

### AV Pro edge AC-FRESCO-CAP-4 4 Video Wall Processor User **Manual**

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AV Pro edge AC-FRESCO-CAP-4 4 Video Wall Processor



### Introduction

- The AC-FRESCO-CAP-4 is a Dedicated Video Wall Processor supporting Output Resolutions up to 18Gbps 4K60 (4:4:4) through its 1 HDMI Input and 4 HDMI outputs. The FRESCO is a "Plug-and-Play" 4-panel Video Wall which is expandable by cascading multiple FRESCO processors to build larger Video Wall arrays.
- Simple yet powerful, the Web GUI makes setting up your video wall a breeze. Use the built-in browser-based web GUI, to adjust the default picture mapping coordinates for each display in the video.
- This process ensures an ideal Video Wall that is easy to do.
- Video walls allow sports bars, retail stores, entertainment venues, and hotels to "WOW" their customers with big, bold, and bright messaging.

### **Features**

- HDMI 2.0(B)
- 18Gbps Bandwidth Support
- 720P to 4K60 4:4:4 Output Resolution
- HDCP 2.2 (and all earlier versions supported)
- EDID Management
- RS-232 and LAN Control Options
- · Balanced Analog Out (2CH PCM)

### Easy to use:

- · Install in seconds
- Feature-rich
- EDID management
- LAN Control
- RS-232 Control
- · OTA updates

### What's In the Box:

- AC-FRESCO-CAP-4 Video Wall Processor
- 12V Locking Power Supply
- 2 x Mounting Brackets
- 6 x Screws for Mounting Brackets
- 1 x 5-Pin Terminal Block
- 1 x 3-Pin Terminal Block

### **Quick Installation:**

- 1. Connect the HDMI input source (Blu-ray, Set Top Box, etc...) to the AC-FRESCO-CAP-4.
- 2. Connect the four HDMI Outputs from the AC-FRESCO-CAP4 to your four Video Wall displays.
- 3. Power on the source.
- 4. Connect the power supply to the AC-FRESCO-CAP4.
- 5. Turn on output devices/displays.
- 6. Use the Web GUI to set up the video wall configuration and image mapping.

### **Specifications**

Video:				
Video Resolutions	Up to 4k 60HZ 4:4:4			
	420, 422, 444 (10 AND 12 DEEP COLOR)			
HDR Formats/Resolutions	HDR10, HDR10+, DOLBY VISION, HLG			
	YUV (Component), RGB			
Color Space	(CSC: Rec. 601, Rec. 709, BT2020, DCI, P3 D6500)			
Chroma Subsampling	4:4:4, 4:2:2, 4:2:0 Supported			
Deep Color	Up to 16-bit (1080), up to 12 BIT (4k)			
Audio:				
Audio Formats Supported by HDMI	PCM 2.0 Ch, LPCM 5.1 & 7.1, Dolby Digital, DTS 1, Dolby Digital Plus, Dolby TrueHD, DTS-HD Master Audio, DTS-X, Dolby Atmos			
Audio Formats Supported Extracted (2CH Port)	PCM 2 CH			
Distance:				
HDMI In/Out (4k60 4:4:4)	UP TO 50 FEET (USING BULLET TRAIN HDMI)			
	UP TO 130 FEET (USING BULLET TRAIN			
HDMI In/Out (W/ AOC Cable) (4k60 4:4:4)	AOC)			
Other:				

Bandwidth	18 Gbps (TMDS)				
HDCP	HDCP 2.3 and Earlier				
Ports:					
HDMI	Type A				
LAN	RJ45 w/ Web Interface/ Control				
Audio (Extracted Analog)	5 PIN Terminal Block (Balanced)				
RS232	3 Pin Terminal Block				
Environmental:					
Operating Temperature	23 to 125°F (-5 to 51°C)				
Storage Temperature	-4 to 140°F (-20 to 60°C)				
Humidity Range	5-90% RH (No Condensation)				
Power:					
Power Consumption (Total)	2 Watts Max				
	Input: AC 100-240V ~ 50/60Hz				
Power Supply	Output: DC 12V 2A				
Dimensions:					
	mm: 136.525 X 296.0624 X 44.45				
Dimensions (Unit Only Length/Width/Height)	in: 5.375 X 11.656 X 1.75				
	mm: 222.25 X 392.1252 X 65.1002				
Dimensions (Packaged Length/Width/Height) (Kit)	in: 8.75 X 15.438 X 2.563				
Weight (Unit)	2.63 lbs (1.19 Kg)				
Weight (Packaged)	3.99 lbs (1.81 Kg)				
*Specifications are subject to change without notice. Mass & dimensions are approximate					

### **Device Overview:**

- Definition A Video Wall is a special array consisting of multiple computer monitors, video projectors, or television sets tiled together contiguously or overlapped to form one large image/picture.
- Video Walls are widely used in commercial and various entertainment venues.

### Front Panel:

- "Front Screen Display"- Displays the current Resolution/Timing of the HDMI Input. Use in conjunction with the
- Settings buttons (UP, DOWN, ENTER, and BACK) to navigate the available settings menus and change edid,

Output format, Ex-audio, Net, Version.

- "Settings Buttons" Use these 4 buttons to navigate the available front screen menus, Edid, Output format, Exaudio, Net, Version.
- "ISP / Control" USB-C service and control port. Primarily used for sending direct serial commands and Firmware updates.



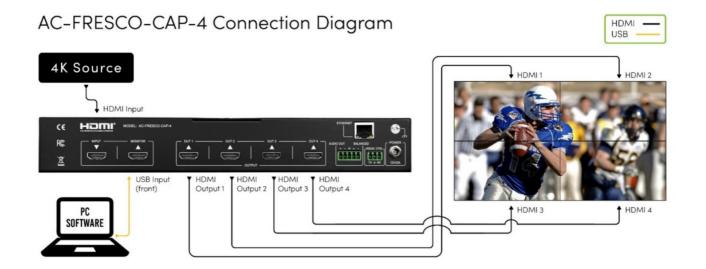
### **Rear Panel Overview:**

- "Ethernet" (LAN RJ45 PORT) Default IP Address for LAN control is 192.168.001.239
- "HDMI Input" used for source input
- "Loop-Out" is used in cascading additional FRESCO Video Wall processors for building larger Video Wall arrays.
- "HDMI Output" OUT1" through "OUT4"
- "Audio-Out" (Balanced Extracted Audio) supports only 2CH PCM.
- "RS232" used to control the FRESCO Video Wall processor



### FRESCO CONNECTION DIAGRAM

### FRESCO CONNECTION DIAGRAM & OUTPUT-TO-DISPLAY ASSIGNMENTS



### THE FRESCO VIDEO WALL WEB GUI THE BIGGEST CHALLENGE TO SETTING UP A FRESCO VIDEO WALL IS HANGING THE PANELS!

Five easy steps to video wall perfection

- 1. Do a great job hanging the panels
- 2. Launch the Web GUI using the FRESCO's IP
- 3. Confirm the Video Wall Parameters
- 4. Click the "APPLY" button
- 5. NO STEP 5 YOU ARE DONE!

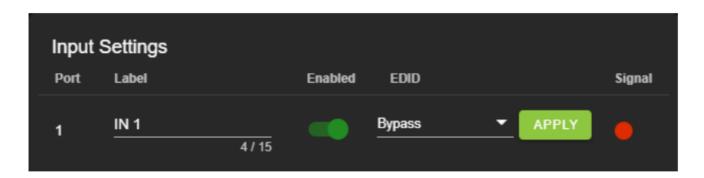


Initial Setup: WebUI

The AC-FRESCO-CAP-4 can be controlled using the Micro USB port, 3pin RS232, or over TCP/IP using the LAN connection. For initial setup, it is recommended to connect the videowall processor to a local area network (LAN) and use a computer on the same network in conjunction with the built-in WebUI. After making all the physical connections, the first step will be to check for any Firmware Updates. The below steps are an example of this setup, other control options are covered in separate sections of this user manual.

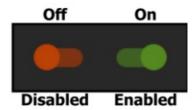
- 1. Connect the HDMI Input sources to the HDMI Inputs on the back of the video processor.
- 2. Connect the HDMI/devices to the HDMI Outputs.
- 3. Connect the network LAN cable to the RJ45 port labeled LAN (between the Micro USB and 3pin RS232 port).
- 4. Power on the sources (Inputs).
- 5. Power on the Output devices/displays.
- 6. Connect the 12V power supply to power on the video processor and then to a suitable power source.
- 7. In order to check the current IP settings use the front panel buttons to navigate to the 4th menu option labeled net to click through the dilering settings.

WebUI: I/O Config - Input Settings



- Input Settings Label Use this to give a name/alias to your inputs (Apple TV, Cable Box, Roku, etc).
  - **Note:** There is a 15-character limit to this field, the name will replace the default "IN #" throughout the rest of the WebUI (for instance the Video Videowall processor tab).
- Input Settings Enable switch Use this enable/disable switch to turn the corresponding Input port on or off.

  The default setting is enabled (green) by default.

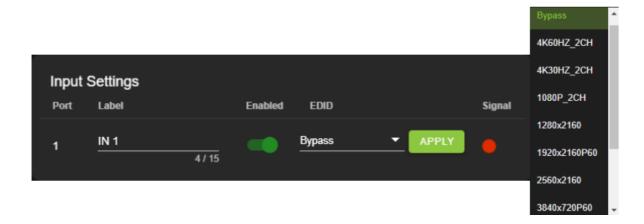


**WebUI:** I/O Config – Input Settings Cont.

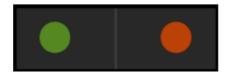
**Input Settings EDID** – Use these four dropdowns to select your preferred EDID. The available combinations are as follows.

0:Bypass(Follow Output 1)	1:4K60HZ_2CH	2:4K30HZ_2CH
3:1080P_2CH	4:1280x2160	5:1920x2160P60
6:2560x2160	7:3840x720P60	8:3840x1080P60
9:3840x1440	10:USER1	

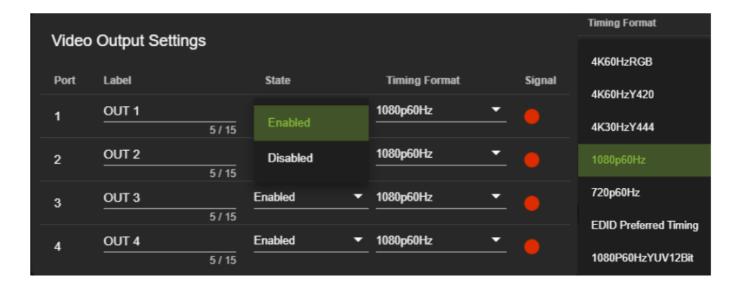
**NOTE:** If you select USER1 EDID, then drop-downs change to allow you to select from and output to copy from. You can select any of the 4 HDMI outputs and then click the COPY button (this replaces the Apply button). This will save that outputs EDID to the USER1 slot.



**Input Settings Signal** – The Signal Indicator on the HDMI INPUTS shows the current state of the connection HDMI source. Green means the HDMI source is detected, and red means that the source is not detected. If red verify that the source is powered on and that the HDMI cable is properly connected to the source and the back of the video processor.



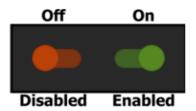
WebUI: I/O Config - Output Settings



- Output Settings Label Use this to give a name/alias to your outputs (Living Room, Den, Kitchen, etc).
- **Note:** There is a 15-character limit to this field, the name will replace the default "OUT #" throughout the rest of the WebUI (for instance the Video Videowall processor tab).
- Output Settings State This drop-down just like the input settings you can Enable or disable the output port.
- Output Timing format This drop-down changes the timing for the corresponding output from 4K60 to 720p.

  The
- **EDID Preferred Timing** copies the preferred timing of the connected display. Output Settings Signal The Signal Indicator on the HDMI OUTPUTS shows the current state of the connection
- **HDMI Output.** Green means HDMI sync is detected, and red means that the sync is not detected. If red verify that the output is powered on and that the HDMI cable is properly connected to the sync and the back of the video processor.



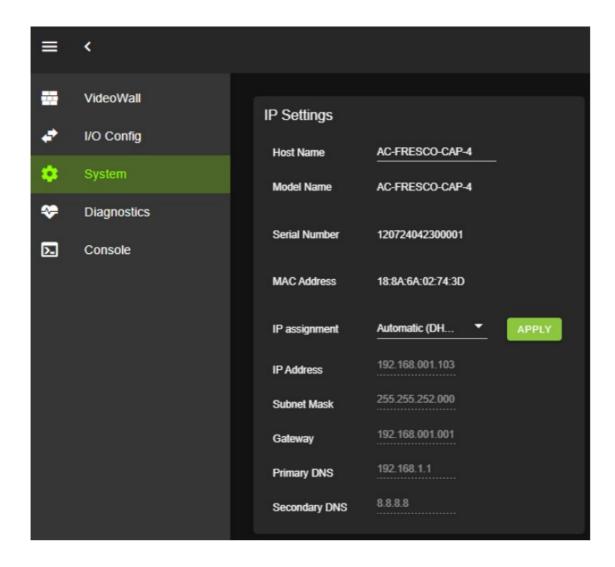


WebUI: System - IP Settings

This area contains relevant network information of the AC-FRESCO-CAP-4.

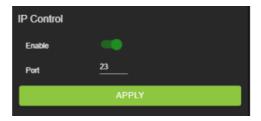
- Host Name Devices name on the network. This field is automatically filled with the Model Name by default.
- Model Name Displays the AVProEdge Model/Part number.
- Serial Number Displays the Serial Number of the Videowall processor.
- MAC Address Displays the device's MAC Address.
- IP assignment This drop-down has two options.
  - 1. Manual
  - 2. Automatic (DHCP)

Default out of the box will be set to Automatic (DHCP), and the IP Address, Subnet Mask, Gateway, Primary DNS, and Secondary DNS will be assigned by your network controller. If you select Manual, you can use the text fields to enter your Network settings. Once all fields have been filled out, click the green Apply Button to set. A prompt will appear to confirm the change, click OK to confirm.



### WebUI: System - Telnet Settings

- This area contains relevant Telnet settings for the AC-FRESCO-CAP-4. Two fields can changed, Enable
- Disable the switch and the Port Number.
  - Enable This switch has two options, Green/Enabled (Default) and Red/Disabled.
  - Port This field is used to change the Telnet Port of the AC-FRESCO-CAP-4. You can use the text field to enter a number or use the Up/Down arrow buttons to increase/decrease the number.



### WebUI: System - Admin Web Interface

This switch has two options, Red/Disabled (Default) and Green/Enabled. When enabled (green) there will be three fields that appear, Username, Password, and Confirm Password.

- Default Username admin
- Default Password admin

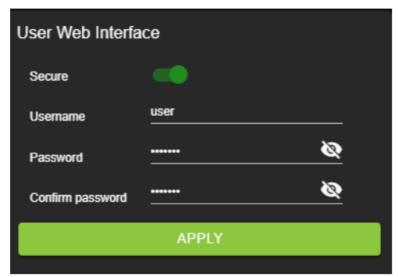


- Once the desired Username and Password have been entered, click the green APPLY button to set.
- With the Admin Web Interface enabled, the only menu that will be accessible using the WebUI will be the Videowall Tab. The rest of the settings will require the Admin login to access.



WebUI: System - User Web Interface

- This switch has two options, Red/Disabled (Default) and Green/Enabled. When enabled (green) there will be three fields that appear, Username, Password, and Confirm Password.
- NOTE: The Admin Web Interface must first be Enabled and set up before this field will be available to change.
- Default Username user
- **Default Password** user123



- Once the desired Username and Password have been entered, click the green APPLY button to set.
- Note: The webpage will reload to the Login page.
- With both Admin and User Web Interfaces enabled, no menus will be accessible using the WebUI without first logging in (see image below).

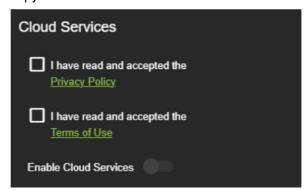


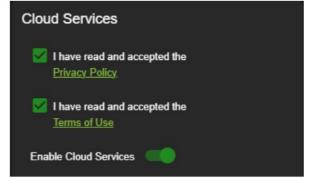
• Logging in with the User credentials, the only menu that will be accessible will be the Videowall tab. The rest of the settings will require the Admin user to log in (see page 24).



WebUI: System - Cloud Services

- By enabling Cloud Services your device will have the ability to connect to firmware servers for over-the-air
   (OTA) updates and enable third-party remote management services. If Cloud Services are disabled, your device will opt out of any previously enabled services and will not be able to access OTA updates.
- Before you can enable the cloud services you must first agree to the "Privacy Policy" and "Terms of Use".
- You can view these documents by clicking on the Privacy Policy or Terms of Use links, this will open up a PDF copy of that document in a new tab.





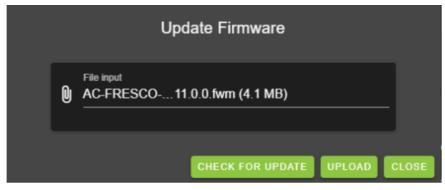
- With the Cloud Services enabled you can use the System tab to check for new Firmware OTA (over the air).
- This will check the firmware versions currently loaded on the AC-FRESCO-CAP-4 and compare them to the latest available.
- If it is up to date, you will see a prompt stating "No update available!" click CLOSE to exit

# No update available! CLOSE

• If an update is available, the following prompt will show. Simply click the UPDATE button to load.

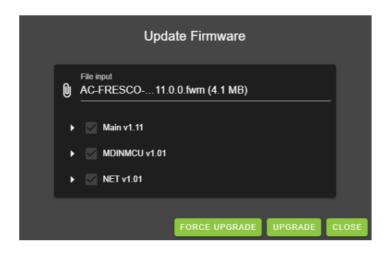
New firmware update is available! UPDATE CLOSE

- NOTE: When loading firmware (depending on the firmware files that are being updated) some settings will
  revert to Factory Defaults. Take note of the I/O Config tab. Settings like the INPUT/OUTPUT labels, EDID
  Settings, Video Scaling, Audio Settings, etc. will have to be re-applied after the firmware updates are
  completed.
- If an update is available a file will automatically be selected, simply click the UPLOAD button to load the firmware files to the Videowall processor.



WebUI: System - Firmware Update Cont.

Once the firmware file has been uploaded, it will display all containing firmware files. Here you can select individual firmware files to load or simply leave all files/options selected. If the version currently installed is not newer, then that update will be skipped automatically.



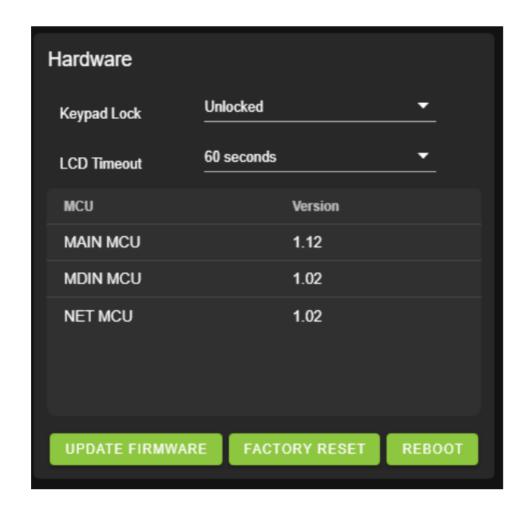


- Once the progress bar hits 100% click the CLOSE button, and the firmware upgrade process is complete.
- Now you will want to go back and re-apply settings like INPUT/OUTPUT Labels, applied EDIDs, Video Scaler

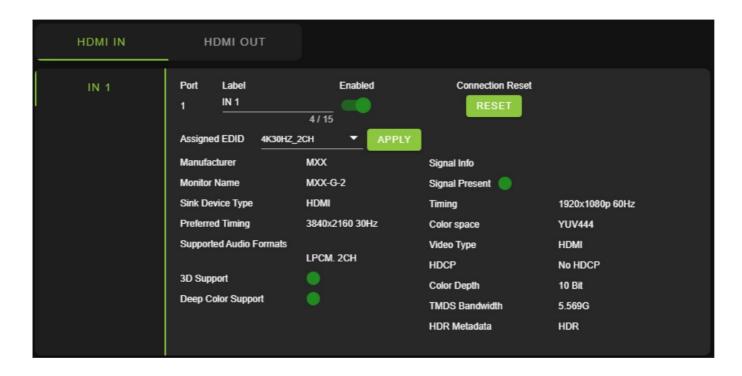
Settings, Audio Settings, etc.

WebUI: System - Hardware

- LCD Timeout This adjusts the time the front panel display will stay lit up when a button is pressed.
- · There are four settings available
  - 1. Always on (Default)
  - 2. 15 Seconds
  - 3. 30 Seconds
  - 4. 45 Seconds
- **Keypad Lock** Enable or Disable (default) the front panel Keypad Lock.
- MCU/Version Lists the current Firmware Versions
- UPDATE FIRMWARE Check/upload firmware.
- FACTORY RESET Restores unit to Factory Defaults
- REBOOT Reboots the AC-FRESCO-CAP-4

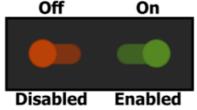


WebUI: Diagnostics - HDMI IN



- Input Settings Label Use this to give a name/alias to your inputs (Apple TV, Cable Box, Roku, etc). Note: There is a 15-character limit to this field, the name will replace the default "IN #" throughout the rest of the WebUI (for instance the Video Videowall processor tab).
- Input Settings Enable switch Use this enable/disable switch to turn the corresponding Input port on or off.

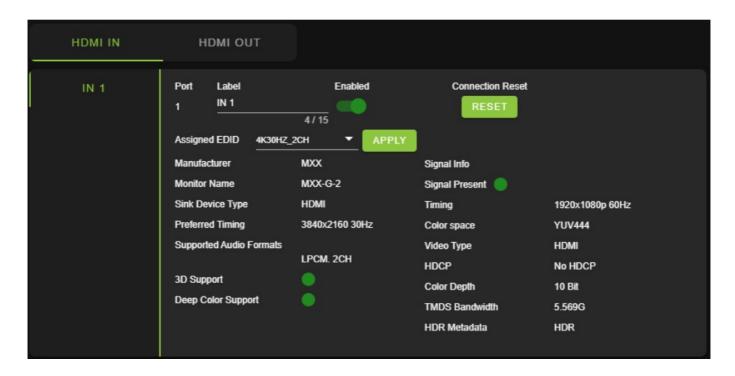
  The default setting is enabled (green) by default.



- Connection Reset Use this button to perform a reset of the HDMI Input connection.
- Input Settings EDID Use this dropdown to select your preferred EDID. The available combinations are as follows.

0:Bypass(Follow Output 1)	1:4K60HZ_2CH	2:4K30HZ_2CH
3:1080P_2CH	4:1280x2160	5:1920x2160P60
6:2560x2160	7:3840x720P60	8:3840x1080P60
9:3840x1440	10:USER1	

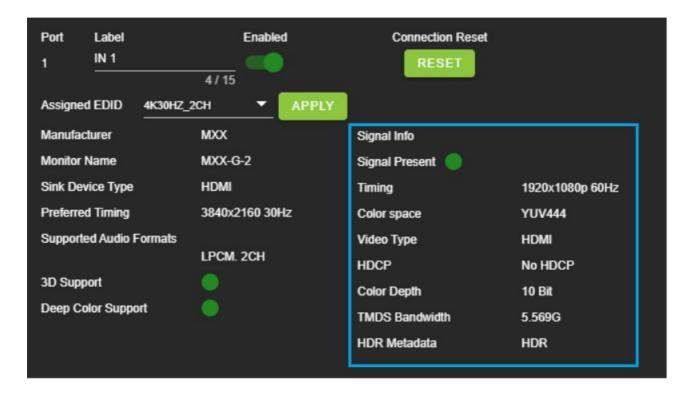
WebUI: Diagnostics - HDMI IN Cont.



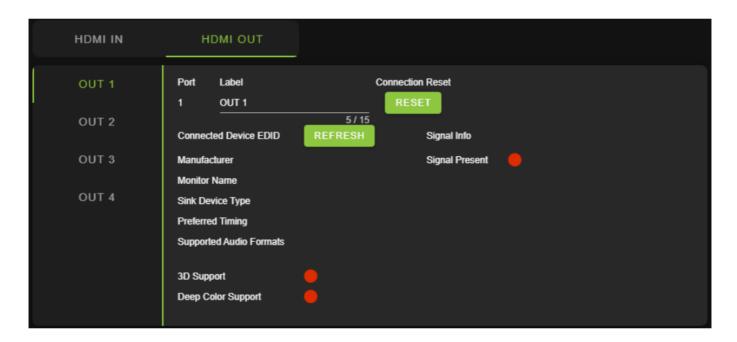
On the left, you will see the current applied EDID information. In the example above, you will see a canned 1080P – No 3D – SDR – 2CH EDID applied to IN 1. Any EDID change, once applied will display here.

### Signal Info shows the connected source's current output information. This includes

- Timing
- · Color Space
- · Video Type
- HDCP Version
- TMDS Bandwidth
- HDR Metadata
- · Audio Sampling Frequency
- · Audio Sampling Size
- Audio Channels



WebUI: Diagnostics - HDMI OUT



HDMI Output Label, State, and Connection Reset. Connected Device EDID shows the connected sync's preferred EDID information and current state. This includes

- Manufacturer
- Monitor Name
- · Sink Device Type
- · Preferred Timing
- · Supported Audio Formats
- 3d Support
- Deep Color Support
- · Signal Present
- Source Input (future update)

#### WebUI: Console

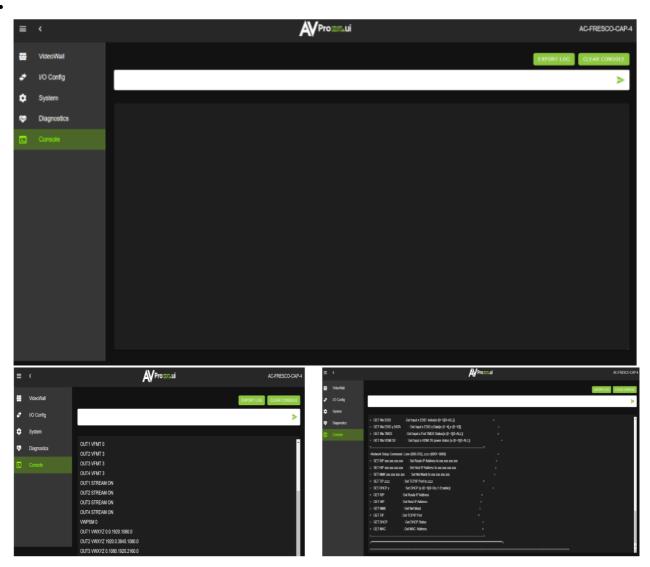
A built-in Command Console is Using the command API (command list) you can send device-specific commands or use it as a live monitor while sending commands from a control system (helpful in troubleshooting).

### **Example**

1. Click in the white box and type

### · a. GET STA

 Click the green arrow or hit ENTER/RETURN on your keyboard The command response will show in the field below.



Example - "GET STA"

**Get status** 

Example - "H"

Help command

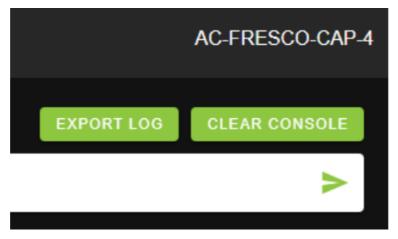
**Returns all Available Commands** 

### **EXPORT LOG** – Button

• This button will generate a text file containing the console information in your web browser's download folder.



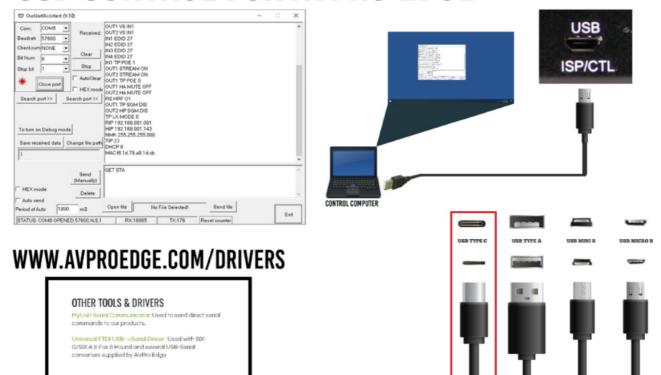
This button will clear the current console session.



### RS-232 and TCP/IP Control:

- The AC-FRESCO-CAP-4 can be controlled with either RS-232 or TCP/IP commands. Certain switching or format configurations can only be done using these commands.
- We recommend using either the MyUART (RS-232- free) or Hercules (TCP/IP free) apps as they are very
  easy to use for sending commands to the machine.
- For TCP/IP control commands use Telnet Port 23.
- For RS-232, use a null modem serial cable adapter and set the serial communications to 57600,n,8,1 (baud: 57600, no parity, 8 data bits and 1 stop bit) with no handshaking.
- Please add a carriage return (Enter key) after each command when using direct commands.
- The unified command list (ASCII) is listed on the following pages. Text version available here, and under the resources tab of on the products web page.

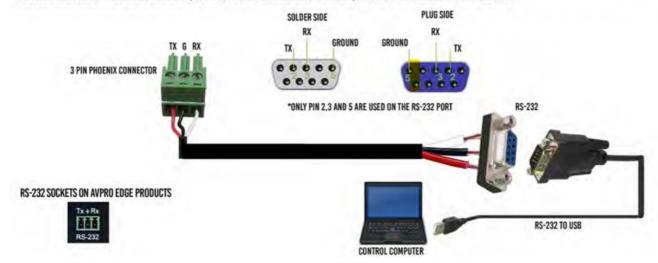
### **USB CONTROL FOR AVPRO EDGE**



### RS-232 Wiring Diagram:

## RS-232 CABLE FOR AVPRO EDGE

IN ORDER TO CONNECT YOUR COMPTER TO THE SWITCH BY RS-232 YOU NEED TO MAKE YOUR OWN CABLE WITH ONE END A PHOENIX CONNECTOR AND THE OTHER END A RS-232 PORT. YOUR COMPUTER DOESN'T HAVE A RS-232 INPUT, GET A USB CONVERTER (AS SHOWN BELOW), AND PLUG THE USB END TO ANY COMPUTER



**Command List:** 

Command	Description		
Н	Help		
STA	Show Global System Status		
SET RST	Reset to Factory Defaults		
SET RBT	System Reset to Reboot		
SET ADDR xx	Set System Address to xx {xx=00~99}		
SET INx RST	Set Input Port Reset {x=0~1}		
SET OUTx RST	Set Output Port Reset {x=0~4}		
SET BAUDR x	Set System BaudRate to x {x=0~5}		
SET LCD ON Tx	Set LCD Remain On Time {x=[0~3](0=Always ON,1=15,2=30,3=60Sec)}		
SET KEY LOCK ON/OFF	Set Key Lock On/Ol		
GET ADDR	Get System Address		
GET STA	Get System System Status		
GET BAUDR	Get System BaudRate		
GET INx SIG STA	Get Input x Signal Status {x=0~1}		
GET OUTx HPD	Get HDMI Output x HPD Status {x=0~4}		
GET INx VID FMT INF	Get Input x Video Format Info {x=0~1}		
GET LCD ON T	Get LCD Remain On Time		
GET KEY LOCK	Get Key Lock Status		
GET HW REV	GET HW REV		
SET VWPSMx	Set Video Wall Preset Mode {x=[0~3]}		
Video Wall Settings Commands:			
SET OUTx VWXYZ x1.y1.x2.y2.z	Set Output Video Wall Parameter, start from $(x1,y1)$ to $(x2,y2)$ , Rotation a ngle $(z)$ { $x=0\sim4$ , $x1=[03840]$ , $y1=[02160]$ , $x2=[x13840]$ , $y2=[y12160]$ , $z=[0,90,180,270]$ } (Note: If $z=90,270$ , output 3 or output 4 will have no video output!)		
GET VWPSM	Get current Video Wall Preset Mode		
GET OUTx VWXYZ	Get Output Video Wall Parameter {x=0-4}		
Output Setup Commands:	(Note:output number(x)=HDMI,x=[0-4](0=AII))		
SET OUTx VFMTy	Set Output x Video Timing Format {x=0-4, y=[0~6] (0:4K60HzRGB, 1:4K6 0HzY420, 2:4K30HzY444, 3:1080p60Hz, 4:720p60Hz, 5: Preferred Timing, 6:1080P60HzYUV12Bit)}  22		

SET OUTx STREAM ON/OFF	SET OUTx STREAM ON/OFF {x=0~4}		
SET OUTx EXA EN/DIS	Set Ex-Audio Output Enable/Disable {x=0~1}		

GET OUTx VFMT	Get Output x Video Timing Format {x=0~4}			
GET OUTx STREAM	Get Output x Stream ON/OFF Status {x=0~4}			
GET OUTx EXA	Get Ex-Audio Output Enable/Disable Status {x=0~1}			
GET OUTx EDID DATA	Get Output x EDID DATA {x=0~4}			
Input Setup Commands:	(Note:input number(x)=HDMI(x),x=[1])			
SET INx EDID y	Set Input x EDID {x= <u>0~1</u> , y=[0~10] 0			
0: Bypass (Follow Output 1)	1: 4K60HZ_2CH	2: 4K30HZ_2CH		
3: 1080P_2CH	4: 1280×2160	5: 1920x2160P60		
6: 2560×2160	7: 3840x720P60	8: 3840x1080P60		
9: 3840×1440	10: USER1			
SET INx EDID CY OUTy	Copy Output y EDID To Input x (USER1 BUF) {x=0~1, y=0-4}			
SET INx EDID Uy DATAz	Write EDID To User y Buler of Input x $\{x=\underline{0}\sim 1, y=[1], z=[EDID Data]\}$			
SET INx TMDS ON/OFF	Set Input x Port TMDS Status ON/OFF {x=0~1}			
GET INx EDID	Get Input x EDID Index {x=0~1}			
GET INx EDID y DATA	Get Input x EDID y Data {x=[14], y=[010]}			
GET INX TMDS	Get Input x Port TMDS Status {x=0~1}			
GET INx HDMI 5V	Get Input x HDMI 5V power status {x=0~1}			
Network Setup Command:	( xxx=[000-255], zzzz=[0001~9999] )			
SET RIP xxx.xxx.xxx	Set Route IP Address to xxx.xxx.xxx			
SET HIP xxx.xxx.xxx	Set Host IP Address to xxx.xxx.xxx			
SET NMK xxx.xxx.xxx	Set Net Mask to xxx.xxx.xxx			
SET TIP zzzz	Set TCP/IP Port to zzzz {zzzz=[0001~9999]}			
SET DHCP y	Set DHCP {y=[0~1](0=Dis, 1=Enable)}			
GET RIP	Get Route IP Address			
GET HIP	Get Host IP Address			
GET NMK	Get Net Mask			
GET TIP	Get TCP/IP Port			

GET DHCP	Get DHCP Status 23
GET MAC	Get MAC Address

### **Troubleshooting**

- Verify Power The LED on the front of the FRESCO should be lit up RED when power is applied. Check power supply connections to device and power
- Verify Connections Check all cables are properly connected
- Issues with 4K but 1080P or less is working
- · Verify all connected devices are capable of the signal you are sending
- Verify that the HDMI cables you are using are certified for 4K signals

### **Bandwidth Chart**

TYPE	RESOLUTION	FRAME RATE (FPS)	COLOUR COMPRESSION	DEEP COLOUR BIT DEPTH	HDR	WIDE COLOR Gamut (BT2020)	HDMI Version	DATA RATE	AUHD SERIES
HD	1920x1080	24	4:2:2	8 BIT	NO	NO	1.4	0.75 GBPS	YES
HD	1920x1080	60	4:2:2	8 BIT	NO	NO	1.4	4.45 GBPS	YES
HD	1920x1080	60	4:4:4	16 BIT	NO	NO	1.4	5.91 GBPS	YES
UHD	3840x2160	24	4:2:0	8 BIT	NO	NO	1.4	8.91 GBPS	YES
UHD	3840x2160	24	4:4:4	8 BIT	NO	NO	1.4	8.91 GBPS	YES
4K	4096x2160	24	4:4:4	8 BIT	NO	NO	1.4	8.91 GBPS	YES
UHD OR 4K	3840x2160	60	4:2:0	8 BIT	NO	NO	1.4/2.0	8.91 GBPS	YES
UHD OR 4K	3840x2160	24	4:2:0	10 BIT	YES	YES	2.0(A/B)	8.91 GBPS	YES
UHD OR 4K	3840x2160	24	4:2:2	12 BIT	YES	YES	2.0(A/B)	11.14 GBPS	YES
UHD OR 4K	3840x2160	24	4:4:4	10 BIT	YES	YES	2.0(A/B)	11.14 GBPS	YES
UHD OR 4K	3840x2160	24	4:4:4	12 BIT	YES	YES	2.0(A/B)	13.37 GBPS	YES
UHD OR 4K	3840x2160	60	4:2:0	10 BIT	YES	YES	2.0(A/B)	11.14 GBPS	YES
UHD OR 4K	3840x2160	60	4:2:0	12 BIT	YES	YES	2.0(A/B)	13.37 GBPS	YES
UHD OR 4K	3840x2160	60	4:2:2	12 BIT	YES	YES	2.0(A/B)	17.82 GBPS	YES
UHD OR 4K	3840x2160	60	4:4:4	8 BIT	YES	YES	2.0(A/B)	17.82 GBPS	YES

### Maintenance

- To ensure the reliable operation of this product as well as protect the safety of any person using or handling this device while powered, please observe the following instructions.
- Use the power supplies provided. If an alternate supply is required, check voltage, polarity and that it has

sulicient power to supply the device it is connected to.

- Do not operate these products outside the specified temperature and humidity range given in the above specifications.
- Ensure there is adequate ventilation to allow this product to operate eliciently.
- Repair of the equipment should only be carried out by qualified professionals as these products contain sensitive components that may be damaged by any mistreatment.
- Only use this product in a dry environment. Do not allow any liquids or harmful chemicals to come into contact with these products.
- Clean this unit with a soft, dry cloth. Never use alcohol, paint thinner or benzene to clean this unit.

### **Damage Requiring Service**

The unit should be serviced by qualified service personnel if:

- The DC power supply cord or AC adapter has been damaged
- · Objects or liquids have gotten into the unit
- The unit has been exposed to rain
- The unit does not operate normally or exhibits a marked change in performance
- The unit has been dropped or the housing damaged

### **Support**

Should you experience any problems while using this product, first, refer to the Troubleshooting section of this manual before contacting Technical Support. When calling, the following information should be provided:

- · Product name and model number
- Product serial number
- Details of the issue and any conditions under which the issue is occurring
- Clean this unit with a soft, dry cloth. Never use alcohol, paint thinner or benzene to clean this unit.

### Warranty

#### THE BASICS.

AVPro Edge warranties its products that are purchased from all Authorized AVPro Edge Resellers or direct purchases. Products are guaranteed to be free from manufacturing defects and of sound physical and electronic condition. AVPro Edge has developed a warranty that anyone can get behind. We wanted to take all the "red tape" out of a warranty and just make it simple. Our 10-YEAR NO BS warranty hinges on 3 elements.

- 1. If you are having trouble, call us. We will attempt to troubleshoot your issue over the phone.
- 2. If it's broken We'll replace it in advance on our dime. (We'll cover return shipping too.) Repair is an option too, but it's YOUR call.
- 3. We know you know what you are doing. We will not make you go through unnecessary steps to troubleshoot an extender.

### **COVERAGE DETAILS.**

• AVPro Edge will replace or repair (at the customer's choice) the defective product. If the product is out of stock

or on back order it can either be replaced with a comparable product of equal value/feature set (if available) or repaired.

 Your warranty begins at receipt of the product (as confirmed by shipping firm tracking). If tracking information is unavailable for any reason, the warranty will commence 30 ARO (After Receipt of Order). The coverage continues for 10 YEARS.

### RED TAPE.

- AVPro Edge is not responsible for untraceable purchases or those that were made outside of an authorized channel.
- If we conclude that a product or serial number has been tampered with as identified by the warranty seal or
  physical examination the warranty will be void. Additionally, for excessive physical damage (beyond normal
  wear & tear) the warranty may be voided or pro-rated based on the extent of the damage as examined by an
  AVPro Edge representative.
- Damage caused by "acts of God" is not covered. They can include natural disasters, power surges, storms, earthquakes, tornadoes, sinkholes, typhoons, tidal waves, hurricanes, or any other uncontrollable event related to nature.
- Damage caused by incorrect installation will not be covered. Incorrect power supply, inadequate cooling, improper cabling, inadequate protection, and static discharge are examples of this.
- Products installed or sold by a third party to AVPro Edge will be serviced by the Authorized AVPro Edge Reseller.
- Accessories (IR Cables, RS-232, Power Supplies, etc...) are not included in the warranty. We will make an acceptable effort to source and supply replacements for defective accessories at a discounted rate as needed.

### **OBTAINING AN RMA.**

- Dealers, Re-sellers, and Installers can request an RMA AVPro Edge Tech Support Rep or their Sales Engineer.
- Or you may email <u>support@avproedge.com</u> or fill out the general contact form at <u>www.avproedge.com</u> End users may not request and RMA directly from AVPro Edge and will be referred back to the Dealer, Re-seller or Installer.

### SHIPPING.

- For the USA (not including Alaska and Hawaii). Shipping is covered on advanced replacements for FedEx
  Ground (some expressed exceptions may apply). Defective product return shipping is covered by AVPro Edge
  using an emailed return label.
- Item must be returned within 30 days of receipt of replacement product, after 30 days, the customer will be billed. Other return shipping methods will not be covered.
- For International (and Alaska and Hawaii) return shipping costs will be the responsibility of the returnee. Once the unit is scanned for return shipping AVPro Edge will ship a new unit for replacement.

### LEGAL STUFF.

Limitation on Liability

- The maximum liability of AVPro Global Holdings LLC under this limited warranty shall not exceed the actual purchase price paid for the product. AVPro Global Holdings LLC is not responsible for direct, special, incidental, or consequential damages resulting from any breach of warranty or condition, or under any other legal theory to the maximum extent permitted by law.
- Taxes, Duties, VAT, and freight forwarding service charges are not covered or paid for by this warranty.
- Obsolescence or incompatibility with newly invented technologies (after the manufacture of the product)
   is not covered by this warranty.

### · Obsolescence is defined as:

- "Peripherals are rendered obsolete when current technology does not support product repair or remanufactured. Obsolete products cannot be re-manufactured because advanced technologies supersede original product manufacturer capabilities.
- Because of performance, price, and functionality issues, product redevelopment is not an option."
- Discontinued or out-of-production items will be credited at fair market value towards a current product of equal or comparable capabilities and cost. Fair market value is determined by AVPro Edge.

### • Exclusive Remedy

- To the maximum extent permitted by law, this limited warranty, and the remedies set forth above are
  exclusive and instead of all other warranties, remedies, and conditions, whether oral or written, express
  or implied. To the maximum extent permitted by law, AVPro Global Holdings LLC specifically disclaims
  any implied warranties, including, without limitation, warranties of merchantability and fitness for a
  particular purpose. If
- AVPro Global Holdings LLC cannot lawfully disclaim or exclude implied warranties under applicable law,
   then all implied warranties covering this product, including warranties of merchantability and fitness for a particular purpose, shall apply to this product as provided under applicable law.
- This warranty supersedes all other warranties, remedies, and conditions, whether oral or written, express or implied.
- Thank you for choosing AVProEdge! Please contact us with any questions, we are happily, at your service!

### **Documents / Resources**



AV Pro edge AC-FRESCO-CAP-4 4 Video Wall Processor [pdf] User Manual AC-FRESCO-CAP-4 4 Video Wall Processor, AC-FRESCO-CAP-4, 4 Video Wall Processor, Video Wall Processor, Wall Processor, Processor

### References

- AV AVPro Edge
- User Manual

### Manuals+, Privacy Policy