Hybrid Conference System with BYOM

eShare W90

User Manual

AV Access

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Introduction

Overview

The eShare W90 is a high-performance BYOD presentation switcher with wireless presentation and conference capability. It equips two built-in Wi-Fi modules and offers multiple access approaches, including Airplay Mirroring, Miracast, Dongle and physical USB-C and HDMI ports, with which you can project the screen contents of your computers (Mac/Windows) or mobile devices (iPhone/iPad/ Android phone) to up to two displays.

Multiple features like automatic switching of input signal and multiview layout, CEC, wireless conference, Guide Screen, and OSD are also included. It is a collaboration terminal that perfect for conferencing system.

Features

- Provides one USB-C and one HDMI inputs, as well as two HDMI outputs.
- In addition to video input, the USB-C input also supports PD charging up to 65W, 1000BaseT Ethernet connection and USB 3.0.
- Supports multiview if only one HDMI output port is connected to an HDMI display.
- Built-in Wi-Fi modules for wireless connectivity with devices over Airplay Mirroring, Miracast, Dongle and Google Cast[1].
- Supports wireless conference (connecting between the host PC and USB conference peripherals wirelessly via a Dongle).
- Supports input resolutions up to 4K@30Hz 4:4:4.
- Supports output resolutions up to 4K@60Hz 4:4:4 (4K@30Hz 4:4:4 for HDMI OUT 2).
- Fast seamless switching.
- Independent analog audio output.

- Built-in triple USB 3.0 switcher allows for USB switching among three USB hosts.
- Two Ethernet ports for networking flexibility and security.
- Detailed and friendly OSD information.
- Offers friendly Web UI for easy configuration.

Note: Google Cast[1] feature will be available in further firmware version soon.

Package Contents

Before you start the installation of the product, please check the package contents:

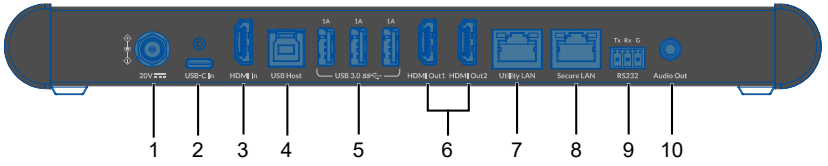
- eShare W90 x 1
- DC 20V 6A Power Adapter x 1
- 3.5mm 3-Pin Phoenix Male Connector x 1
- HDMI Cable (1.5m) x 1
- USB Type-C Cable (2m) x 1
- USB 3.0 Type-A to Type-B Cable (1.8m) x 1
- Mounting Brackets x 2 (with 4 x Screws)
- User Manual x 1

Panel

Front Panel

#	Name	Description
1	Reset	Reset button for the following two functions: • When the device is powered on, short press the button, the device's OSD information appears on the display screen for 10 seconds. • When the device is powered on, press and hold the button for at least 5 seconds, the device reboots and restores to its factory defaults.
2	Status	Working status LED indicator. • **Blinking quickly**: The device is booting. / The device is being upgraded. • **Lighting constantly**: The device has started. / The device is working properly. • **Blinking slowly**: The device is in standby state. • **Off**: The device is powered off.
3	Pairing	USB-C port. Connect to the dongle for pairing or upgrading the dongle.
4		Kensington security slot.

Rear Panel



#	Name	Description
1	20V	Connect to the DC 20V 6A power adapter provided.
2	USB-C In	USB 3.0 type-C port that supports USB-C video input, PD charging (up to 65W), 1000BASE-T Ethernet connection and USB 3.0. Connect to a USB-C source.
3	HDMI IN	Connect to an HDMI source.
4	USB Host	USB 3.0 type-B port. Connect to a USB host device.

#	Name	Description
5	USB 3.0	3 x USB 3.0 type-A ports for the following two functions: (1) Connect to USB peripheral devices (e.g. keyboard, mouse, touch screen, camera, speakerphone, etc.) for USB expansion. **Note:** • Keyboard and mouse are not available for signal return to Dongle wirelessly. • Each 1A port can output DC 5V 1A power to the USB peripheral. (2) Connect to a USB flash drive for firmware upgrade. For more information, refer to the Firmware Upgrade section.
6	HDMI Out 1-2	Connect to HDMI displays.
7	Utility LAN	2 x RJ-45 ports. Connect to network devices for LAN control, network access and Airplay Mirroring signal input. Tip: For more information about the usage of two Ethernet ports, refer to the Network Mode Configuration section.
8	Secure LAN	
9	RS232	3-Pin 3.5mm phoenix connector for the following two functions: • Connect to a peripheral (e.g. a projector) to control the peripheral (in com mode). • Connect to a controller (e.g. a computer) to control this device (in api mode). Default setting: com mode. For more information about the working mode configuration of the RS232 port, refer to the API document of the device.
10	Audio Out	Connect to an audio receiver for unbalanced analog audio output. **Note**: This port always outputs the same audio as the HDMI OUT 1&2.

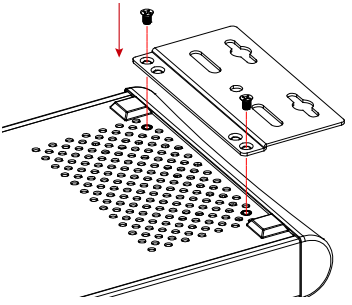
Installation and Application

Installation

Note: Before installation, make sure the device is disconnected from the power source.

Steps to install the device on a suitable location:

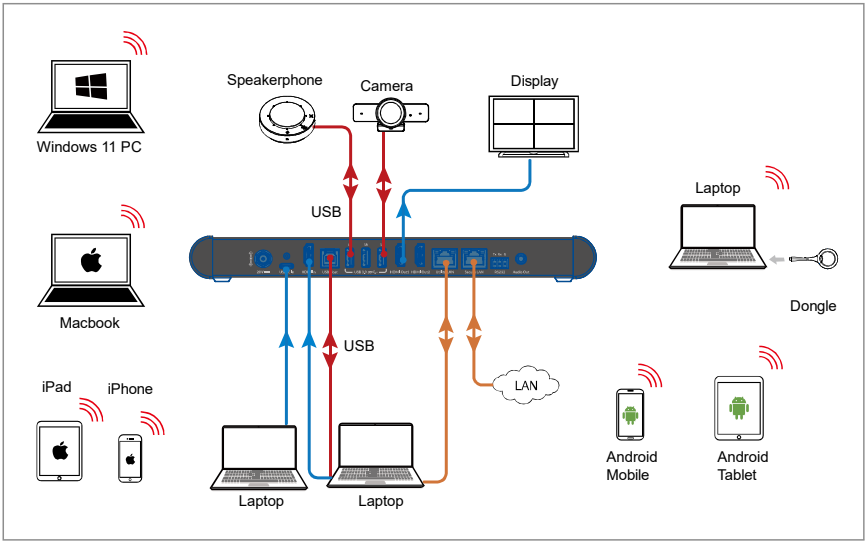
1. Attach the mounting brackets to the bottom panels of both sides using the screws (two on each side) provided in the package.



2. Install the brackets onto the position as desired using the screws (not included).

Application

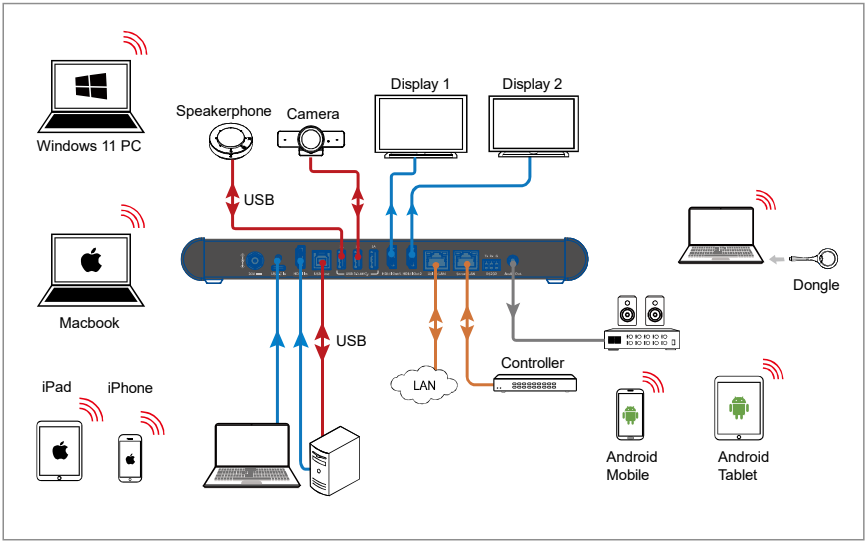
Scenario 1



Features:

- Plug a dongle into the laptop after the dongle is paired with the device successfully, the laptop can connect to the device wirelessly via the dongle as well as access the camera and speakerphone at the device.
- User can wirelessly project the screen content of the laptop and mobile devices to the device over Airplay and Miracast.
- If only one HDMI output is connected to an HDMI display device, Multiview function will be activated.

Scenario 2



- Plug a dongle into a laptop after the dongle is paired with the device successfully, the laptop can connect to the device wirelessly via the dongle and access the camera and speakerphone at the device.
- User can wirelessly project the screen content of the laptop and mobile devices to the device over Airplay and Miracast.

Key Functions

Screen Mirroring

If you're working on a PC and want its apps and content to be shown on another screen, you may want to consider mirroring your PC's screen to that screen.

With screen mirroring support, the device allows you to share your mobile devices' content wirelessly on any HDMI displays over Airplay Mirroring, Miracast and/or Dongle. In this manual, mobile devices available for screen mirroring are referred to as "screen mirroring source", such as Apple devices (iPhone/iPad/Mac), Android phones, Windows PCs, Dongle, etc.

Screen Mirroring over Airplay (for Apple Devices)

a. Connect your iPhone/iPad/Mac to the device's Wi-Fi.
   - ⇨ **Wi-Fi SSID**: as same as the device name and can be obtained from OSD at the upper right of the display screen. By default, it is set as **eShare W90**.
   - ⇨ **Password**: can be set through Web UI and can be obtained from OSD at the upper right corner of the display screen. By default, it is set as **12345678**.

b. Open Control Center on your Apple device, tap 

to select appropriate mirroring device (the device name can be obtained from the upper right corner of the display screen) from the pop-up menu.

c. To disconnect Apple device from the device: click **Stop Mirroring**, the display stops displaying your device's screen.

Screen Mirroring over Miracast (for Android Phones & Windows PCs)

For Android smartphone (take Samsung Galaxy series for example):

3. Enable the Wi-Fi or WLAN feature of your smartphone.
4. On your phone, swipe down from the top and tap 

or 

to select appropriate mirroring device (the device name can be obtained from the upper right corner of the display screen) from the pop-up CONNECT menu.
5. To disconnect the smartphone from the device: click “DISCONNECT” on your smartphone’s screen.

Note:

- The icon, instruction and entrance of the Miracast function may vary on different Android phones, please refer to your phone’s manual to get accurate instruction.
- If you fail to use Miracast function, please disable your phone’s Wi-Fi and enable it later, or restart the mobile if necessary.

For Windows PC (Window 10 or higher):

1. Enable the WLAN feature of your PC.
2. On your PC, press the combination keys “  + K” to select appropriate mirroring device (the device name can be obtained from the upper right corner of the display screen) from the pop-up menu.
3. To disconnect PC from the device: click **Disconnect**, the display stops displaying PC’s screen.

Important:

- The icon and interface of the Miracast function may vary on different computers.
- Some Windows 10/11 computers may fail to perform screen mirroring

with Miracast due to compatibility issues.

Tip: Both the Airplay mirroring and Miracast support access code. If you see the PIN entry window appears on your devices, input the access code that can be obtained through OSD (see OSD section for more information).

Screen Mirroring over Dongle

Users are able to share laptop's content on a display wirelessly using the eShare D30 Dongle, no additional installation of application is required.

Note:

(1) eShare D30 Dongle is sold separately.

(2) Before you plug eShare D30 Dongle into your laptop, ensure your laptop's USB-C port supports video output.

Steps to share laptop's screen on the display using eShare D30 Dongle:

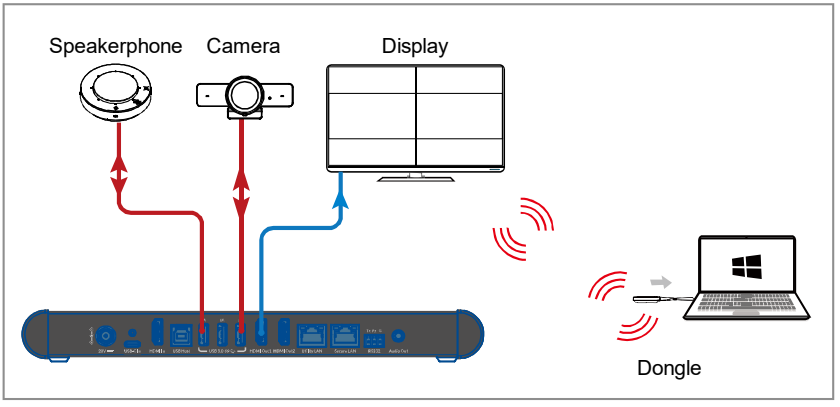
1. Pair the Dongle with the device.
   Connect the Dongle to the Pairing port on the device's front panel. Once pairing between Dongle and the device is completed, "Pairing successful" appears on the display screen.
2. Connect the Dongle to a laptop.
   Insert the Dongle into the laptop's USB-C port, it starts running and connecting to the device's Wi-Fi. After it is connected to the device's Wi-Fi successfully, the Dongle LED turns from blinking to lighting constantly.
3. Now press the Dongle's projecting button, you can project your laptop's screen on the display immediately.

Wireless Conference

Wireless Conference function enables a laptop to access the USB conference peripherals (such as a USB camera, a USB speakerphone, etc.) attached to the switcher wirelessly through a Dongle.

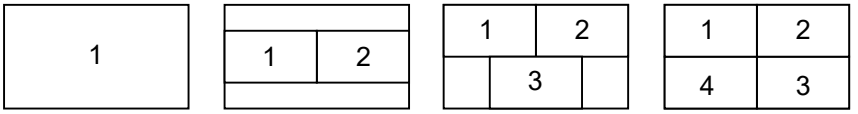
Here is how to use this feature:

1. Connect USB conference peripherals to the USB-A ports of the switcher.
2. Pair between the switcher and the Dongle.
   Connect the Dongle to the switcher's PAIRING port to pair two devices.
   Once pairing is complete, remove the Dongle from the switcher.
3. Plug the Dongle into the laptop.
   Connect the Dongle to the laptop's USB-C port. The Dongle will be ready to transmit and receive signals in a few seconds.
   Note: Please make sure the USB-C port of the laptop supports audio and video output.
4. Press the Wireless Conference button on the Dongle to connect between the laptop and the USB devices wirelessly.



Multiview

When only one HDMI output port (either HDMI OUT1 or HDMI OUT2) is attached to an HDMI display, the switcher supports Multiview, that is, allows up to four video sources to be displayed on a single screen.



If four video sources are being played on one display screen of HDMI OUT1/HDMI OUT2, connect an additional video source to the device, this latest input source will replace the source that presents longest on the screen.

Note: By default, Multiview function is enabled, and can be disabled through web UI (go to Web UI > Video Settings > Video Switching section) and API commands. For more information about the API commands, see the separate API documentation.

Automatic Switching

The device supports automatic signal switching function, allowing you to output desired sources with ease. This function follows Last-In-First-Out rule:

1. When only one video source is connected to the device, HDMI OUT 1 and/or HDMI OUT 2 automatically output this video source to the display screens.
2. When a video source is to be input in the case that four video sources are being played in Multiview mode on one display screen, this latest input source will replace the source that presents the longest on the screen. For more information, see the switching mechanism in Multiview section.
3. When no active video source is being input to the device, the output display shows the Guide Screen image finally.

Display of HDMI OUT1 and HDMI OUT2 Outputs

When both HDMI OUT1 and HDMI OUT2 are connected to two display screens respectively, Multiview function is disabled and the two HDMI outputs function as follows:

(1) Each of the HDMI outputs display in single view on its corresponding display screen.

(2) If the device detects no active video source input, both HDMI outputs display Guide Screen.

(3) If the device detects only one active video source input, both HDMI outputs display this video source.

(4) If the device detects the quantity of the video source input increases from one to two, the later input source is assigned to HDMI OUT2, and the earlier one is still at HDMI OUT1.

(5) If the device detects an additional video source is to be input in the case that two input video sources have existed, then the latest input source replaces the source that presents longer and outputs to the corresponding HDMI OUT port.

Network Mode Configuration

The device equips two Ethernet ports for networking flexibility and security, which support the following two network modes:

(1) Transparent Mode (Default Setting)

In this mode, two Ethernet ports are interconnected with each other, and each one can be used for device control by connecting to the LAN where the controller resides, for BYOD communication, and for the attached device (e.g. room PC) to access network.

(2) Isolated Mode

When the configuration item “Secure Ethernet Mode” on web UI is set to Enable, Isolated mode is activated. For more information about enabling “Secure Ethernet Mode”, refer to Wired Network section.

In Isolated mode, the SECURE LAN port is used for controlling the device; the UTILITY LAN port is for BYOD communication and for the attached device to access network.

Guide Screen

The device outputs Guide Screen image when no active video source is detected. The Guide Screen can be personalized to convey customized connection instructions through the device’s Web UI page.

Figure 1-- Guide Screen Image

The Guide Screen image appears automatically on the display screen in a period of time after all video sources are removed from the device.

Note:

- This Guide Screen image can be changed though Web UI, for more information, refer to System Settings section.

- By default, if the device has been output Guide Screen image for 60 seconds, a 60-second countdown appears on the Guide Screen. When the countdown is over, the connected display will enter standby mode if it is CEC-capable.

OSD

The device supports OSD (on screen display) to convey device basic information, including video source's information, Access code, device name and IP address, etc. Here are two different OSD examples in different scenarios.

Example 1: Displays in single view

Figure 2 – OSD Example 1

Example 2: Displays in dual view

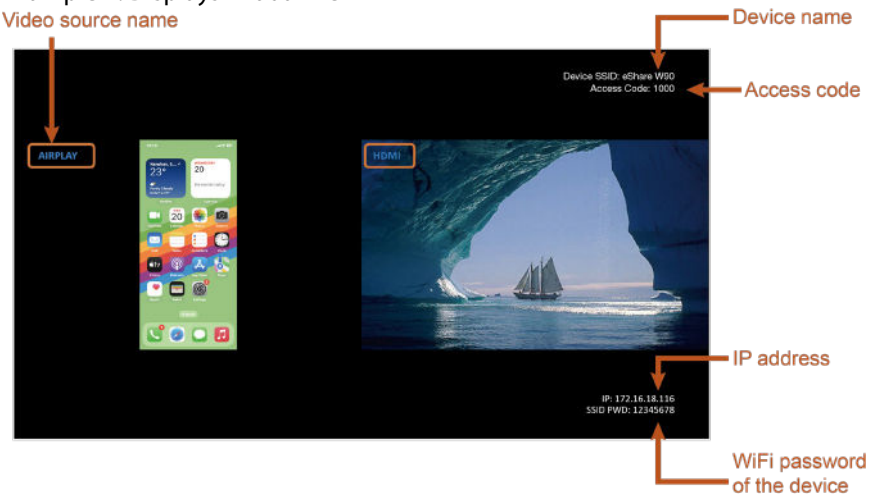


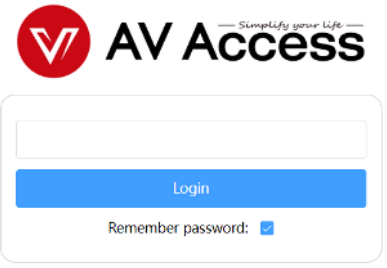
Figure 3 -- OSD Example 2

Web UI

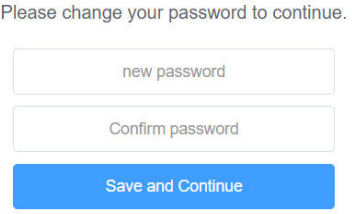
The Web UI designed for this device allows for basic controls and advanced settings. It can be accessed through a modern browser, e.g. Chrome, Safari, Firefox, IE10+, etc.

To get access the Web UI:

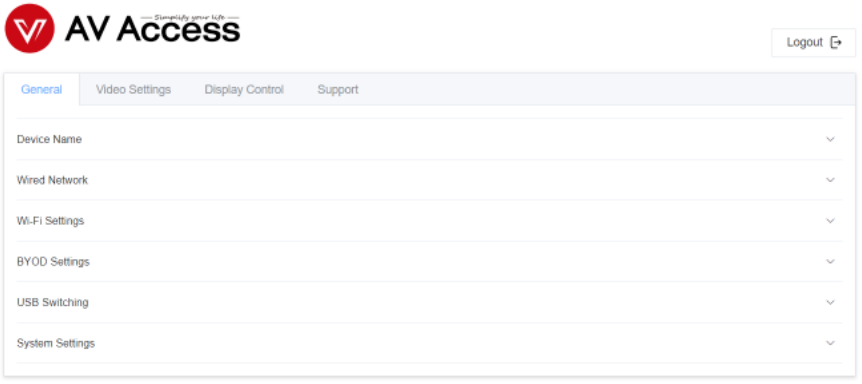
1. Connect the LAN port of the device to a local area network. Ensure there's a DHCP server in the network so that the device can obtain a valid IP address.
2. Connect a PC to the same network as the device.
3. Input the device's IP address in the browser and press Enter, the following window pops up. (See OSD section to easily view the IP address.)



4. Input the password (default password: **admin**) and click **Login**.
5. Set up a new login password in the following dialog box and click **Save and Continue** to enter the main page. The password shall be alphanumeric only with 4 to 16 characters in length.



The main page is split into the following submenus: Wireless Setting, Output Setting, Network Setting, Web UI Logon Password, Guide Screen Change, Firmware Upgrade and Version Information.

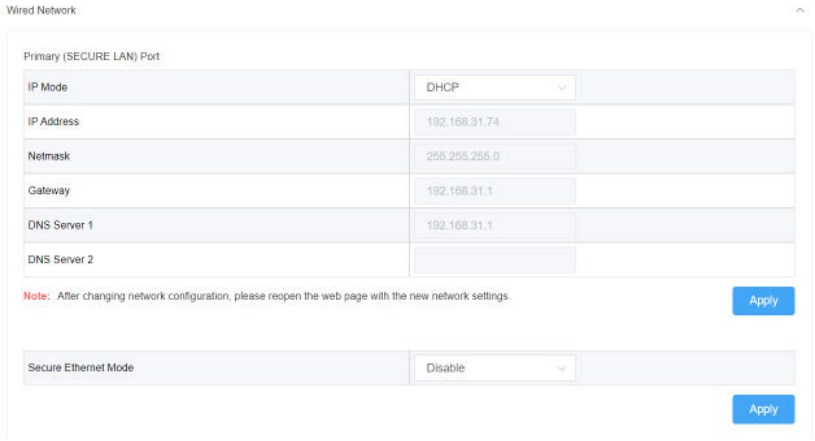


General

Device Name

Name	Description
Device Name	Define the device name to an easy-to-remember one. **Note:** • The device name must be 1~20 characters in length, including letters, numbers, "_" or "-". • The device name is also used as the identifier for BYOD screen casting methods, including Airplay, Miracast and Dongle, and its uniqueness must be guaranteed. When multiple devices are deployed in the environment, make sure that all devices' names are different. Default setting: **eShare W90**
Apply	Click to perform current settings.

Wired Network



This section is for network settings of the device's Ethernet ports.

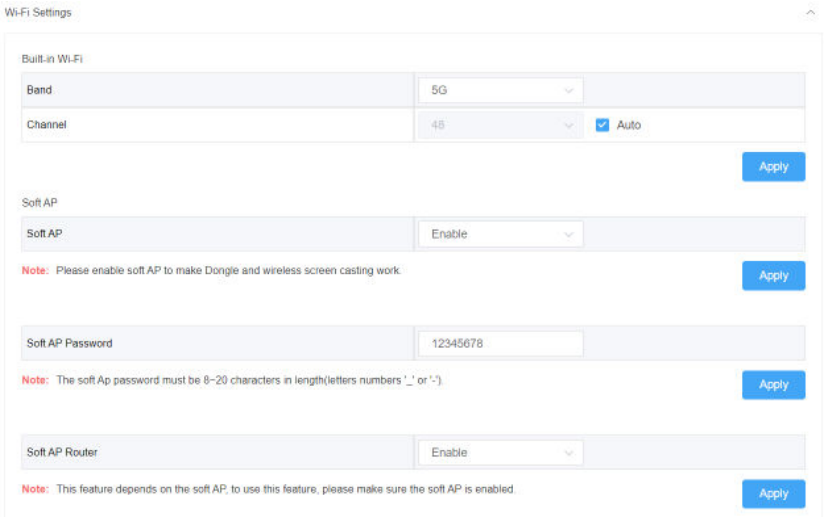
For Primary (SECURE LAN) port:

Name	Description
IP Mode	Select IP addressing mode between DHCP and Static. Default setting: **DHCP**
IP Address	Set IP address manually for the device when Static mode is selected.
Netmask	Set subnet mask manually for the device when Static mode is selected.
Gateway	Set gateway address manually for the device to communicates with another network when Static mode is selected.
DNS Server 1	Set DNS server manually for the device to ensure normal network communication.
DNS Server 2	
Apply	Click to save and perform current settings. Note: After the IP settings are changed, please refresh the Web UI page to log back in.

For Secure Ethernet Mode:

Name	Description
Secure Ethernet Mode	To enable or disable the Secure Ethernet Mode. • **Enable**: Select to activate Isolated mode. In Isolated mode, the SECURE LAN port is used to control this device, the UTILITY LAN port is used for BYOD communication and network access. • **Disable**: Select to activate Transparent mode. In Transparent mode, two Ethernet ports are interconnected with each other. Default setting: **Disable** **Note:** For more information about the two network modes above, refer to Network Mode Configuration section.

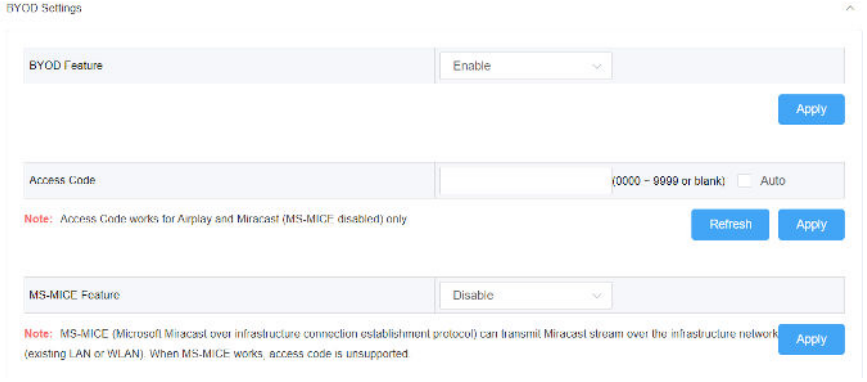
Wi-Fi Settings



Name	Description
Band	• **5G**: Configure the device's frequency band as 5GHz. • **2.4G**: Configure the device's frequency band as 2.4GHz. Default setting: **5G** **Tip:** If your wireless devices don't support 5GHz Wi-Fi, configures the frequency band of this device as 2.4G before connecting them to this device via Miracast.
Channel	Configure the device's wireless channel. Default setting: **Auto** Auto means the device selects a wireless channel automatically for itself.
Soft AP	Click to enable/disable the device's soft AP function. Default setting: **Enable** Note: Ensure that the soft AP function is enabled before using Dongle and wireless screen casting features.
Soft AP Password	Configure the soft AP password. Default setting: **12345678**
Soft AP Router	• **Enable**: Enable the device's soft AP router function so that wireless devices connected to soft AP are able to access the internet (verify the Ethernet port of the device is connected to the internet).

Name	Description
	Note: When the device's IP mode is set as Static, you must configure the Ethernet port's gateway and DNS correctly so that soft AP router runs properly. • **Disable**: Disable the device's soft AP function to prevent wireless devices connected to soft AP from accessing the internet. Default setting: **Enable** Note: Ensure that the soft AP function is enabled before using Soft AP Router feature.
Apply	Click to perform current settings.

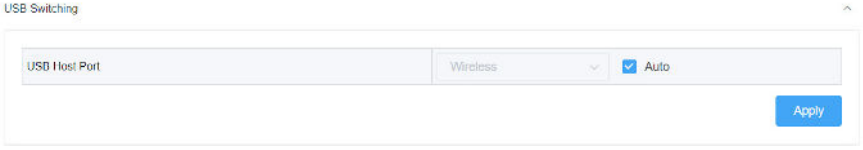
BYOD Settings



Name	Description
BYOD Feature	Select to enable/disable the device's BYOD feature. Default setting: **Enable** Note: This feature is available for Airplay and Miracast only.
Access Code	Enter a four-digit access code ranges from 0000~9999 to help prevent users from accidentally connecting to an unintended device and protect from an unauthorized access. • When an access code is set, it will appear on the upper right corner of the attached display. • If you don't want to set access code, you can leave it blank here. Default setting: Null

Name	Description
	Note: Access Code works for Airplay and Miracast (MS-MICE disabled) only.
MS-MICE Feature	Select to enable/disable the device's MS-MICE Feature. MS-MICE refers to the *Miracast over Infrastructure Connection Establishment protocol*, which is developed by Microsoft and perceived as the upgraded version of Miracast, can transmit Miracast stream over the infrastructure network (existing LAN or WLAN). • **Enable**: Windows will only select infrastructure network when connection between Miracast source and Miracast receiver is through Ethernet or a secure Wi-Fi network; if not, Windows will retrieve to use Miracast P2P instead of MS-MICE. • **Disable**: Windows selects Miracast to wirelessly send screencasts based on the Wi-Fi peer-to-peer (P2P) connection. Default setting: **Disable** **Note:** When MS-MICE is working, Access Code is not available.
Apply	Click to perform current settings.

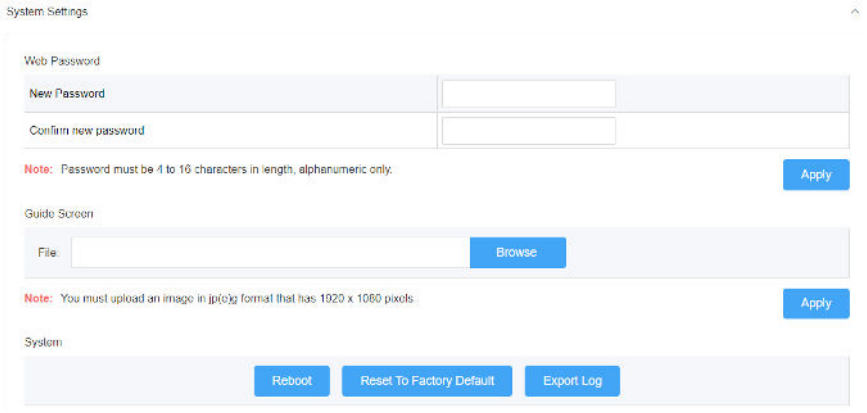
USB Switching



Name	Description
USB Host	Click to select the USB host port of the built-in USB 3.0 switcher: • **USB-C**: Select USB-C IN as the USB host. • **USB Host**: Select USB HOST as the USB host. • **Wireless**: Select Dongle as the USB host. • **Auto**: Select among USB host ports above as the USB host automatically. In this mode, the latest connected USB channel (USB-C / USB HOST / Dongle) will be selected as the USB host automatically. Default setting: **Auto**

Name	Description
Apply	Click to perform current settings.

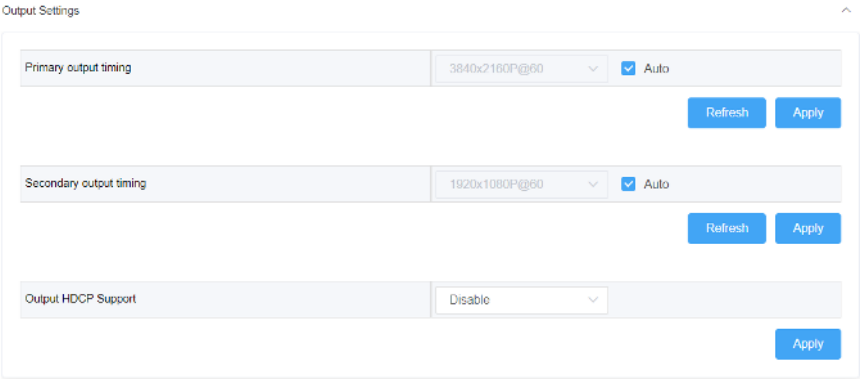
System Settings



Name	Description
Web Password	• **New Password/Confirm new Password**: Set a new password to log on to the device's web UI page. • **Apply**: Click to apply settings. **Note:** The new password must be 4 to 16 characters in length, alphanumeric only.
Guide Screen	• **Browse**: Click to browse for the new Guide Screen image. • **Apply**: Click to upload the selected image to the device. **Note:** Image in jp(e)g format with 1920x1080 pixels is recommended.
System	• **Reboot**: Click to reboot the device. • **Reset to Factory Default**: Click to restore the device to factory defaults. You can also perform this task by pressing and holding the Reset button on front panel for five seconds. • **Export Log**: Click to export system log.

Video Settings

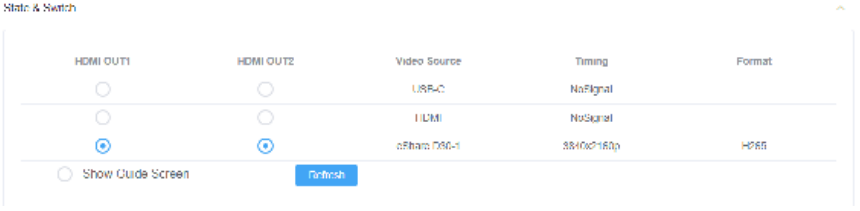
Output Settings



Name	Description
Primary output timing	Set the output timing for the video at HDMI OUT 1. Two operation methods are offered in the following: • **Auto**: Select to output the optimal resolution of the attached display based on the display's EDID. For example, if the recommended resolution for the display is 4K@60Hz, the device will output 4K@60Hz video. • **Resolution range list**: select a desired output resolution from the dropdown menu to output this fixed resolution. Maximum supported output resolution is 4K@60Hz. Default setting: **Auto** Note: The maximum output timing of HDMI OUT 1 is 3840x2160P@60.
Secondary output timing	Set the output timing for the video at HDMI OUT 2. Two operation methods are offered in the following: • **Auto**: Select to output the optimal resolution of the attached display based on the display's EDID. For example, if the recommended resolution for the display is 4K@30Hz, the device will output 4K@30Hz video. • **Resolution range list**: select a desired output resolution from the dropdown menu to output this

Name	Description
	fixed resolution. Maximum supported output resolution is 4K@30Hz. Default setting: **Auto** Note: The maximum output timing of HDMI OUT 2 is 3840x2160P@30.
Output HDCP Support	Select to enable or disable HDCP support of the output port. Two options are offered in the following: • **Enable:** To enable HDCP support of the output port. In this case, the HDCP setting of the output port will follow that of the connected display. This option is applicable to HDCP-enabled displays. • **Disable:** To disable HDCP support of the output port. Default setting: **Enable**

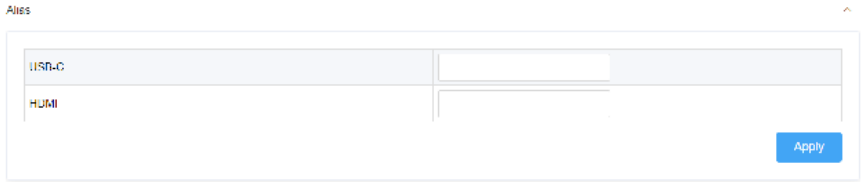
State & Switch



This section is used for switching among multiple input sources and displaying the sources' statuses, including video source names, input resolutions and format.

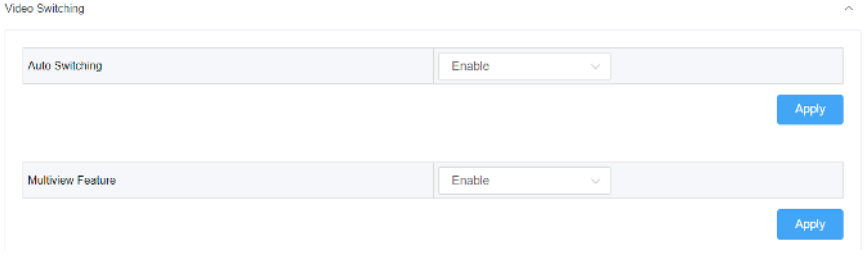
Name	Description
HDMI OUT1 &HDMI OUT2	Click the button to select (button turns from white to blue) or deselect (button turns from blue to white) the specified video source for the HDMI outputs.
Show Guide Screen	Click the button to output the Guide Screen (button turns from white to blue).
Refresh	Click to refresh the current state information.

Alias



Name	Description
Alias	Enter a new alias name to change the video source name to a new one. **Note:** The alias name must be within the length of 1~20 characters, including alphanumeric characters, underscores "_" and hyphens "-", but shall not start with "-" or be pure numbers. If you don't want to change the name, leave it blank here.
Apply	Click to perform the current settings.

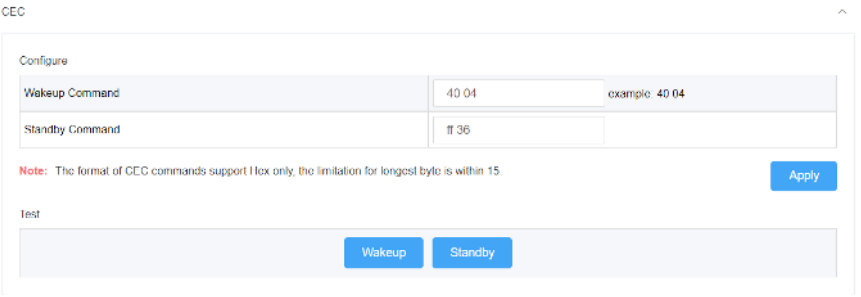
Video Switching



Name	Description
Auto Switching	• **Enable**: Enable the Auto Switching function. • **Disable**: Disable the Auto Switching function. Default setting: **Enable** **Note:** For more information about Auto Switching function, please refer to Automatic Switching function.
Multiview Feature	• **Enable**: Enable the Multiview Feature. • **Disable**: Disable the Multiview Feature. Default setting: **Enable**

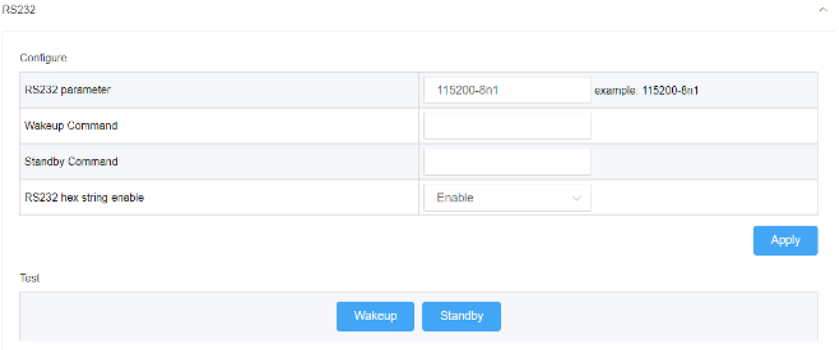
Display Control

CEC



Name	Description
Wakeup Command	Enter the CEC wakeup command of the controlled display device in hex format. For more information about the command, see the user guide of your display device. Default setting: **40 04**
Standby Command	Enter the CEC standby command of the controlled display device in hex format. For more information about the command, see the user guide of your display device. Default setting: **ff 36**
Apply	Click to save and perform current settings.
Wakeup	Click to send the Wakeup command to wake the display up from standby mode (for testing).
Standby	Click to send the Standby command to make the display enter standby mode (for testing).

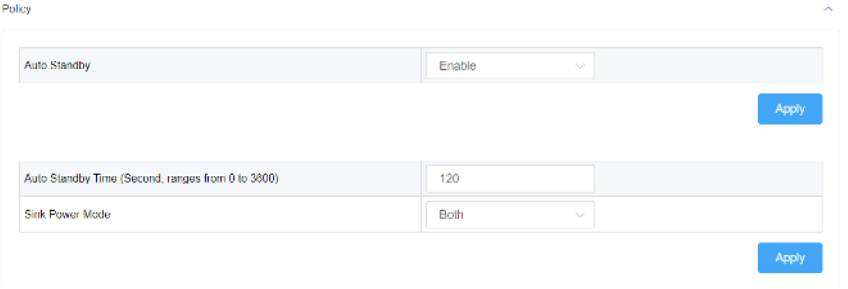
RS232



Name	Description
RS232 Parameter	Set the RS232 parameters for the controlled display. For more information about the parameters, see the user guide of your display device. **Parameter** / **Value** / **Abbreviation** Baud Rate / 115200bps / 115200 Data Bits / 8bits / 8 Parity / None / n Stop Bits / 1 / 1 Default setting: **115200-8n1**
Wakeup Command	Enter the RS232 wakeup command of the controlled display device. For more information about the command, see the user guide of your display device. If you want to disable this function, you can enter nothing here. By default, it's set as blank.
Standby Command	Enter the RS232 standby command of a controlled display device. For more information about the command, see the user guide of your display device. If you want to disable this function, you can enter nothing here. By default, it's set as blank.
RS232 hex string enable	• **Enable**: select to use the RS232 standby and wakeup commands in hex string form to control your display devices. If this item is enabled, make sure standby and wakeup commands are manually converted to their equivalent hex forms first and

Name	Description
	then input the **RS232 Standby Command** and **RS232 Wakeup Command**. For example, RS232 wake up command in hex form may be: *50 57 52 20 4F 4E 0D 0A* • **Disable**: select to directly send the original standby or wakeup commands to control the attached display device. Default setting: **Enable**
Apply	Click to perform current settings.
Wakeup	Click to send the Wakeup command defined in "Wakeup Command" field to wake the display up from standby mode.
Standby	Click to send the Standby command defined in "Standby Command" field to set the display to enter standby mode.

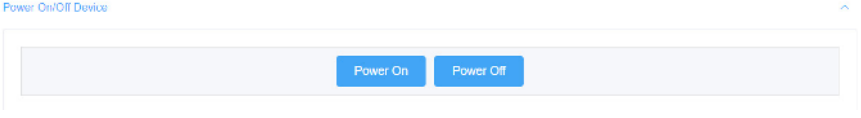
Policy



Name	Description
Auto Standby	• **Enable**: To enable auto standby function for the device. If enabled, when there's no valid signal input to the device during a specified period of time, the device will enter standby status automatically. • **Disable**: To disable auto standby function for the device. Default setting: **Enable**
Auto Standby Time (Second, ranges from 0 to 3600)	Set the standby timeout (inactivity period) after which the device will automatically enter the standby mode. • If the standby timeout doesn't exceed 60 seconds, a standby countdown of the device will appear on the

Name	Description
	display screen immediately once it outputs Guide Screen. • If the standby timeout is larger than 60 seconds, a 60-second standby countdown of the device will appear on the display screen when the standby timeout has only 60 seconds left. • If Auto Standby Time is set to 0, it means the device will enter standby mode immediately once it outputs Guide Screen. For example, an 80-second auto standby time means the device will enter standby mode after it has not detected valid signal input for 80 seconds, during which when the device has output Guide Screen for 20 seconds, a 60-second countdown appears on the display, as the countdown reaches zero, the device enters standby mode. Default setting: **120**
Sink Power Mode	• **Both**: Enable both CEC and RS232 modes to manage the sink power. • **CEC**: Enable CEC to manage the sink power. Default setting: **Both**
Apply	Click to save and perform current settings.

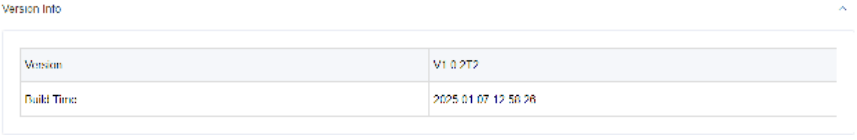
Power On/Off Device



Name	Description
Power On	Click to wake the device up from the standby mode.
Power Off	Click to set the device to standby mode.

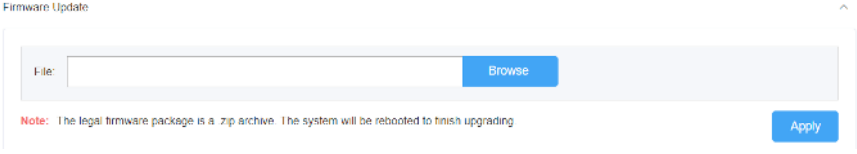
Support

Version Info



Name	Description
Version	Shows the device's firmware version.
Build Time	Shows the time and date when the device's firmware was built.

Firmware Update



Name	Description
Firmware Update	• **Browse:** Click to browse for the local upgrade file. • **Apply:** Click to upload the firmware file to the device and perform firmware upgrade.

Firmware Upgrade

The device supports firmware upgrade through either Web UI or USB-A ports on rear panel.

To upgrade firmware through Web UI, see Firmware Update section.

To upgrade firmware through USB-A port on rear panel, perform the following:

1. Name the upgrade file package “FSC640-update.zip”.
2. Create a new folder named “upgrade” under the root directory of a FAT32 or NTFS USB flash drive. Place the upgrade file in this folder.
3. Connect the USB flash drive to one of the device’s USB-A ports. It takes about 1 minute for the device to read the USB flash drive. If the device detects the upgrade file is a newer version, it will start upgrading. When the upgrade process is completed, the device reboots automatically.

Important:

- Do not cut off the power during the upgrade process.
- If the device detects the upgrade file is not a newer version, it will not start upgrading.

Specifications

Technical	
Input Video Port	1 x HDMI In; 1 x USB-C In; 2 x LAN, 10/100/1000Mbps Ethernet; 2 x Wi-Fi
Input Video Signal	• HDMI: HDMI 1.4, HDCP 1.4 • USB-C: DisplayPort 1.1, HDCP 1.4 • LAN/Wi-Fi: H.264
Input Resolutions	**HDMI/USB-C:** 640x480[8], 800x600[8], 1024x768[8], 1280x768[8], 1280x800[8], 1280x1024[8], 1360x768[8], 1366x768[8], 1440x900[8], 1400x1050[8], 1600x1200[8], 1680x1050[8], 1920x1200[8], 720x480[8] (480p), 720x576[6] (576p), 1280x720[5] (720p30), 1280x720[6] (720p50), 1280x720[8] (720p60), 1920x1080[2] (1080p24), 1920x1080[3] (1080p25), 1920x1080[5] (1080p30), 1920x1080[6] (1080p50), 1920x1080[8] (1080p60), 3840x2160[2](2160p24), 3840x2160[3](2160p25), 3840x2160[5](2160p30) **Miracast (Wi-Fi):** 640x480[8], 720x480[8] (480p), 720x576[6] (576p), 1280x720[2], 1280x720[3], 1280x720[5](720p30), 1280x720[6](720p50), 1280x720[8] (720p60), 1920x1080[2] (1080p24), 1920x1080[3] (1080p25), 1920x1080[5](1080p30), 1920x1080[6](1080p50), 1920x1080[8](1080p60) **Airplay Mirroring (LAN/Wi-Fi):** Up to 1920x1080[8](1080p60) **Google Cast* (LAN/Wi-Fi):** Up to 1920x1080[5](1080p30) **USB-C Dongle:** 1920x1080[8](1080p60), 3840x2160[5](2160p30) 1 = at 23.98Hz, 2 = at 24Hz, 3 = at 25Hz, 4 = at 29.97Hz, 5 = at 30Hz, 6 = at 50Hz, 7 = at 59.94Hz, 8 = 60Hz
Output Video Port	2 x HDMI
Output Video Signal	HDMI 2.0, HDCP 2.2
Output Resolutions	**HDMI OUT1:** 720x480[8] (480p60), 720x576[6] (576p60), 640x480[8], 800x600[8], 1024x768[8], 1280x720[6](720p50), 1280x720[8] (720p60), 1280x800[8], 1280x1024[8], 1366x768[8], 1440x900[8], 1600x1200[8], 1680x1050[8], 1920x1200[8], 1920x1080[2]

Technical	
	(1080p24), 1920x1080[3] (1080p25), 1920x1080[5] (1080p30), 1920x1080[6] (1080p50), 1920x1080[8] (1080p60), 3840x2160[3] (2160p25), 3840x2160[5] (2160p30), 3840x21606(2160p50), 3840x21608(2160p60) **HDMI OUT2:** 720x480[8] (480p60), 720x576[6] (576p60), 640x480[8], 800x600[8], 1024x768[8], 1280x720[6](720p50), 1280x720[8] (720p60), 1280x800[8], 1280x1024[8], 1366x768[8], 1440x900[8], 1600x1200[8], 1680x1050[8], 1920x1200[8], 1920x1080[2] (1080p24), 1920x1080[3] (1080p25), 1920x1080[5] (1080p30), 1920x1080[6] (1080p50), 1920x1080[8] (1080p60), 3840x2160[3](2160p25), 3840x2160[5] (2160p30) 1 = at 23.98 Hz, 2 = at 24 Hz, 3 = at 25 Hz, 4 = at 29.97 Hz, 5 = at 30 Hz, 6 = at 50 Hz, 7 = at 59.94 Hz, 8 = 60 Hz

***Note:** Google Cast feature will be available in further firmware version soon.

Audio	
Input Audio Port	1 x HDMI; 1 x USB-C; 2 x LAN; 2 x Wi-Fi
Input Audio Signal	RAW PCM 2.0, 16 bit, 32/44.1/48KHz sps
Output Audio Port	2 x HDMI; 1 x Analog Audio OUT
Output Audio Signal	RAW PCM 2.0, 16 bit, 48KHz sps

Wi-Fi	
Standard	IEEE 802.11 a/b/g/n/ac
Frequency	Dual bands, 2.4~2.4835GHz, 5.0~5.8GHz
Security	WEP, TKIP, AES, WPA, WPA2

Control	
Control Connector	2 x RJ45, 10/100/1000Mbps Ethernet
Control Method	LAN (Web UI); RS232

General	
Operating Temperature	0°C to 45°C (32°F to 113°F)
Storage Temperature	-20°C to 70°C (-4°F to 158°F)
Humidity	10% to 90%, non-condensing
ESD Protection	Human-body Model: ±8kV (Air-gap discharge)/±4kV (Contact discharge)
Power Supply	20V 6A DC
Power Consumption	93W (Max)
Device Dimensions (W x H x D)	277.6mm x 29.1mm x 142mm / 10.93” x 1.15” x 5.59”
Product Weight	1.0kg/2.2lbs

Warranty

Products are backed by a limited 1-year parts and labor warranty. For the following cases AV Access shall charge for the service(s) claimed for the product if the product is still remediable and the warranty card becomes unenforceable or inapplicable.

1. The original serial number (specified by AV Access) labeled on the product has been removed, erased, replaced, defaced or is illegible.
2. The warranty has expired.
3. The defects are caused by the fact that the product is repaired, dismantled or altered by anyone that is not from an AV Access authorized service partner. The defects are caused by the fact that the product is used or handled improperly, roughly or not as instructed in the applicable User Guide.
4. The defects are caused by any force majeure including but not limited to accidents, fire, earthquake, lightning, tsunami and war.
5. The service, configuration and gifts promised by salesman only but not covered by normal contract.
6. AV Access preserves the right for interpretation of these cases above and to make changes to them at any time without notice.

Thank you for choosing products from AV Access.

If you have any question, please contact us via the following emails:
General Enquiry: info@avaccess.com
Customer/Technical Support: support@avaccess.com

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