto:service@avocor.com).*