EVO-IP: FEATURES and FUNCTIONS GUIDE

The Evolution by Vanco EVO-IP HDMI over IP is a complete audio, video, and control product over ethernet system. As a whole, the system has the ability to send up to 1064 sources to 1064 displays along with IR and RS-232 pass-through, analog and digital audio breakouts on the send and receive ends, video up to 4K@60Hz and HDR10/Dolby Vision compatibility, with POE up to 330ft/100m when connected to a POE enabled switch off of a single Cat6 cable. The transmitter is also equipped with an HDMI loop-out that allows the system to incorporate other products such as Evolution tiling and Multi-view products easily with minimal additional programming. As a dedicated system, EVO-IP can also create and recall video walls using up to 25 displays, and can overlay text, pictures, and even albums which is perfect for digital signage! When connected to a network, the EVO-IP Cloud allows for additional features such as scheduling events or maintenance, remote monitoring of a system including diagnostics and troubleshooting, as well as voice control capabilities with Alexa enabled products! With an IP-less installation option as well as any new sources/displays being discovered automatically within the system, the EVO-IP HDMI over IP system is the fast, easy, and perfect solution for both residential and commercial installations.

Table of Contents

For Technical Support Call Toll Free: 800-626-6445

506 Kingsland Dr, Batavia, IL 60510

⤫ MATRIX MODE

Allows any input or source connected to an EVOIPTX1 to be routed to any or many displays connect to the EVOIPRX1.

1. Image of receiver feedback (If source is selected, the image will be a picture or preview of the source that is selected on that display. If no source is selected or the output is MUTE, then no image will be shown)

2. Image of transmitter feedback (If a source is on, the image will be a picture or preview of what is currently being played on the source. If the source is not on or is MUTE, then no image will be shown)

3. **Receiver MUTE Button**: Once activated will cut signal and power of HDMI going to the receiver.
4. **Transmitter MUTE Button**: Once activated will cut signal and power of HDMI going to the transmitter.
5. **Presets**: Click to access, create, and edit Mapping Presets (see below)
6. **Save As**: Click to Save current mapping of inputs and outputs
7. **Load**: Click to load a previously saved mapping
8. **Icon View**: Shows each source and display as an icon that can be clicked/touched, dragged and dropped
9. **List View**: Shows each source and display

SWITCHING INPUTS and OUTPUTS

Any input can be switched to any and all outputs with ease using the EVO-IP browser-based GUI, over the cloud, or with the EVO-IP mobile app. There are 2 ways to view and make changes to matrix mode: Tab view and List view which can be changed by clicking on the icons located on the top right-hand corner of the window.


Tab View: Touch/Click and Drag
When Tab View is selected, simply click on or touch and hold the image of the source you want to use, drag it to the output/display you want it to be viewed on, and drop the image onto the output. You will receive feedback the change had been applied and within 5 seconds the preview image of the source being played on the output will be refreshed.

TOUCH/CLICK   **Drag**   **Drop**

List View: Better for larger systems
The Tab view is great when there are not as many devices in a system but when there are hundreds of sources and displays, clicking and dragging may be very troublesome. The list view is a great way to see all sources and displays within a system.

1. **Click on List View**
2. **Select Mapping**
3. **Click on the TX/Source that is currently being played on the RX/Display. Select a new source from the dropdown menu to switch to another TX/Source.**

VANCO
ADVANCING...CONNECTIVITY
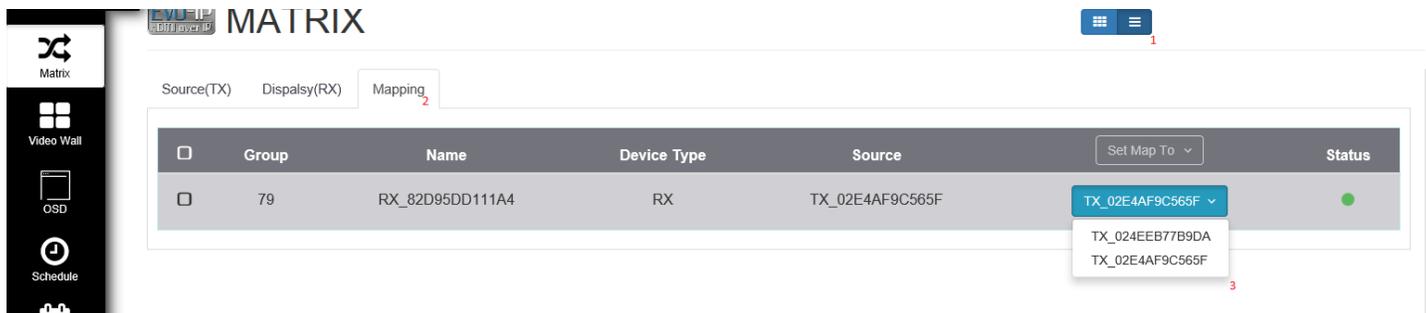
You can also select multiple RX/Displays to switch to the same source or check the box on the top to have ALL RX/Displays have the same TX/Source selected.

PRESETS

Presets are saved mappings of specific inputs going to specific outputs. These can be saved, recalled, renamed, and edited easily through the web browser GUI. These can also be enabled and disabled when connected through the cloud using the Evo-IP Alexa skill!
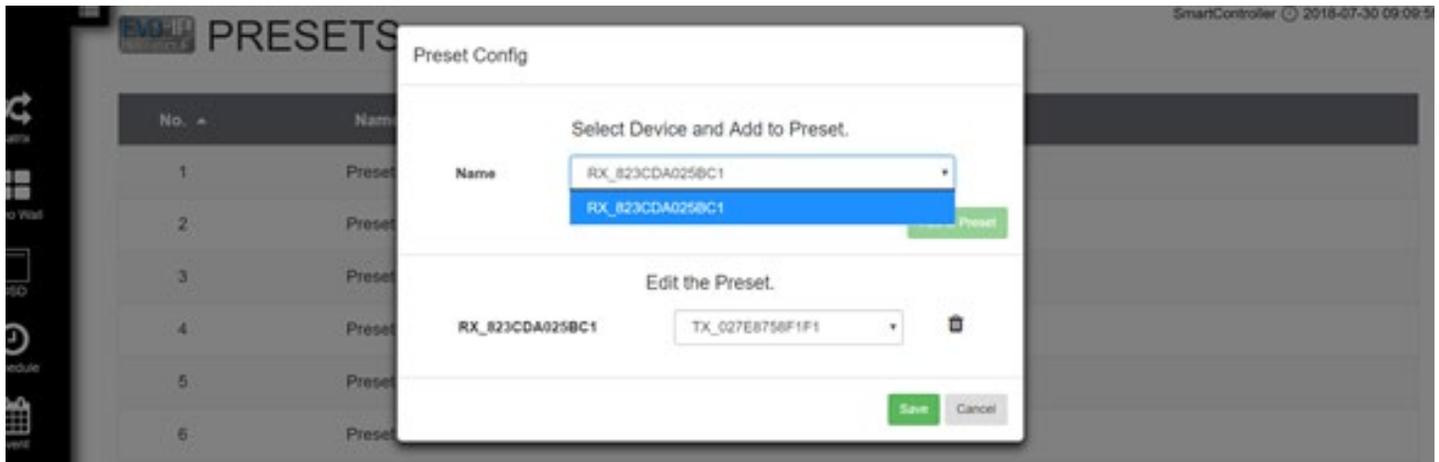
Creating a Preset Mapping

1. Click on the Preset button on the MATRIX tab found in the upper right-hand corner of the screen.


2. Highlight a preset by touching or having our mouse cursor on top of the preset you want to edit, then click on the PENCIL.

3. Select the Receivers (displays) and Transmitters (sources) that you would like to be part of the PRESET and click SAVE.
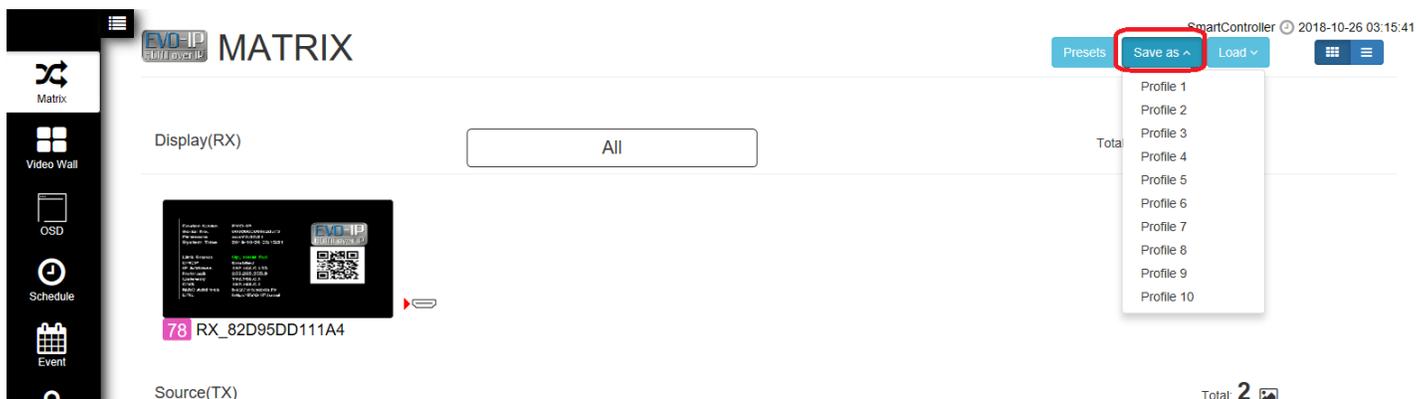
4. Once the preset is saved, you will return to the main PRESET screen. Click on APPLY and the preset information will be stored and ready for use.
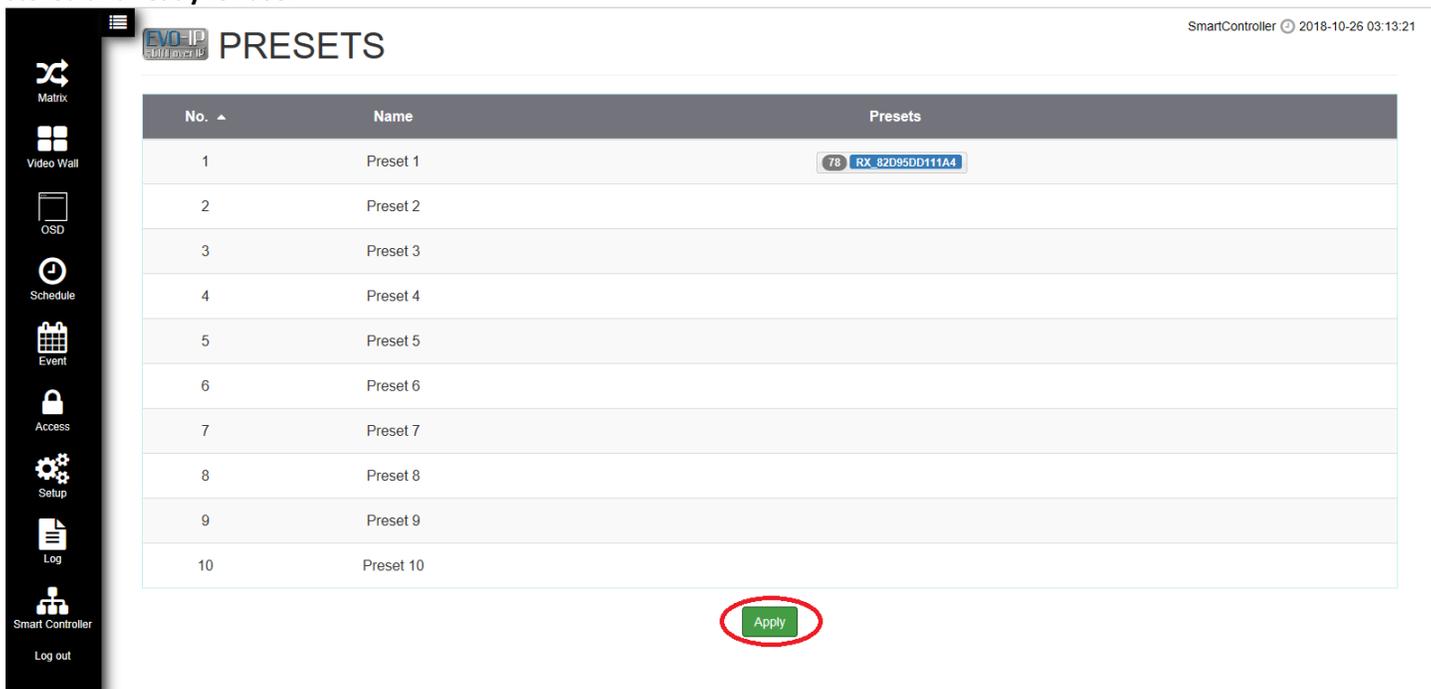
Saving a Current Preset Mapping

While in matrix mode, you can save the current mapping of inputs and outputs for future use by simply clicking on the SAVE AS button located in the right corner of the Window and select a profile name for the mapping to be saved to. Once saved you will receive feedback stating the Profile was saved.

For Technical Support Call Toll Free: 800-626-6445
506 Kingsland Dr, Batavia, IL 60510

VANCO
ADVANCING...CONNECTIVITY

Uploading a Previously Saved Mapping

While in matrix mode, you can upload a previously saved mapping of inputs and outputs for future use by simply clicking on the LOAD button located in the right corner of the Window and select a profile name for the mapping you want to use. Once it has been uploaded you will receive feedback stating the Profile was applied and that the page will refresh in 3 seconds.

▓ Video Wall Mode

EVO-IP is capable of configuring and customizing video walls up to 25 displays or a 5x5 configuration. Multiple videos can also be configured within a system along with app and Alexa control making it an easy and customizable choice for any video need.
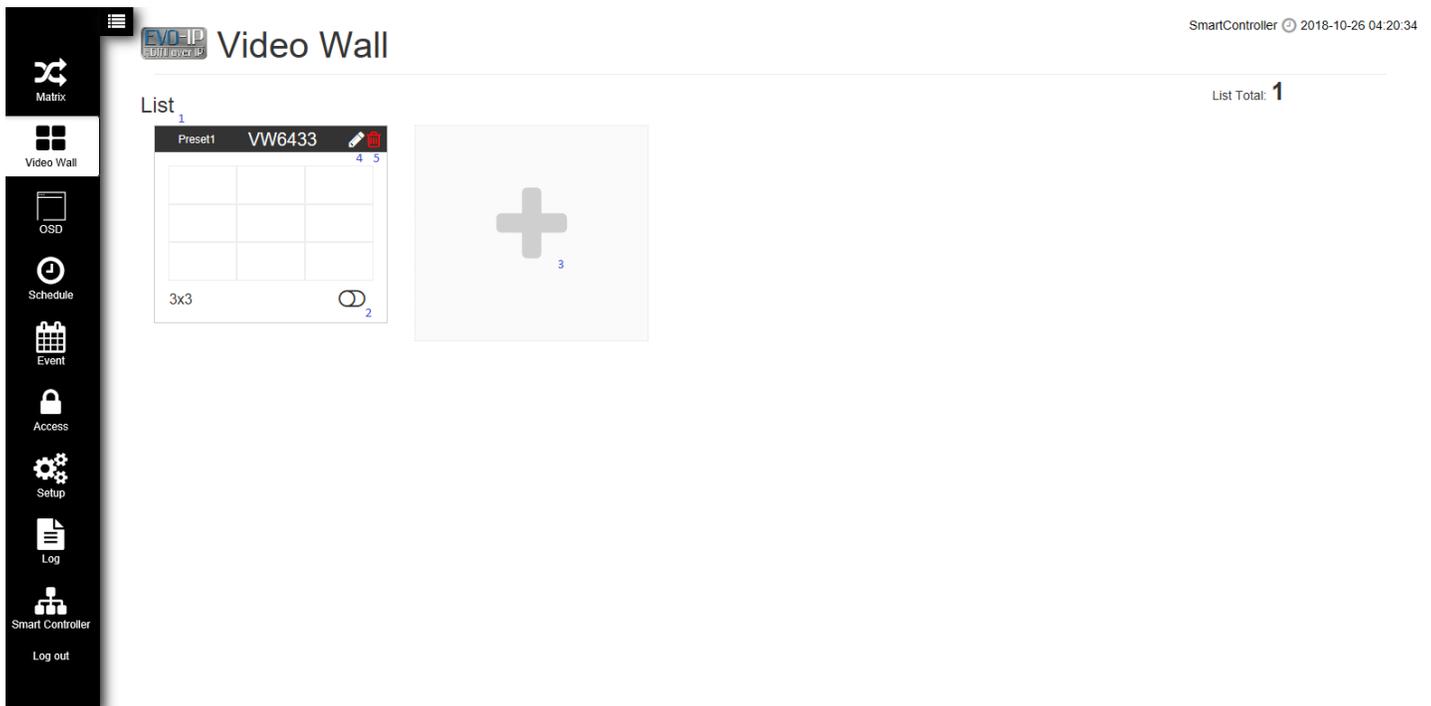
1. Lists any video wall that was configured
2. Enables/Disables Video Wall
3. Adds New Video Wall Configuration
4. Click on the pencil to Edit the current video wall
5. Click on the garbage can icon to Delete the current video wall

Configuring a Video Wall
Once you touch or highlight a video wall, click on the pencil to edit and configure your video wall for use.

1. **Change the name of the video wall (no characters or spaces)**
2. **Change the layout of your video wall up to 5x5 or 25 displays total. Click UPDATE once finished.**
3. **Enables or disables the OSD (on screen display). This assists in the setup and alignment of the video wall screens.**
4. **Bezel Adjustment helps account for different sized bezels within a video wall. First select the display you wish to correct, then click on the BEZEL button, then change and test the changes before saving.**

For Technical Support Call Toll Free: 800-626-6445
506 Kingsland Dr, Batavia, IL 60510

VANCO
ADVANCING...CONNECTIVITY

Auto Bezel & Gap Adjustment

(x1,y1)

A [4]

(x2,y2)

Border Setup   Unit: px

↑		↑	0	↓	0
←	→				
↓		←	0	→	0

Test   Add   Cancel

5. **TX/Sources available for use in the video wall configuration. Each Source will have a different color to help make multiple source video walls easier to configure and manage.**
6. **RX/Displays available for use in the video wall configuration.**
7. **Represents the video wall displays and how they are configured.**
8. **Rotates the individual display 180 and 270 (portrait) degrees.**

Once the video wall has been configured, click on the SAVE button and it will be ready for use.

For Technical Support Call Toll Free: 800-626-6445

506 Kingsland Dr, Batavia, IL 60510

VANCO
ADVANCING...CONNECTIVITY

OSD Mode: (On Screen Display)

The OSD Mode of EVO-IP is a great tool for uploading up to 16- 1MB pictures/logos to be overlaid on top of an image being viewed on a display. It also can allow for custom messages to be created and viewed as well.
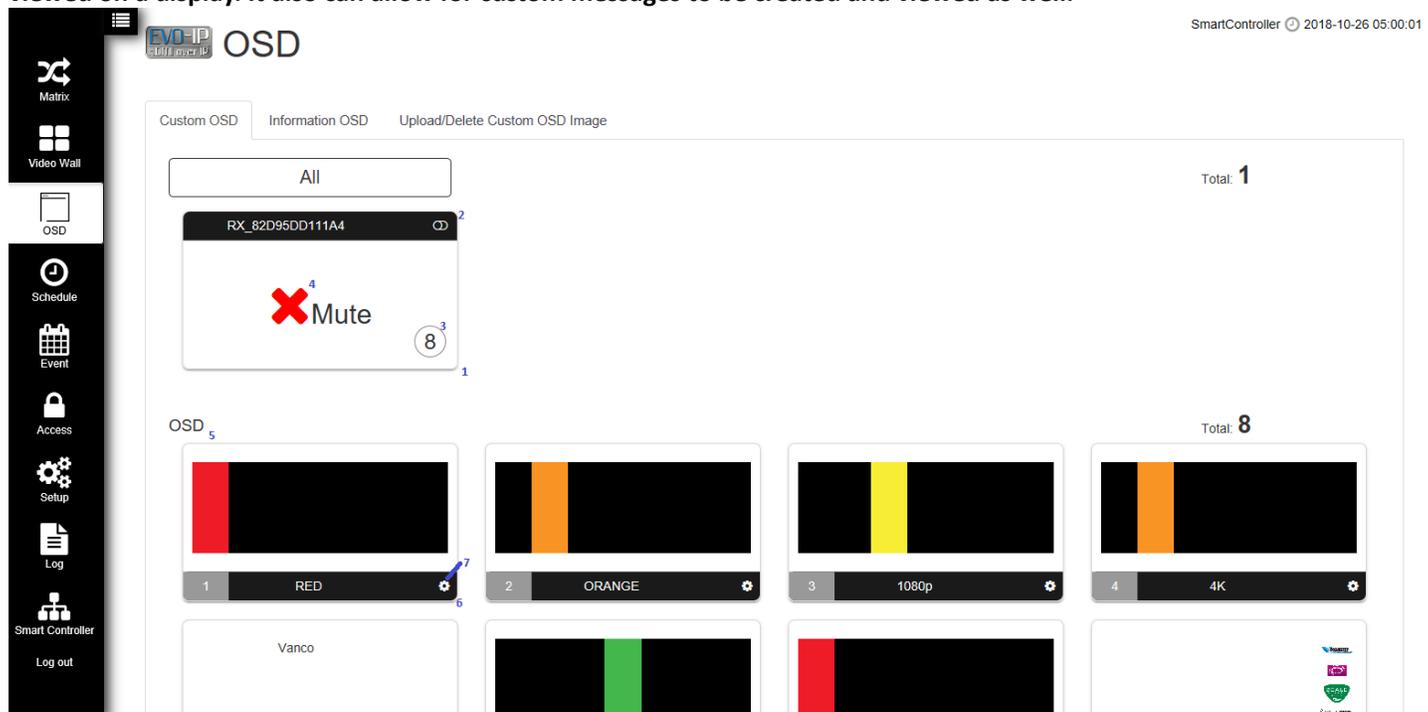
1. **RX/Display(s) available for OSD**
2. **Enable/Disable OSD**
3. **States which OSD is selected (8 OSD's can be available at any given time)**
4. **States the status of the OSD. Mute means the OSD is not being displayed. If the OSD is enabled and displayed there will be a picture of the OSD shown here.**
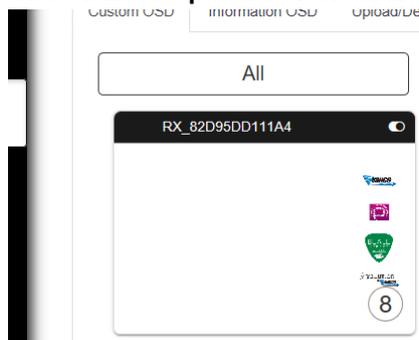
5. **List of OSD's that are available. There can be 8 OSD's that are readily available to be enabled/disabled but these can be changed and customized at any time.**
6. **The number and name of the OSD**
7. **Settings (allows for creating, customizing and changing the OSD)**

<u>Uploading a Photo:</u>
In the EVO-IP OSD Mode, up to 16 images can be uploaded to the system for use. Each image must:
1. **Be equal to or less than 1MB in size**
2. **Be no larger than 1920x1080 pixels**
3. **Have no characters or spaces in the file name.**

Click, Drag and Drop:
1. **Locate the picture of you want to upload on your computer/device.**
2. **Click on the UPLOAD/DELETE CUSTOM OSD IMAGE tab**
3. **Click, drag and drop the image from the folder on your computer/device to the upload window.**
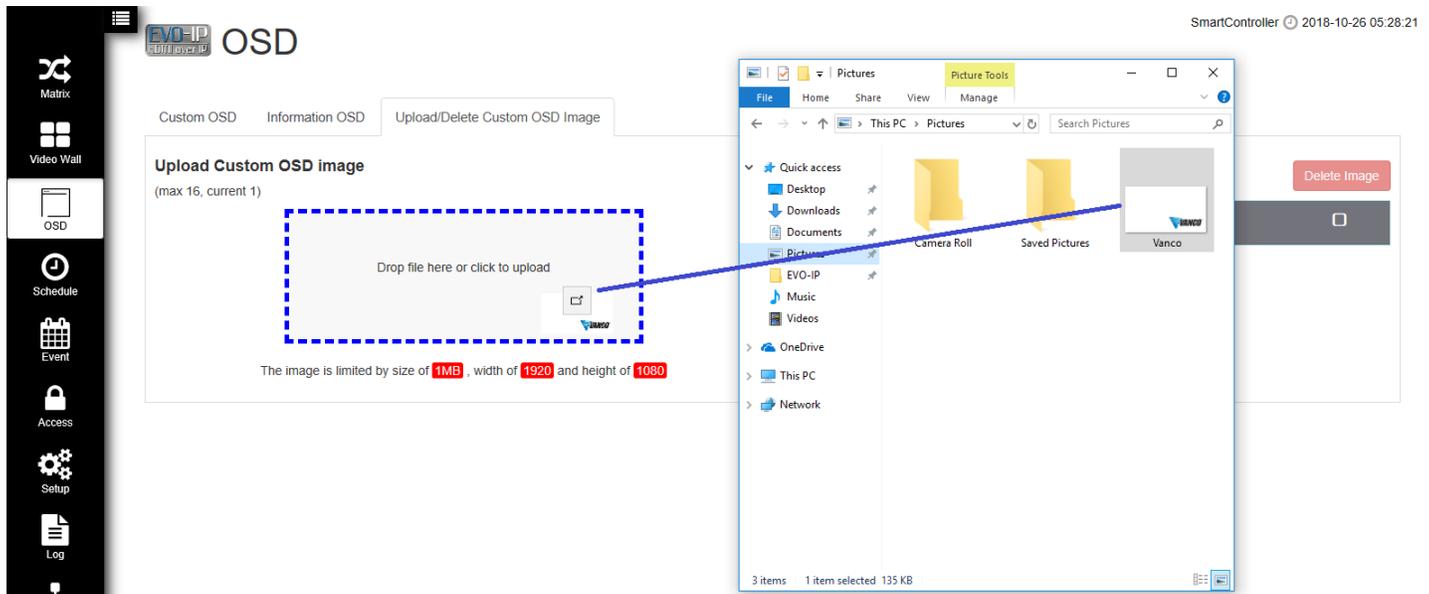
Browsing and Uploading an Image:
1. **Click on the UPLOAD/DELETE CUSTOM OSD IMAGE tab**
2. **Click inside the image window to open a file browser on your computer**
3. **Select the image you wish to upload and click OPEN**

VANCO
ADVANCING...CONNECTIVITY

Once your image is uploaded, you will see it in on the side and will be ready for immediate use.

Settings: Creating and Changing Text and Image OSD

In OSD mode, you can display text, a single image, or rotate through an album of uploaded images. After clicking on the GEAR button for settings, you will have the option to create or edit the OSD for Text or for an Uploaded image.

TEXT OSD:

Custom OSD 1

Name (max 12) 1

CUSTOM_1

Type 2

Message

Resolution 3

640x480@60
1920x1080@60
3840x2160@30

(X=0, Y=0)

The position might be influenced by length of the words, font size or sink etc.

Transparency 4

25

Text Position (Unit: px) 5

X   0   (Range: 0~655)

Y   0   (Range: 0~390)

Message Color 6

Message Text (max 12) 7

no text

Size (10-80) 8

12

Test 9

Apply 10

Cancel

1. **Type the name of your OSD (no spaces or characters)**
2. **Select the type of OSD from the drop-down menu (TEXT)**
3. **Select the resolution of the display the text will show up on***
4. **Adjust the transparency of the text as needed**
5. **Select the exact position of the text as it will show up on the screen.**

a. **Each resolution will be provided different X,Y coordinate ranges**
6. **Message Color**
7. **Message**
8. **Size of Text**
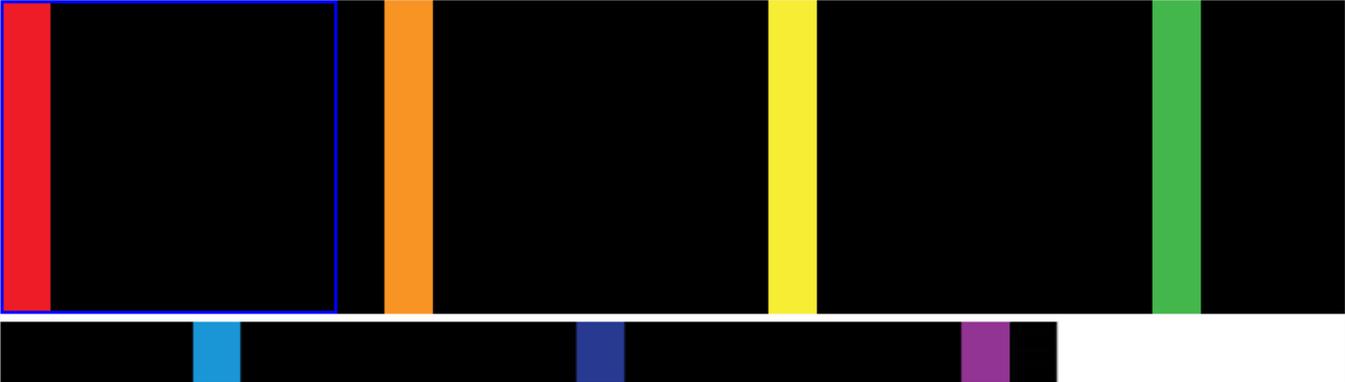
Single Image:

Custom OSD 1

Name (max 12)

CUSTOM_1

1

Type	Subtype	Resolution
Image	Single Image	640x480@60

2 **3**

(Modifying resolution will lead to rx reboot)

Transparency

25

4

6

Photo **5**

1. **Type the name of your OSD (no spaces or characters)**
2. **Select the type of OSD from the drop-down menu (IMAGE)**

For Technical Support Call Toll Free: 800-626-6445

506 Kingsland Dr, Batavia, IL 60510

VANCO
ADVANCING...CONNECTIVITY

3. **Select Single Image or Album (Single Image example shown)**
4. **Select the resolution of the display the OSD will be displayed on***
5. **Photos that are available to be selected**
   a. **For an album, select multiple images in the order you wish they are presented**
   b. **Select time between images and either order or random shuffle options for albums**

◉ Cycle Play Images In Order   ○ Cycle Play Images In Random
                                                  Image Switches every (minimum = 3)

3	sec

Apply   Cancel

6. **Preview of image that was selected.**

Click apply when done and the OSD will be ready for use.

*NOTE: ANY CHANGE IN RESOLUTION WILL MAKE THE RX REBOOT

Keep the following rules in mind when creating and using OSD.
1. **Resolution of the text or image is dependent on the display they are being used on. The EVO-IP control box will scale the text/image appropriately but any change in resolution in the settings will cause the RX to reboot which will take 15-30 seconds.**
2. **The image will be displayed exactly as it is uploaded. It will not alter or change the image.**
3. **If you want WHITE to be transparent, simply upload your image with a white background.**
4. **If you want to upload an image for signage purposes and it happens to have a white background, simply have a single pixel in the most top left corner of the image to be black or gray. This will make sure that the white background for the rest of the image is not transparent.**

🕐 SCHEDULE TAB

When specific actions need to take place at specific time(s) within your EVO-IP system, the schedule tab can be a big help. Once configured*, you can automatically set up signal being turned off or on, mapping of inputs/outputs, rebooting, or turn on or off Cycle Play which is a great tool for any digital signage application. This feature requires Cloud Connectivity** and can be controlled using the EVO-IP iOS and Android app.

For Technical Support Call Toll Free: 800-626-6445
506 Kingsland Dr, Batavia, IL 60510

VANCO
ADVANCING...CONNECTIVITY

1. **Click to add a new schedule item**
2. **Once finished creating or modifying a schedule, click apply to save for use.**

1. **Type of Unit for Schedule (TX or RX)**
2. **Name of the device that will utilize the schedule**
3. **Duration (days) of time that a schedule event will occur**
4. **Day(s) an event will occur (for example, click on Sunday for a scheduled event to occur every Sunday)**
5. **Time the scheduled event will happen**

6. **Action**
    a. Mute will but the signal and power (HDMI) for the TX or RX
    b. Resume will allow and pass signal and power (HDMI) for the TX and RX
    c. Re-mapping will map a specific input and output
    d. Cycle-Play ON/OFF (only when a RX/Display is selected in the TYPE drop-down menu)
        i. When on, multiple TX/Sources can be selected and cycled through every 10-60 seconds

Action	Cycle-play on ⌄
CyclePlay Time	10	10-60 seconds
Cycle Play	TX_024EEB77B9DA ✕ TX_02E4AF9C565F ✕

Add Cancel

Once a schedule has been configured, click the ADD button on the opened Window and the APPLY button on the main screen for use.

*NOTE: For the scheduled item to be successfully implemented and used, the time needs to be set correctly through the Smart Controller Tab.

**NOTE: Connectivity and registration to the EVO-IP cloud is required for this feature and for mobile app control.

📅 EVENT TAB

The ability to remotely monitor, troubleshoot, and resolve issues within a system can be found within the Event Tab of EVO-IP. This feature is ONLY available once connected and registered to the EVO-IP cloud but helps save time and money when trying to resolve issues within a system.

1. **Type of device an event is being created for (TX/Source or RX/Display)**
2. **Name of the device**
3. **Event that requires attention (video lost, or connection lost)**
4. **Check box to reboot device automatically when the specified event occurs**
5. **Check box to send an email to the Administrator automatically when the specified event occurs**
6. **Check box to send a SMS message to the Administrator automatically when the specified event occurs**
7. **Click to confirm changes to event**
8. **Delete Event**
9. **Click to add email/SMS settings**
10. **Click to Apply created or changed Events**
11. **Add new event**

Creating or Editing an Admin Email

1. **Click + to add email**
2. **Edit email/user information (multiple emails can be used as well, and email does not need to directly correspond to the EVO-IP Cloud Account)**
3. **Delete email**
4. **Apply Email to Event**

Creating or Editing an Admin SMS

EVENT E-MAIL/SMS SETTINGS   EVENT CONTACT

SmartController ⏱ 2018-10-26 09:50:09

Back to Event

E-Mail   **SMS**

No. ▲	Manage Group	Phone Number	✚₁
1	new_group_0		✏₂ 🗑₃

Apply ₄

1. **Click to add SMS number(s)**
2. **Edit SMS/user information (multiple numbers can be used as well and does not need to directly correspond to the EVO-IP cloud account)**
3. **Delete SMS number**
4. **Apply SMS number to Event**

🔒 ACCESS TAB

The Access tab helps define and restrict what sources or features certain RX/Displays can see and use. By default, the EVO-IP system does not have this turned on (set to Unlimited sources) but can be easily enabled so and password protected.

EVO-IP ACCESS

SmartController ⏱ 2018-10-26 09:53:51

Access   MISC

Type ▲	Name	Account	Password		Source			
RX	RX_82D95DD111A4	g14023 ₁	yip1ot ₂	random	₃	✔₄ ✘₅		
					TX_024EEB77B9DA			
					TX_02E4AF9C565F			

Apply ₆

1. **Customizable Account name that can be associated with a specific RX/Display**
2. **Password to access or make changes to the account (can manually be entered or randomly selected)**
3. **Select specific source that the RX/Display has access to**
4. **Confirm changes**
5. **Delete**
6. **Apply Changes**

1. **Enables QR Code to be able to access account**
2. **When enabled, prevents any changes from occurring within the system***
   a. **NOTE: When ON, no new TX or RX units will be able to be discovered or setup**

SETUP TAB

The setup process is what sets EVO-IP apart from the rest. This tab refreshes every 10 seconds so any device that is connected to the system is automatically recognized within 10-20 seconds. No need to manually refresh or locate devices on the network as the EVOIPCTL1 control box does all the work for you.

SETUP

Devices

Devices in Managed

Update in 4 sec

Group ▲	Type	Name	Device IP	MAC Address	Status		
⚙ 80	RX	RX_82D95DD111A4	169.254.7.127	82:D9:5D:D1:11:A4	● 48 sec	✎	🗑
⚙ 81	TX	TX_024EEB77B9DA	169.254.10.176	02:4E:EB:77:B9:DA	● 44 sec		
⚙ 82	TX	TX_02E4AF9C565F	169.254.7.74	02:E4:AF:9C:56:5F	● 44 sec		

1. **LED Flash Indicator- click to have the TX or RX LED's flash to help locate and identify the correct source or display associated with that unit**
2. **Click on the pencil to edit the information**
3. **Click to delete the unit**
4. **Indicated the amount of time before the system refreshes again**

Editing a Transmitter

Device Setup

Identification 1

Name	TX_024EEB77B9DA	**Alive Time**	5 min, 16 sec
Type	TX	**Group**	81 (225.0.103.78)
Device IP	169.254.10.176	**MAC Address**	02:4E:EB:77:B9:DA
System Version	A7.0.0 Build 3015	**Control Version**	Wed, 19 Jul 2017 10:03:21 +0800

Status 2

LAN	ON	**Video Stream**	Loss	**HDCP**	OFF

Information 3

Name 4	TX_024EEB77B9DA
Group ID 5	81
Photo 6	Photo 1

7

Apply 8

A/V Settings

Streaming Video	On 9	**Loop-out**	On 10

Apply 11

EDID Mode	Default EDID (4K2K@60Hz HDR - 24bit 2D video & 2ch audio) 13

Apply 14

Maintenance

⚙ Factory Default 15   ↻ Reboot 16   ⚙ Blink LED 12

1. **Transmitter ID Information**
2. **Transmitter Status**
3. **Transmitter Information**
4. **Name of Transmitter/Source (no Spaces)**
5. **Group ID (number associated with that specific source)**
6. **Photo or preview of the image used to represent the TX/Source**
7. **Photo/Preview**
8. **Apply Changes made in the Information section**
9. **Streaming Enabled/Disabled**

VANCO
ADVANCING...CONNECTIVITY

10. **HDMI Loop-out Enabled/Disabled**
11. **Apply Changes to Streaming or Loop-out**
12. **Click to have the LED of the units flash for 15 seconds**
13. **Select EDID the transmitter will present to the source**

```
Default EDID (4K2K@60Hz HDR - 24bit 2D video & 2ch audio)
720P_LPCM
1080P_dolby
1080P_LPCM
3840x2160_dolby
3840x2160_LPCM
4096x2160_dolby
Learning EDID
```

     NOTE: For HDR10 and Dolby Vision, select Learning EDID option

14. **Apply EDID**
15. **Reset transmitter to factory default**
16. **Reboot transmitter**

Editing a Receiver

Device Setup

Identification [1]

Name	RX_82D95DD111A4	Alive Time	22 min, 56 sec
Type	RX	Group	80 (225.0.103.78)
Device IP	169.254.7.127	MAC Address	82:D9:5D:D1:11:A4
System Version	A7.0.0 Build 3015	Control Version	Wed, 19 Jul 2017 09:58:33 +0800

Status [2]

LAN	ON	HDCP	OFF	TV	Loss

Information [3]

Name [4] RX_82D95DD111A4	Group ID [5] 80	Apply [6]

A/V Settings

Streaming Video [7] On	Scaling 1080p60 [8]	Apply [9]

Maintenance

⚙ Factory Default [10]	↻ Reboot [11]	⚙ Blink LED [12]

1. **Receiver ID Information**
2. **Receiver Status**
3. **Receiver Information**
4. **Receiver Name (no spaces)**
5. **Receiver ID (the receiver takes on the ID of the source that is being played on it)**
6. **Apply changes to name and group ID**
7. **Enable/Disable Video**
8. **Scaling Options**

VANCO
ADVANCING...CONNECTIVITY

passThrough
720p60
1080p60
1080p50
2160p30
2160p25

NOTE: Select passthrough for HDR10 and Dolby Vision. Switching time between HDR and non-HDR increases when selected.

NOTE: When scaling is set, seamless switching is enabled.

NOTE: 1080p and 4K can be up/downscaled interchangeably and 720p and 1080p can be up/downscaled interchangeably. 4K downscaling to 720p may be dependent on the display and EDID.

9. **Apply Changes to Streaming and Scaling**
10. **Reset receiver to factory default**
11. **Reboot receiver**
12. **Click to have the LED's on the receiver blink for 15 seconds**

LOG TAB

The Log Tab is vital to troubleshooting, diagnosing and being able to repair an issue without having to be on site. This is cloud accessible to the Admin and Installer and requires connectivity and registration to the EVO-IP cloud.

1. **Input range of dates to view**
2. **Look through previous pages of information**
3. **Clear log information**
4. **Export log into Excel spreadsheet**

SMART CONTROLLER TAB

The EVOIPCTL1 Smart Controller is the heart and soul of the EVO-IP HDMI over IP system. It identifies, addresses units, direct traffic, and allows for all of the features found within the cloud for residential and commercial applications. To access the Smart Controller web interface, simply click on the Smart Controller tab on the left of the screen and a new window will open.

The default account and password to login is <u>admin.</u>
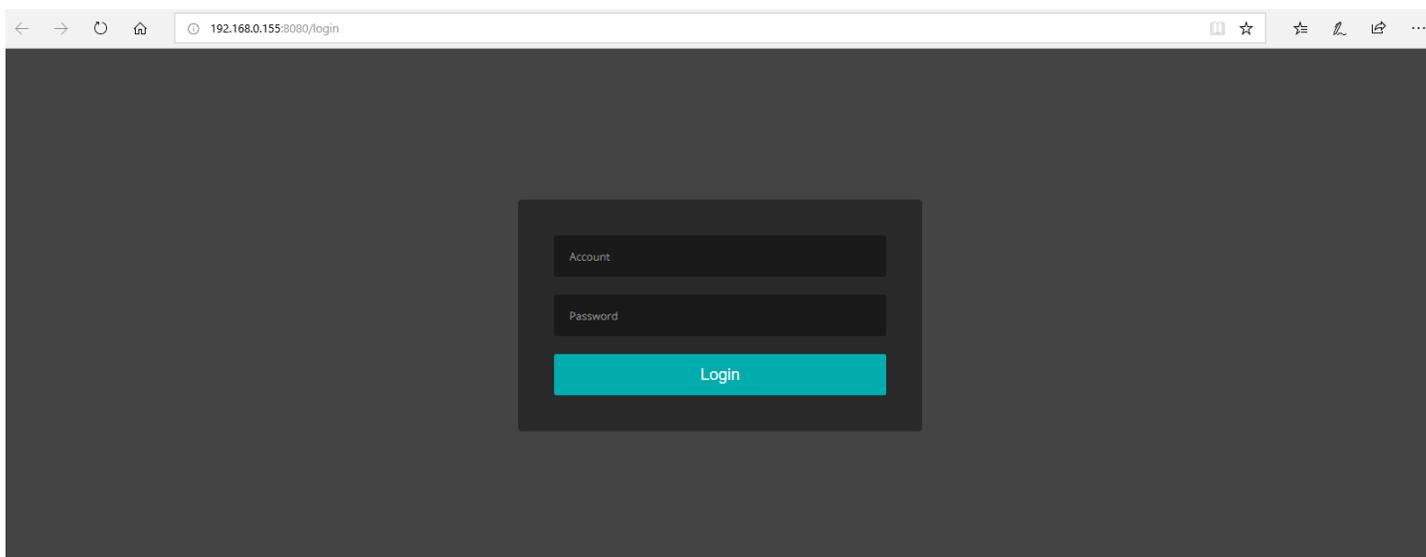
Set a Static IP for the EVOIPCTL1
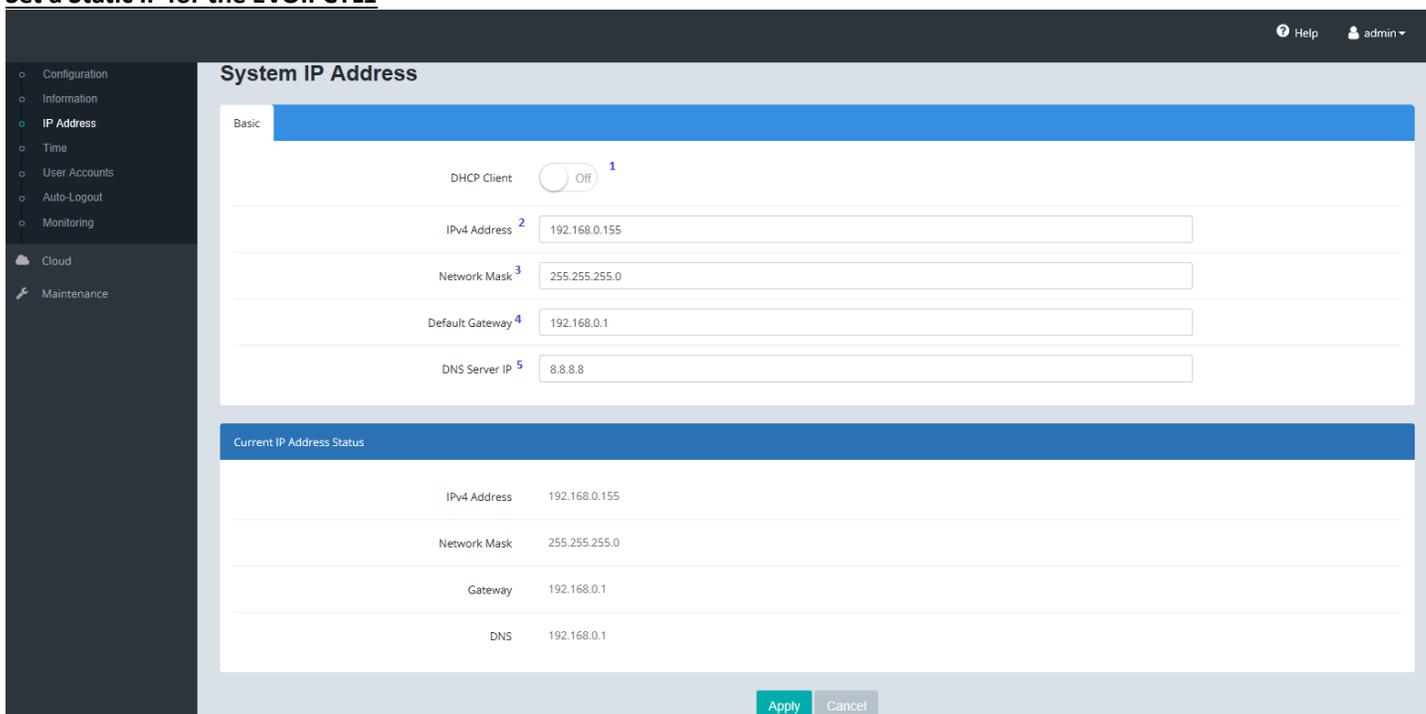
1. **Turn DHCP off (set to ON by default)**
2. **Type in Static IP Address to be used for the control box**
3. **Type in the network mask**
4. **Type in the default gateway being used in the network**
5. **Type in DNS Server information**

6. **Click Apply (box will reboot automatically)**

NOTE: You will have to use your new IP address to access the EVO-IP and Smart Controller GUI's.

<u>**Changing the time (needed for Scheduling)**</u>

1. **Select if time is provided by SNTP or Manually**
2. **Current Settings/Time**
3. **Select Time Zone**
4. **Server time is received from in SNTP mode or where time is manually entered.**
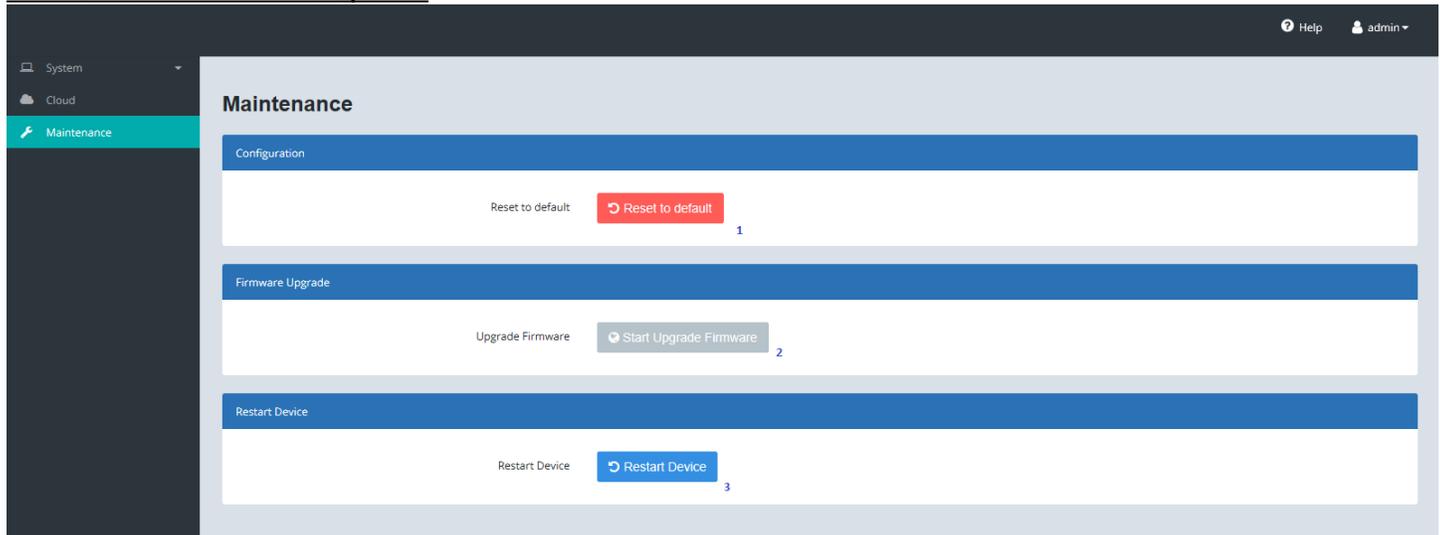5. **Click apply when done.**

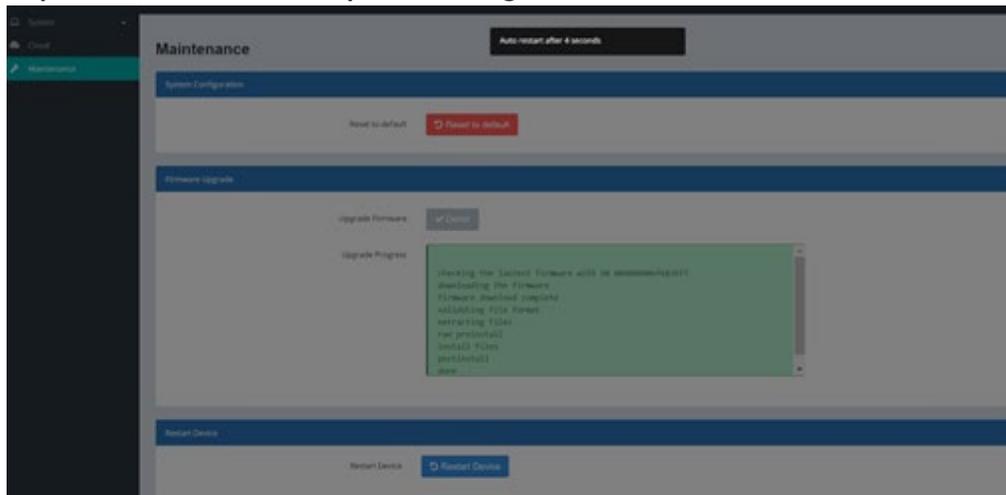<u>**Add/Edit/Delete User Accounts**</u>

By default, there is an ADMIN account (read and write) and USER account (read only). Other accounts can be created, edited and defined easily.
NOTE: This is different from the cloud accounts

Maintenance and Firmware Updates

1. **Click to reset EVOIPCTL1 to factory default**
2. **Look for and perform firmware update (needs to be connected to the internet)**
   a. **Once update is complete, the EVOIPCTL1 will reboot automatically. Do not remove from the internet or power source while the update is being done.**

3. **Reboot the device**