

# PureLink

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## BEYOND 4K

### Collabora 8 4K

**4K Multiview Presentation Switcher with wireless and wired inputs**





## Important Safety Information

1. Read, follow, and keep these instructions.
2. Heed all warnings.
3. Do not use this product near water. Keep away from wet places, such as: spas, pools, sinks, laundries, wet basements, etc.
4. When cleaning, unplug the switcher and wipe with a dry cloth. Do not use damp cloths, cleaning fluids, or aerosols which may result in electric shock, fire, or switcher damage.
5. Operate this product using only the included power supply and/or power cable. Use of an unapproved power implement may impair performance, damage the product, or cause fires.
6. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
7. Do not install or place this product near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
8. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the product.
9. Only use attachments/accessories specified by BC to avoid fire, shock, or other hazards.
10. To reduce the risk of electric shock and/or damage to this product, never handle or touch this switcher or power cord if your hands are wet or damp. Do not expose this product to rain or moisture.
11. Unplug this product during lightning storms or when unused for long periods of time.
12. Never open, remove switcher panels, or make any adjustments not described in this manual. Attempting to do so could result in electric shock, damage to the switcher, or other hazards.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

### CAUTION

TO REDUCE THE RISK OF ELECTRIC SHOCK  
DO NOT OPEN ENCLOSURE OR EXPOSE  
TO RAIN OR MOISTURE.  
NO USER-SERVICEABLE PARTS  
INSIDE REFER SERVICING TO  
QUALIFIED SERVICE PERSONNEL.

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## 1. Introduction

The COLLABORA 8 4K is a high-performance BYOD presentation switcher with wireless presentation capability including Airplay Mirroring, Miracast, physical interfaces (HDMI, VGA and USB-C) and USB Dongle, with which you can project screen contents of your computer (Mac/Windows) or mobile device (iPhone/iPad/Android) to a display in Multiview mode.

Multiple features like fast seamless switching, auto signal switch, serial control, CEC, Guide Screen, OSD display, USB switching, and wireless extension are included.

## 2. Features

- Multiview presentation with configurable screen layout.
- Built-in Wi-Fi module for wireless connectivity with devices over Airplay, Miracast and USB Dongle.
- Fast seamless switching for both single view and Multiview.
- Supports HDMI input resolutions up to 4K@30Hz 4:4:4.
- Supports HDMI output resolutions up to 4K@60Hz 4:4:4.
- Detailed and friendly OSD information.
- Supports USB extension and switching control among three USB hosts.
- Offers multiple control approaches: front panel buttons, Web UI and Telnet API.
- Multiview layout adjustable by the end user.

## 3. Package Contents

- 1 x Switcher
- 1 x DC 12V Power Adapter (with US, UK, EU, AU pins)
- 2 x Phoenix Male Connectors (3.5 mm, 4 Pins)
- 2 x Mounting Brackets (with Screws)
- 2 x Wi-Fi Antennas
- Optional: USB Dongle for Mac/Windows (up to four dongles per switcher)

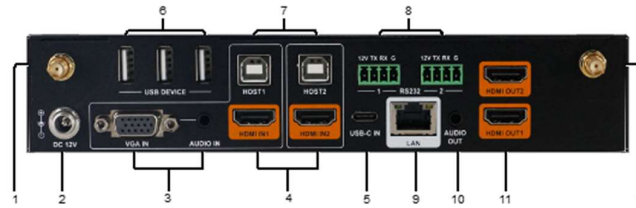
## 4. Panel Description

### Front Panel



No.	Name	Description
1	Power LED	<ul style="list-style-type: none"> <li><b>On:</b> The switcher is powered on.</li> <li><b>Off:</b> The switcher is powered off.</li> </ul>
2	Status LED	<ul style="list-style-type: none"> <li><b>On:</b> The switcher is outputting at least one video source.</li> <li><b>Blinking:</b> The switcher is in standby mode.</li> <li><b>Off:</b> The switcher is outputting Guide Screen.</li> </ul>
3	Source Switch	<ul style="list-style-type: none"> <li><b>VGA IN ~ USB-C IN Buttons:</b> <ul style="list-style-type: none"> <li>⇒ Short press to output or stop outputting the corresponding video source.</li> <li>⇒ Hold press to output the corresponding video source in full screen mode.</li> </ul> </li> <li><b>VGA IN ~ USB-C IN LEDs:</b> <ul style="list-style-type: none"> <li>⇒ On: The corresponding video signal is valid and is being output.</li> <li>⇒ Blinking quickly: The corresponding video signal is valid but is not being output.</li> <li>⇒ Blinking slowly: The corresponding video signal is being output but is not valid.</li> <li>⇒ Off: The switcher is in standby mode. / The corresponding video signal is neither valid nor being output.</li> </ul> </li> </ul>
4	Output	<ul style="list-style-type: none"> <li><b>HDMI2 Output button:</b> press to switch between Follow mode and Matrix mode for HDMI Output 2. <ul style="list-style-type: none"> <li>⇒ To switch to <b>Follow</b> mode: long press the Output button until the Follow LED lights up. In Follow mode, HDMI OUT 2 follows HDMI OUT 1 to output the same video content as that of HDMI OUT 1.</li> <li>⇒ To switch to <b>Matrix</b> mode: short press the Output button. In Matrix mode, HDMI OUT 2 will output a specific video source in single view (specified by Telnet API or Web UI); continue to short press the button, the HDMI OUT 2 will cycle through the hardware video sources (VGA &gt; HDMI 1 &gt; HDMI 2 &gt; USB-C &gt; VGA &gt;...) for output.</li> </ul> </li> <li><b>LED Status:</b> <ul style="list-style-type: none"> <li>⇒ Follow LED: Lights up when Follow mode is selected.</li> <li>⇒ Matrix LED: Lights up when Matrix mode is selected.</li> </ul> </li> </ul>
5	USB	<ul style="list-style-type: none"> <li>Connect to a U-disk for firmware upgrade.</li> <li>Connect to the USB Dongle for pairing up with each other.</li> </ul>
6	Reset	Press and hold this button for five or more seconds and then release, it will automatically reboot and restore to its factory defaults.

## Rear Panel



No.	Name	Description
1	Antenna	Connect to the antenna pair provided for the access to Miracast and soft AP function.
2	DC 12V	Connect to the power adapter provided.
3	VGA In	Connect to a VGA source for video input as well as analog audio input.
4	HDMI In 1-2	Connect to an HDMI source device.
5	USB-C In	Connect to a USB-C video source.
6	USB Hub	Connect to the USB device (e.g. mouse, keyboard, USB audio) for USB extension between USB device and USB host.
7	USB Host	Connect to USB host device for USB extension between USB device and USB host.
8	RS232 1-2	<ul style="list-style-type: none"> <li>RS232-1: Reserved.</li> <li>RS232-2: Connect to a RS232-enabled device such as a projector to control the projector. <ul style="list-style-type: none"> <li>⇒ Pins TX, RX, GND are used to control the connected projector.</li> <li>⇒ Pins 12V, GND are used to provide 12VDC power.</li> </ul> </li> </ul>
9	LAN	Connect to a network device (e.g. network switch, router, computer, etc.) for LAN control (Web GUI & Telnet API) and Airplay Mirroring signal input.
10	Audio Out	Connect to an audio receiver (e.g. amplifier) for audio output.
11	HDMI Out 1-2	Connect to an HDMI display device.



## 5. Specifications

Technical	
Input Video Port	1 x VGA; 2 x HDMI; 1 x USB-C; 1 x LAN, 10/100/1000 Mbps Ethernet; 1 x WLAN
Input Resolutions	<ul style="list-style-type: none"> <li> <b>VGA:</b>  640x480<sup>8,9</sup>, 720x480<sup>8</sup>, 720x576<sup>6</sup>, 800x600<sup>8</sup>, 1024x768<sup>8,9</sup>, 1280x720<sup>7,8</sup>, 1280x800<sup>8</sup>, 1280x1024<sup>8,9</sup>, 1360x768<sup>8</sup>, 1366x768<sup>8</sup>, 1400x1050<sup>8</sup>, 1440x900<sup>8</sup>, 1600x900<sup>8</sup>, 1600x1200<sup>8,9</sup>, 1920x1080<sup>6,8</sup> </li> <li> <b>HDMI/USB-C:</b>  640x480<sup>8</sup>, 800x600<sup>8</sup>, 1024x768<sup>8</sup>, 1280x768<sup>8</sup>, 1280x800<sup>8</sup>, 1280x1024<sup>8</sup>, 1360x768<sup>8</sup>, 1366x768<sup>8</sup>, 1440x900<sup>8</sup>, 1400x1050<sup>8</sup>, 1600x1200<sup>8</sup>, 1680x1050<sup>8</sup>, 1920x1200<sup>8</sup>, 720x480<sup>8</sup> (480p), 720x576<sup>6</sup> (576p), 1280x720<sup>5</sup> (720p30), 1280x720<sup>6</sup> (720p50), 1280x720<sup>8</sup> (720p60), 1920x1080<sup>2</sup> (1080p24), 1920x1080<sup>3</sup> (1080p25), 1920x1080<sup>5</sup> (1080p30), 1920x1080<sup>6</sup> (1080p50), 1920x1080<sup>8</sup> (1080p60), 3840x2160<sup>5</sup>(2160p30) </li> <li> <b>LAN/WLAN:</b> Up to 1920x1080<sup>8</sup> (1080p60) </li> </ul> <p>Note: The input resolution support for LAN or WLAN may vary according to the specific BYOD protocols and devices.</p> <p>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, 9 = 75 Hz</p>
Output Video Port	2 x HDMI
Output Resolutions	<p><b>For HDMI OUT 1:</b></p> 720x480 <sup>8</sup> (480p60), 720x576 <sup>6</sup> (576p60), 640x480 <sup>8</sup> , 800x600 <sup>8</sup> , 1024x768 <sup>8</sup> , 1280x1024 <sup>8</sup> , 1366x768 <sup>8</sup> , 1440x900 <sup>8</sup> , 1280x800 <sup>8</sup> , 1680x1050 <sup>8</sup> , 1920x2160 <sup>5</sup> , 1600x1200 <sup>8</sup> , 1920x1200 <sup>8</sup> , 2560x1440 <sup>5</sup> , 2560x1440 <sup>8</sup> , 1280x720 <sup>6</sup> (720p50), 1280x720 <sup>8</sup> (720p60), 1920x1080 <sup>6</sup> (1080i50), 1920x1080 <sup>8</sup> (1080i60), 1920x1080 <sup>2</sup> (1080p24), 1920x1080 <sup>3</sup> (1080p25), 1920x1080 <sup>5</sup> (1080p30), 1920x1080 <sup>6</sup> (1080p50), 1920x1080 <sup>8</sup> (1080p60), 3840x2160 <sup>2</sup> (2160p24), 3840x2160 <sup>3</sup> (2160p25), 3840x2160 <sup>5</sup> (2160p30), 3840x2160 <sup>6</sup> (2160p50), 3840x2160 <sup>8</sup> (2160p60)
	<p><b>For HDMI OUT 2:</b></p> Up to 1920x1080 <sup>8</sup> (1080p60)
	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, 9 = 75 Hz
Input Audio Port	2 x HDMI, 1 x USB-C, 1 x LAN, 1 x Analog Audio, 1 x WLAN
Input Audio Format	RAW PCM, 16 bit, 32/44.1/48KHz sps; PCM 2.0
Output Audio Port	2 x HDMI, 1 x Analog Audio
Output Audio Format	RAW PCM, 16 bit, 32/44.1/48KHz sps; PCM 2.0
Control Method	Front panel buttons; Web UI; Telnet API/CLI
Wi-Fi	
Standard	IEEE 802.11 a/b/g/n/ac
Frequency	Dual bands, 2.4~2.4835GHz, 5.0~5.8GHz
Throughout	2T x 2R, up to 867Mbps
Security	WEP, TKIP, AES, WPA, WPA2
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	12 V 1 A DC

Technical	
Power Consumption	20W (Max)
Device Dimension (W x H x D)	215 mm x 42 mm x 140.2 mm / 8.46" x 1.65" x 5.52"
Net Weight	1.0kg/2.2lbs

## 6. Installation and Wiring

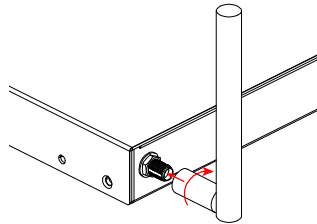
### Installation

**Note:**

- Before installation, please ensure the switcher is disconnected from the power source.

#### Attaching Antennas

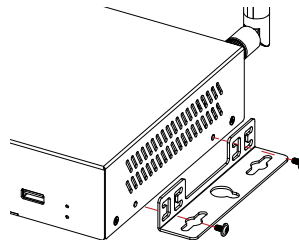
6.1 Attach the antennas provided to the threaded connectors.



#### Attaching Installation Brackets

6.2 Attach the installation brackets if needed to the enclosure using the screws provided in the package separately.

6.3 The bracket is attached to the enclosure as shown.



6.4 Attach the brackets to the surface you want to hold the switcher against.

### Wiring

**Warnings:**

- Before wiring, disconnect the power from all devices.
- During wiring, connect and disconnect the cables gently.

**Note:**

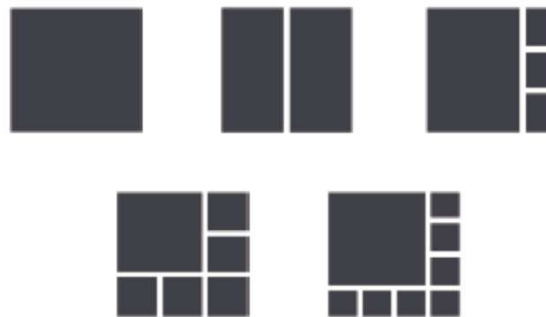
- If you connect the switcher to an Ethernet Switch, please ensure the switch is able to forward messages from the 224.0.0.251 multicast group. Most non-management switches meet this requirement.

## 7. Key Function

### Screen Layout Switch

The switcher features automatic/manual switching on Multiview screen layout, i.e. multiple video sources can be displayed in Multiview form on a single screen.

By default, the screen layout switching mode is set as automatic switching for the switcher, and the preset screen layouts allows for up to sixteen video sources to be displayed on a screen as the following:]



**Note:**

- As the video sources to be displayed increase or decrease, the switcher will automatically change to a new screen layout so that all video sources can be displayed appropriately on the whole screen.
- As the video sources increase until there are no available screen layout to allows for all these sources to be displayed on the screen, the Collabora will:
  - 1) Replace the source that displayed on the screen for the longest time with newest input source;
  - 2) Display the newest source on the main window\* of the screen. (\*By default, the main window lies in the upper left of the screen.)

The switcher also offers manual switching on the screen layout, which allows you to customize Multiview screen layout (up to 8 views), switching sequence and main window. For more information, please see the separate API documentation.

## Automatic Signal Switching

Automatic signal switching allows you to easily and quickly output desired sources. By default, automatic signal switching function is set as enabled.

- When a video source inputs, the switcher will automatically output and display it on the screen.
- When a new video source is added when there are no available screen layouts for all these video sources to be displayed (greater than 8), the switcher will have this new video source displayed on the screen's main window and remove the video that displays on screen for the longest.
- As the video sources increase or decrease, the switcher will change to a new screen layout automatically so that all video sources can be displayed appropriately on the whole screen.
- If all video sources are removed, the switcher will output the Guide Screen picture finally.

The switcher also offers three methods of switching to specific video source manually:

- 1) Using the front panel buttons to output corresponding hardware video source.
- 2) Using web UI.
- 3) Using API commands. For more information please see the separate API documentation.

## Screen Mirroring

With screen mirroring support, the switcher allows users to wirelessly share multimedia from their devices on any HDMI displays. The switcher allows users to perform screen mirroring over Airplay Mirroring and Miracast.

### (1) Screen Mirroring over Airplay

Example: iPhone 8 (iOS 13.1):

- A. Connect your iPhone to the soft AP of the switcher.
  - ⇒ **Soft AP SSID:** as same as switcher's device name and can be obtained from OSD at the upper right of the display screen; by default, it is set as COLLABORA 8 4K.
  - ⇒ **Password:** set through Web GUI or API and can be obtained from OSD at the bottom right of the display screen; by default, it is set as **12345678**.
- B. Slide up from the bottom of the iPhone's screen to show the control center. Click **Screen Mirroring** and choose the device name in the pop-up list. The display will output the screen of iPhone.



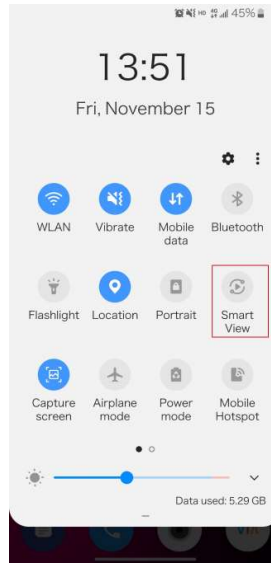
- C. To disconnect iPhone: click **Stop Mirroring**, the display will stop outputting the screen of iPhone.



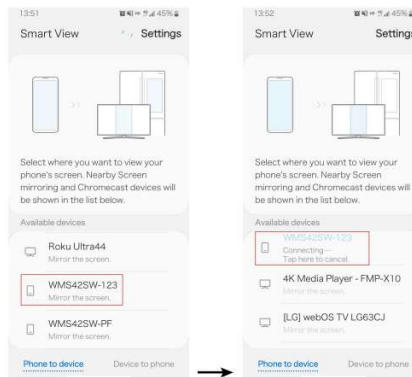
## (2) Screen Mirroring over Miracast


Example Android mobile: Samsung Galaxy S9:

1. Enable the Wi-Fi or WLAN feature of the mobile.
2. Slide down from the top of the screen and click the **Smart View** icon in the pop-up interface.



3. The Smart View window will appear and start to search Miracast receiver. Click the device name in the search result, the display will output the the mobile' screen.



4. To disconnect mobile from the switcher: click the icon  on the mobile screen, and choose **Disconnect** in the Smart View window.



**Note:**

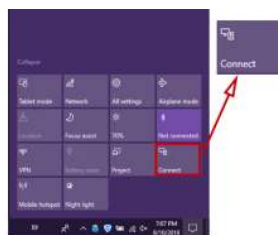
- The icon, instruction and entrance of the Miracast function may vary on different Android mobile phones, please refer to your mobile phone's manual to get accurate instruction.
- If you fail to use Miracast function, please disable the mobile's Wi-Fi and enable it later, or restart the mobile if necessary.

**For Windows 10 PC:**

1. Enable the WLAN feature of your PC.
2. Click the icon on bottom right of the screen to open **Action Center**.



3. Click **Connect**.



4. Click the switcher's device name in the search result.
5. To disconnect PC from the switcher: click **Disconnect**, the display will stop outputting the PC's screen.

**Note:**

- The icon and interface of the Miracast feature may vary on different computers.
- Some Windows 10 computers may fail to perform screen mirroring over 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.)

### (3) Screen Mirroring over USB Dongle

USB Dongle allows you to share content from your laptop on the display screen in a simple way – just by clicking the button of the USB Dongle connected to the laptop without installing any additional software.

#### Introduction to USB Dongle



USB Dongle

No.	Name	Description
1	USB port	Connect to the switcher or laptop for pairing up or projecting screen.
2	LED Indicator	<p>Blinking:</p> <ul style="list-style-type: none"> <li>⇒ When connected to the switcher: USB Dongle is being pairing up with the switcher.</li> <li>⇒ When connected to the computer: USB Dongle is starting or is establishing connection with the switcher.</li> </ul> <p>Solid on:</p> <ul style="list-style-type: none"> <li>⇒ When connected to the switcher: USB Dongle is paired up with the switcher successfully.</li> <li>⇒ When connected to the computer: USB Dongle is connected to the switcher successfully. You can press the button to start for screen projection now.</li> </ul>
3	Projection Button	Press the button to project laptop's screen on the display.

**Note:** USB Dongle is sold separately.

Steps to share laptop's screen on the display using USB dongle:

1. Pair USB Dongle with the switcher.

Connect USB Dongle to USB Type A of the switcher for pairing up. Then the switcher will set its soft AP's SSID and password for USB dongle. Once pairing is done, "Pairing succeeded" will appear on the display screen.

2. Connect USB Dongle to a laptop.

Connect USB Dongle to the laptop, it will start running and connecting to the switcher's soft AP. Once the Dongle connects to the switcher successfully, the USB Dongle LED stops blinking and turns to be solid on.

- Now press the USB Dongle button, you can share your laptop's screen on the display screen immediately. Press and hold the button for at least 5 seconds, you can have your laptop's screen displayed in full screen.

## Guide Screen

The switcher uses a Guide Screen to convey the basic connection instructions for user access. The Guide Screen can be personalized to allow custom connection instructions on the switcher's Web UI page.

The Guide Screen is accessible in the following cases:

- Automatic switching: disconnect all video sources from the switcher, the Guide Screen will appear automatically.
- Manual switching:
  - Short press the source selection button on front panel until no active video sources are displayed.
  - Send API command through telnet to the switcher to show the Guide Screen. For more information, please see the separate API documentation.

**PureLink**  
BEYOND 4K  
www.purelinkav.com

**COLLABORA 8 4K**  
8 source collaboration hub

**Connection Guide:**

**AirPlay:**  
1: Select Collabora in WiFi settings  
2: Enter Collabora password (lower right of this screen)  
3: Swipe up and select Screen Mirroring  
4: Choose Collabora  
5: In seconds you are sharing!

**Miracast:**  
1: Select Collabora in your WiFi settings  
2: Enter Collabora password (lower right of this screen)  
3: Choose Collabora  
4: In seconds you are sharing!

**Windows, Mac:**  
1: Insert USB Dongle  
2: Run 'Launcher.exe'  
3: When blue light on dongle is solid, click to share!

**Rear Panel Connections**

Works with Apple AirPlay

Miracast

Windows

Apple

Android

For more instructions, go to:  
[www.purelinkav.com/product/eight-source-4k-multi-viewer-collaboration-hub](http://www.purelinkav.com/product/eight-source-4k-multi-viewer-collaboration-hub)

### Note:

- By default, if Guide Screen picture is being output for 60 seconds, a countdown timer with the time period of 60 seconds will appear on the Guide Screen. When the timer ticks to zero, if the connected display is CEC-supported or correctly set with RS232 control commands, it will enter standby mode.

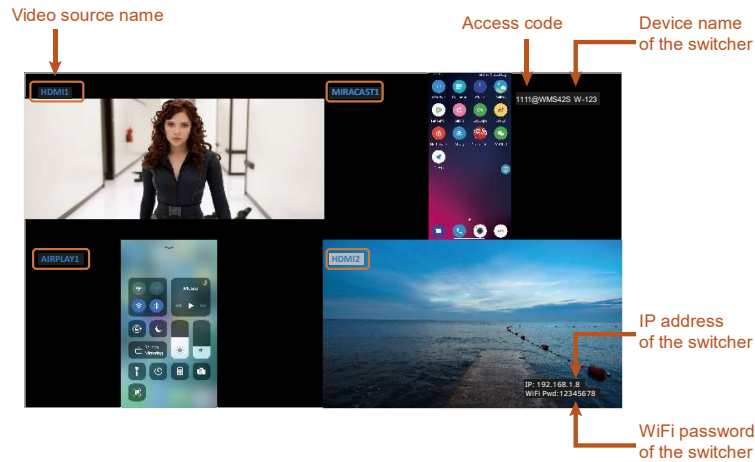
## OSD

The switcher 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: Full screen mode



### Example 2: Multiview mode



#### Note:

- When the switcher outputs Guide Screen picture, the OSD will display all the time.
- When the switcher outputs specific video sources, the OSD will display on the display device's screen for 10 seconds and then disappear.
- By default, the access code is set as blank, therefore the OSD doesn't display the access code. If you want to set access code, please refer to [Access Code](#) section for more information.

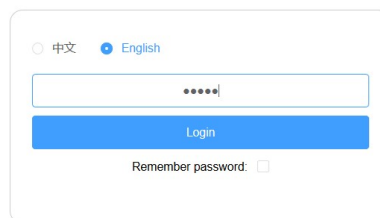
## 8. Web UI

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

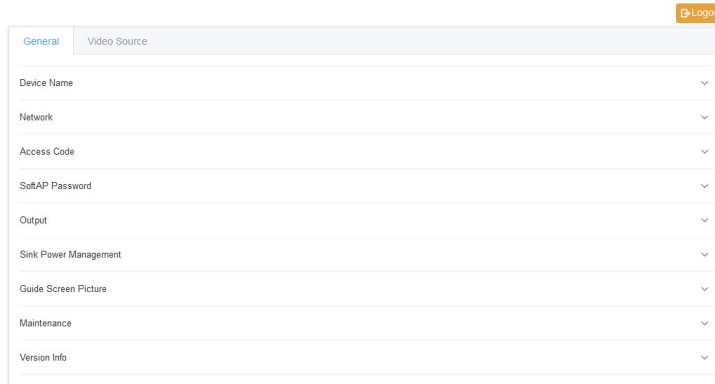
By default, the switcher comes with a default IP address **192.168.1.8**. Subnet mask is **255.255.255.0**.

To get access to Web UI:

1. Connect your PC and the LAN port of the switcher to a local area network.
2. Set your PC to the same network segment as the switcher, e.g. 192.168.1.xxx.
3. Input the switcher's IP address in the browser and press Enter and the following window will pop up.



4. Choose the language you wish to use: English or Chinese.
5. Input password (default password: admin) and click Login to enter the main page of Web UI.



The Web UI main page consists of General and Video Source Tabs.

## General Tab

### Device Name

UI Element	Description
<b>Device Name</b>	Redefine the device name to names easy to remember. <b>Note:</b> The name must be 1~20 characters in length, including letters, numbers, “_” or “-”. By default, device name is <b>COLLABORA 8 4K</b> .
<b>Apply</b>	Click to perform current settings.

### Network

UI Element	Description
------------	-------------

UI Element	Description
<b>Network</b>	For network settings in the switcher's LAN port.
<b>IP Mode</b>	Select an IP mode from DHCP and Static. By default, it's set as <b>Static</b> .
<b>IP Address</b>	Set IP address manually for the switcher when Static mode is selected.
<b>Netmask</b>	Set subnet mask manually for the switcher when Static mode is selected.
<b>Gateway</b>	Set gateway address manually for the switcher to communicate with another network that uses different communication protocols when Static mode is selected.
<b>DNS Server 1</b>	Set DNS server manually for the switcher to ensure normal network communication.
<b>DNS Server 2</b>	
<b>Apply</b>	Click to save and perform current settings. <b>Note:</b> After changing the IP settings, please refresh the Web UI page to re-login.

## Access Code

UI Element	Description
<b>Access Code</b>	Enter a four-digit access code to help prevent users from accidentally connecting to an unintended device and protect from an unauthorized access. <ul style="list-style-type: none"> <li>When an access code is configured, it appears on the upper right corner of the display.</li> <li>If you don't want to set access code, you can enter nothing here.</li> </ul> By default, it's set as blank.
<b>Auto</b>	When "Auto" is checked, the switcher will randomly generate a four-digit access code in the following cases: <ul style="list-style-type: none"> <li>The switcher switches to Guide Screen for output.</li> <li>The switcher reboots.</li> </ul>
<b>Refresh</b>	Click to refresh to the latest access code.
<b>Apply</b>	Click to perform current settings.

## Analog Audio Latency

UI Element	Description
<b>Analog Audio Latency</b>	<p>Input a digit to set the latency time for analog audio signal output.</p> <p>By default, it's set as zero.</p> <p><b>Note:</b> The digit should be within the range from 0 to 200 and must be an integer multiple of 20.</p>
<b>Apply</b>	Click to perform current settings.

## Soft AP Password

UI Element	Description
<b>Password</b>	<p>Set soft AP password.</p> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>The soft AP SSID is as same as the Device Name of COLLABORA 8 4K. (Default Device Name is <b>COLLABORA 8 4K</b>)</li> <li>The soft AP password must be 8 to 20 characters in length.</li> </ul> <p>If you don't want to set password, you can leave it blank here.</p>
<b>Apply</b>	Click to perform current settings.

## Output

UI Element	Description
<b>Output Timing</b>	Set the output timing for the HDMI output ports. Two operation methods are offered in the following:

UI Element	Description
	<ul style="list-style-type: none"> <li><b>Auto:</b> select to output the maximum resolution supported by display based on the display's EDID. E.g. If display supports up to 4K@60Hz, the switcher will output 4K@60Hz.</li> <li><b>Resolution range list:</b> select a desired output resolution from the dropdown menu to output this fixed resolution.</li> </ul> <p>By default, it's set as <b>Auto</b>.</p>
<b>Refresh</b>	Click to refresh to the latest status of the output timing.
<b>Output HDCP Support</b>	<p>Set the HDCP capability for the HDMI output. Two options are offered in the following:</p> <ul style="list-style-type: none"> <li><b>Enable:</b> select to enable HDCP capability of the output.</li> <li><b>Disable:</b> select to disable HDCP capability of the output.</li> </ul> <p>By default, it's set as <b>Enable</b>.</p>
<b>Auto Standby (0~60 minutes)</b>	<p>Set a period of time that remains before the countdown timer begins for auto standby.</p> <ul style="list-style-type: none"> <li>For example, when the current input is Guide Screen, 1 minute means if there's no signal present at the display in 1 minute, the countdown timer for display standby begins; when the timer ticks to zero, the display enters standby mode.</li> </ul> <p><b>Note:</b> If the connected display doesn't support CEC or isn't correctly set with RS232 commands, the word "Standby" appears in the middle of the Guide Screen.</p> <ul style="list-style-type: none"> <li>If it's set to 0 minute, it means this function is disabled, you cannot set the display to standby mode.</li> </ul> <p>By default, auto standby is set as <b>1 minute</b>.</p>
<b>Apply</b>	Click to perform current settings.

## Sink Power Management

Sink Power Management

Sink Power Mode	Both
Interval between two consecutive commands to the sink(Second, ranges from 0 to 200)	8
RS232 parameter	9600-8n1 <small>example: 115200-8n1</small>
RS232 standby command	
RS232 wakeup command	
RS232 hex string enable	Disable

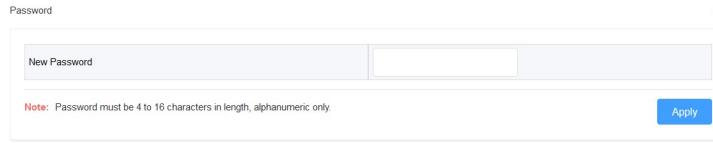
Power On Power Off Apply

UI Element	Description
<b>Sink Power Management</b>	Set display to enter standby mode or to return to their normal working state through CEC capability or RS232 commands.
<b>Sink Power Mode</b>	<ul style="list-style-type: none"> <li><b>both:</b> Enable both CEC and RS232 mode to manage the sink power.</li> </ul>



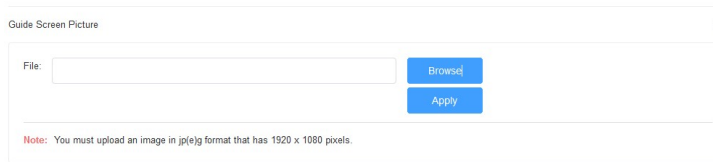
UI Element	Description															
	<ul style="list-style-type: none"> <li><b>cec</b>: Enable CEC to manage the sink power.</li> <li><b>rs232</b>: Enable RS232 to manage the sink power.</li> </ul> <p>By default, it's set as <b>both</b>.</p>															
<b>Interval between two consecutive commands to the sink (Second)</b>	<p>Specify a time interval between sending two consecutive commands to the sink (in seconds). The interval should not be less than 0s.</p> <p><b>Note:</b> If you're not clear about this function, it's suggested that you make no changes here or contact with the manufacturer.</p> <p>By default, the interval is set as <b>8</b> seconds.</p>															
<b>RS232 Parameter</b>	<p>Set the RS232 parameters for the controlled display. For more information about the parameters, see the user guide of your display devices.</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Value</th> <th>Abbreviation</th> </tr> </thead> <tbody> <tr> <td>Baud Rate</td> <td>9600bps</td> <td>9600</td> </tr> <tr> <td>Data Bits</td> <td>8bits</td> <td>8</td> </tr> <tr> <td>Parity</td> <td>None</td> <td>n</td> </tr> <tr> <td>Stop Bits</td> <td>1</td> <td>1</td> </tr> </tbody> </table> <p>By default, its set as <b>9600-8n1</b>.</p>	Parameter	Value	Abbreviation	Baud Rate	9600bps	9600	Data Bits	8bits	8	Parity	None	n	Stop Bits	1	1
Parameter	Value	Abbreviation														
Baud Rate	9600bps	9600														
Data Bits	8bits	8														
Parity	None	n														
Stop Bits	1	1														
<b>RS232 standby command</b>	<p>Enter the RS232 standby command of a controlled display device. For more information about the command, see the user guide of your display devices. If you want to disable this function, you can enter nothing here.</p> <p>By default, it's set as blank.</p>															
<b>RS232 wakeup command</b>	<p>Enter the RS232 wakeup command of a controlled display device. For more information about the command, see the user guide of your display devices. If you want to disable this function, you can enter nothing here.</p> <p>By default, it's set as blank.</p>															
<b>RS232 hex string enable</b>	<ul style="list-style-type: none"> <li><b>Enable</b>: select to use the hex numbers of RS232 standby and wakeup commands to control your display devices. If this is the case, make sure standby and wakeup commands are manually converted to their equivalent hex representations first and then input in <b>RS232 standby command</b> and <b>RS232 wakeup command</b>. For example, RS232 wake up command in hex may be: <i>50 57 52 20 4F 4E 0D 0A</i>.</li> <li><b>Disable</b>: select to directly send the original standby or wakeup commands to control display devices.</li> </ul> <p>By default, it's set as <b>Disable</b>.</p>															
<b>Power On</b>	Click to power on the connected display.															
<b>Power Off</b>	Click to power off the connected display.															
<b>Apply</b>	Click to perform current settings.															

## Password



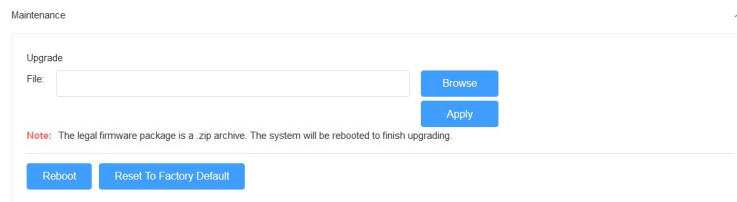
UI Element	Description
<b>Password</b>	Set a new login password for the switcher.  <b>Note:</b> The new password must be 4 to 16 characters in length, alphanumeric only.
<b>Apply</b>	Click to perform current settings.

## Guide Screen Picture



UI Element	Description
<b>Browse</b>	For changing a picture for Guide Screen.
<b>Apply</b>	Click to upload the picture file to the switcher.  <b>Note:</b> The picture must be in jp(e)g format that has 1920 x 1080 pixels.

## Maintenance



UI Element	Description
<b>Browse</b>	Click to browse for the local upgrade file and upload for firmware upgrade.  <b>Note:</b> The legal firmware package is a .zip archive.
<b>Apply</b>	Click to perform firmware upgrade.
<b>Reboot</b>	Click to restart the switcher.

UI Element	Description
<b>Reset to Factory Default</b>	Click to restore the switcher to its factory defaults. You can also perform this task by using the RESET button on front panel.

**Steps to upgrade firmware:**

1. Click **Browse** to select the upgrade file on the computer and upload it to the switcher for firmware upgrade. It will take a few seconds to upload the upgrade file.
2. The following window will appear once the upload is completed. Then the switcher will reboot. Please refresh the page and then re-login.



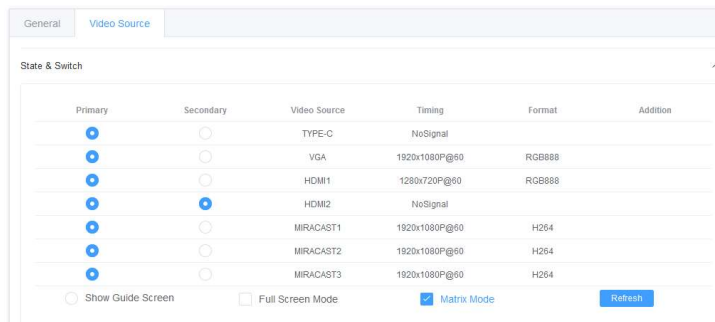
**Version Information**

Version Info	
Version	V1.4.5
Build Time	2020 02 28 09:39:26

UI Element	Description
<b>Version Info</b>	Displays the switcher’s firmware information.
<b>Version</b>	Shows the switcher’s firmware version.
<b>Build Time</b>	Shows the time and date when the switcher’s firmware was built.

**Video Source Tab**

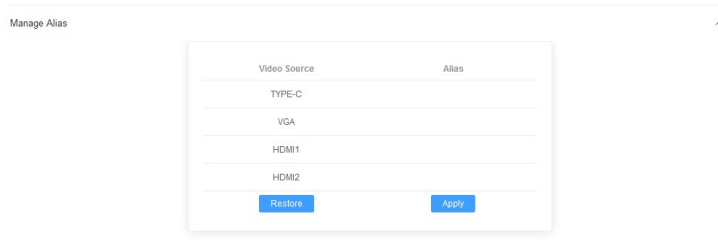
**State & Switch**



UI Element	Description
<b>State &amp; Switch</b>	For displaying the video signal status (including video source name, video resolution and video

UI Element	Description
	format) and setting the display mode.
<b>Primary</b>	Click the button (turns from white to blue) to display the video source(s) on the screen connected to HDMI Out 1.
<b>Secondary</b>	Click the button (turns from white to blue) to display the video source(s) on the screen connected to HDMI Out 2.
<b>Show Guide Screen</b>	Click the button (turns from white to blue) to display Guide Screen on the screen connected to HDMI OUT 1 and HDMI OUT 2.
<b>Full Screen Mode</b>	Check the box to display the selected video source in full screen mode on the screen connected to HDMI OUT 1.
<b>Matrix Mode</b>	<ul style="list-style-type: none"> <li>When the box is checked, the screen connected to HDMI Out 2 will display the selected video source (in Secondary column) in single view.</li> <li>When the box is not checked, the screen connected to HDMI Out 2 will display the same video content as that of HDMI OUT 1.</li> </ul>
<b>Refresh</b>	Click to refresh to the current state information.

### Manage Alias



UI Element	Description
<b>Video Source</b>	Displays the video source name.
<b>Alias</b>	Enter an alias to change the video source name to a new one.
<b>Restore</b>	Click to restore the setting to factory defaults.
<b>Apply</b>	Click to perform the current settings.

## 9. Video Source Tab

COLLABORA 8 4K supports firmware upgrade through Web UI and USB ports on the front panel.

To upgrade firmware through Web UI, see [Maintenance](#) section.

To upgrade firmware through USB port on the front panel, perform the following:

1. Name the upgrade file package “COLLABORA 8 4K-update.zip”.
2. Create a new folder named “upgrade” under the root directory of a FAT32 or NTFS Udisk. Place the upgrade file in this folder.



3. Connect the Udisk to the switcher’s USB port. It takes about 1 minute for the switcher to read the Udisk. If the switcher detects the upgrade file is a newer version, it will start to upgrade, and the LED indicators on front panel -- VGA, HDMI 1-2 & USB-C LEDs will start blinking. When the upgrade process is completed, the four LEDs will stop blinking and return to normal state.

**Note:**

- Do not cut off power during the upgrade process.
- If the switcher detects the upgrade file is not a newer version, it will not start upgrade.
- If you want to perform force upgrade<sup>1</sup>, add the force deploy file to the “upgrade” folder. The switcher will start to upgrade whether the version of upgrade file is newer or not. Therefore, please use this method with caution.

If you have further questions, please contact your PureLink dealer, call PureLink at 201-488-3232, or visit [www.purelinkav.com](http://www.purelinkav.com)