



Over IP Control system

AVP-Controller-100 & AVP-Controller-101

User Manual

Table of Context

Software Setup How-to Guide	4
➤ Starting over_ip_console	4
➤ Create Group	7
➤ Add Decoders to Group	7
➤ Create Matrix	8
➤ Create Video Wall	12
➤ Create Mouse Roaming	14
Decoder Function	17
Encoder Function	18
UI Function	20
APP Overview	28
Before Using i-Touch+	28
Operating i-Touch+	29
i-Touch+ Main Screen UI	30
Martix Layout	31
Settings UI	32

Console Overview

Over_ip_console is a comprehensive software solution that enables remote control of AV equipment. Compatible with Windows and macOS, it offers a user-friendly interface for configuration. The software supports multiple control methods, including PC software, web UI, and iOS app. To prioritize security, it allows for the creation of custom user accounts and permissions. Additionally, a failover mechanism is in place to prevent service interruptions in case of device disconnections. With Over_ip_console, users can easily monitor live feeds and make adjustments to settings from anywhere.


Device Connection

1. Connect the PC to Encoder using HDMI Cable , then connect to Network Switch via Ethernet cable (Cat. 5e) ◦
2. Connect the monitor to Decoder using HDMI Cable , then connect to Network Switch via Ethernet cable (Cat. 5e) ◦

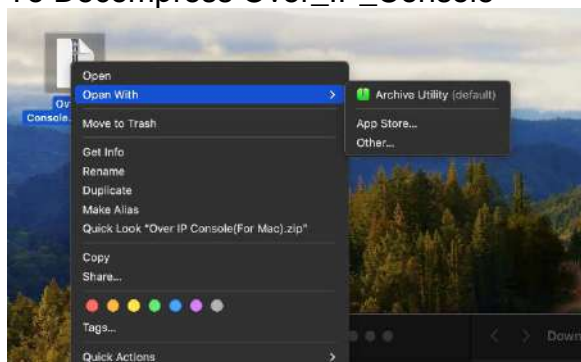
Software Setup How-to Guide

● Starting over_ip_console

1. Start the over_ip_console.exe (Windows)

Name	Date modified	Type	Size
data	9/5/2024 9:05 AM	File folder	
bitsdojo_window_windows_plugin.lib	8/19/2024 9:48 AM	LIB File	180 KB
flutter_windows.dll	8/16/2024 9:24 AM	Application exten...	17,754 KB
 over_ip_console	9/4/2024 5:52 PM	Application	210 KB
over_ip_console.exp	9/4/2024 5:52 PM	EXP File	1 KB
over_ip_console.lib	6/27/2024 3:57 PM	LIB File	2 KB

2. Start the over_ip_console.exe (MAC)
 - a. To Decompress Over_IP_Console

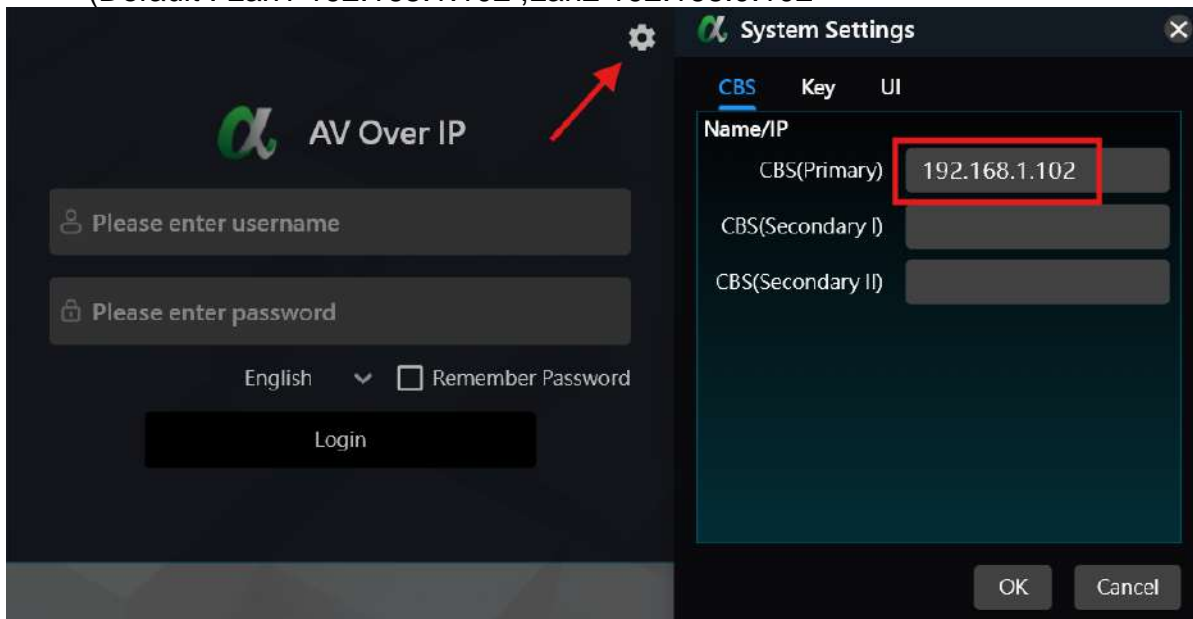


- b. After Decompressed, Press new icon for over_ip_console

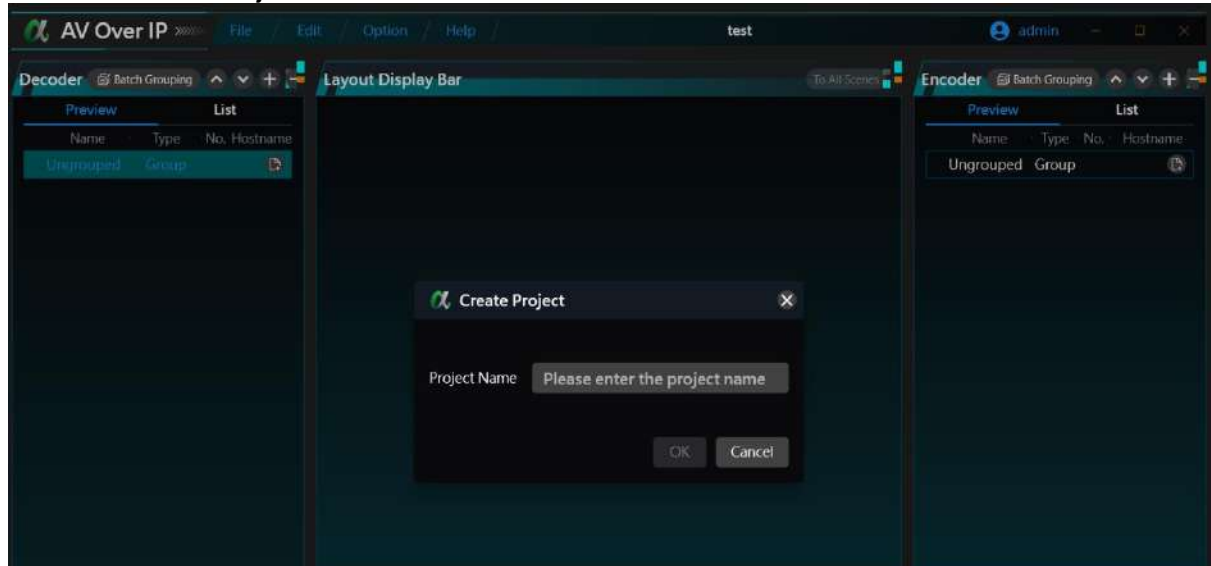


AVP-Controller-100 & AVP-Controller-101

- Before login , need to setup IP Address for Controller
(Default : Lan1 192.168.1.102 ,Lan2 192.168.0.102

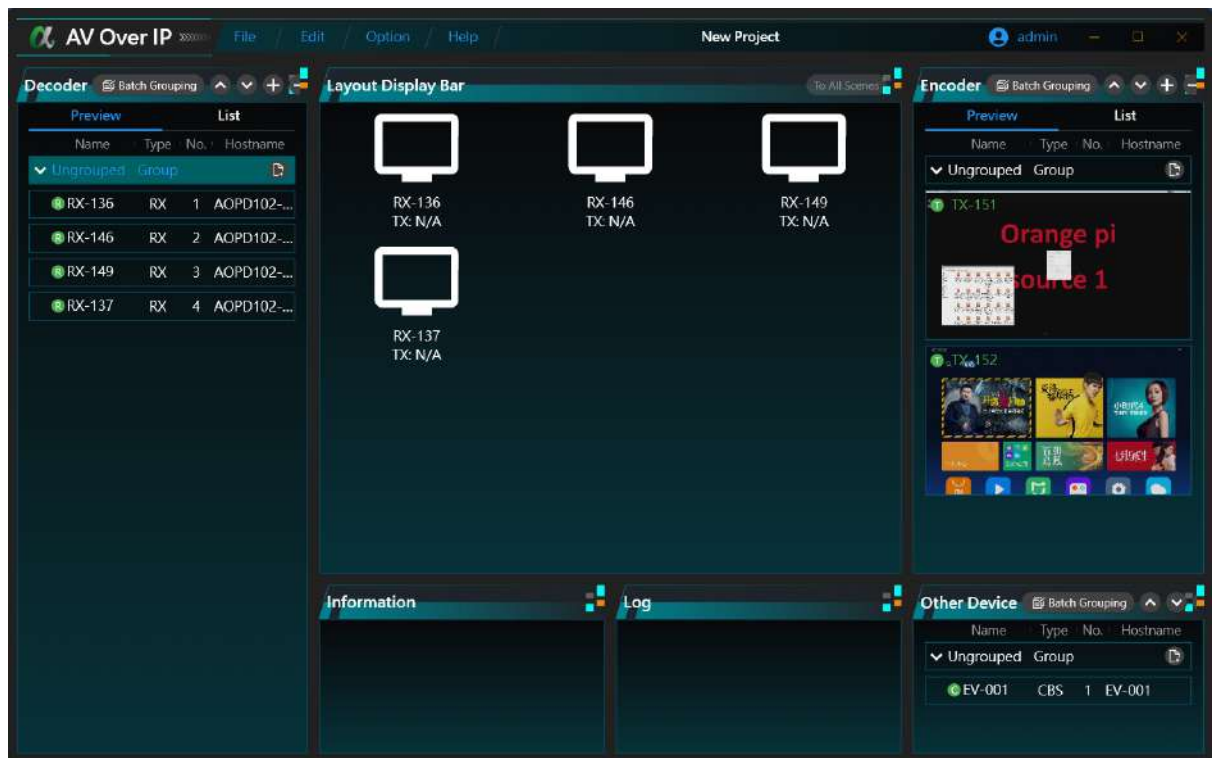


- Log in as a User (Default username : admin ; Default password : admin) ◦
- Create a new Project



- After created,Controller will start search automatically , You will see all devices for Encoder / Decoder / Other Device

AVP-Controller-100 & AVP-Controller-101



The screenshot shows the AV Over IP software interface with the following components:

- Decoder Panel:**

Name	Type	No.	Hostname
RX-135	RX	1	AOPD102-...
RX-146	RX	2	AOPD102-...
RX-149	RX	3	AOPD102-...
RX-137	RX	4	AOPD102-...
- Layout Display Bar:**
 - RX-136 TX: N/A
 - RX-146 TX: N/A
 - RX-149 TX: N/A
 - RX-137 TX: N/A
- Encoder Panel:**

Name	Type	No.	Hostname
TX-151	TX	1	Orange pi source 1
TX-152	TX	2	TV-152
- Other Device Panel:**

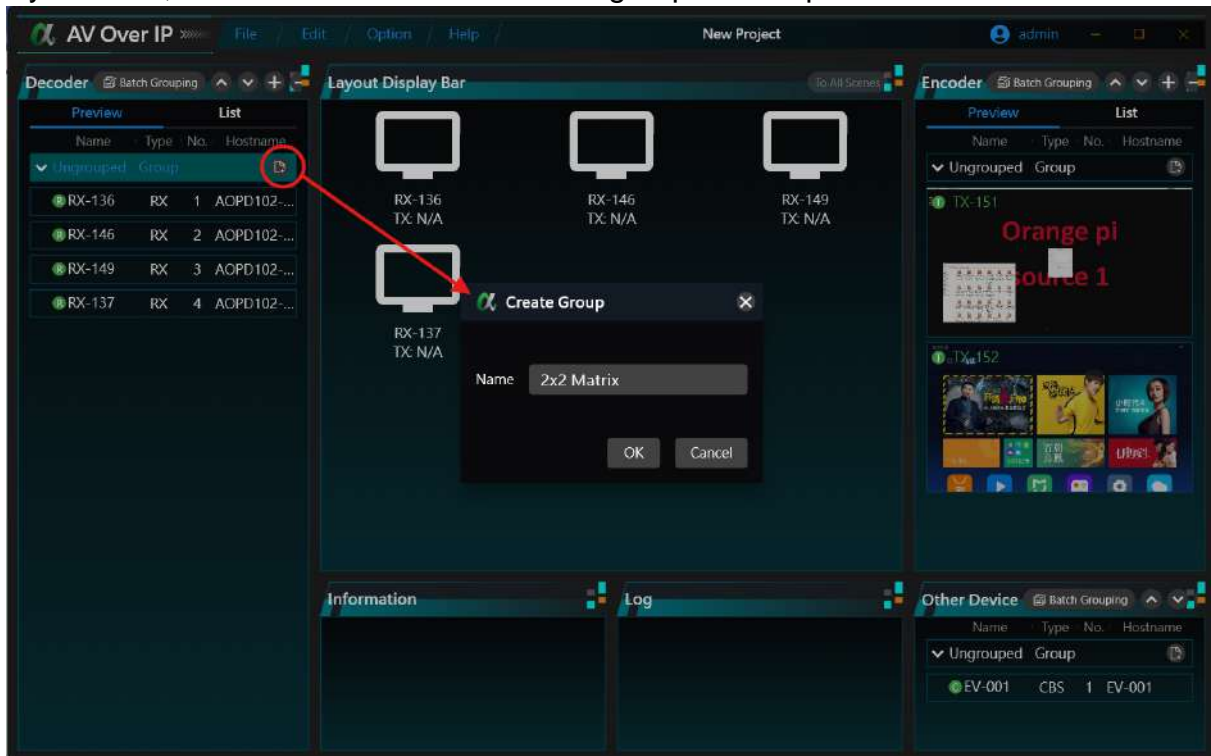
Name	Type	No.	Hostname
EV-001	CBS	1	EV-001

AVP-Controller-100 & AVP-Controller-101

- **Create Group**

Decoders can be organized in Group ◦

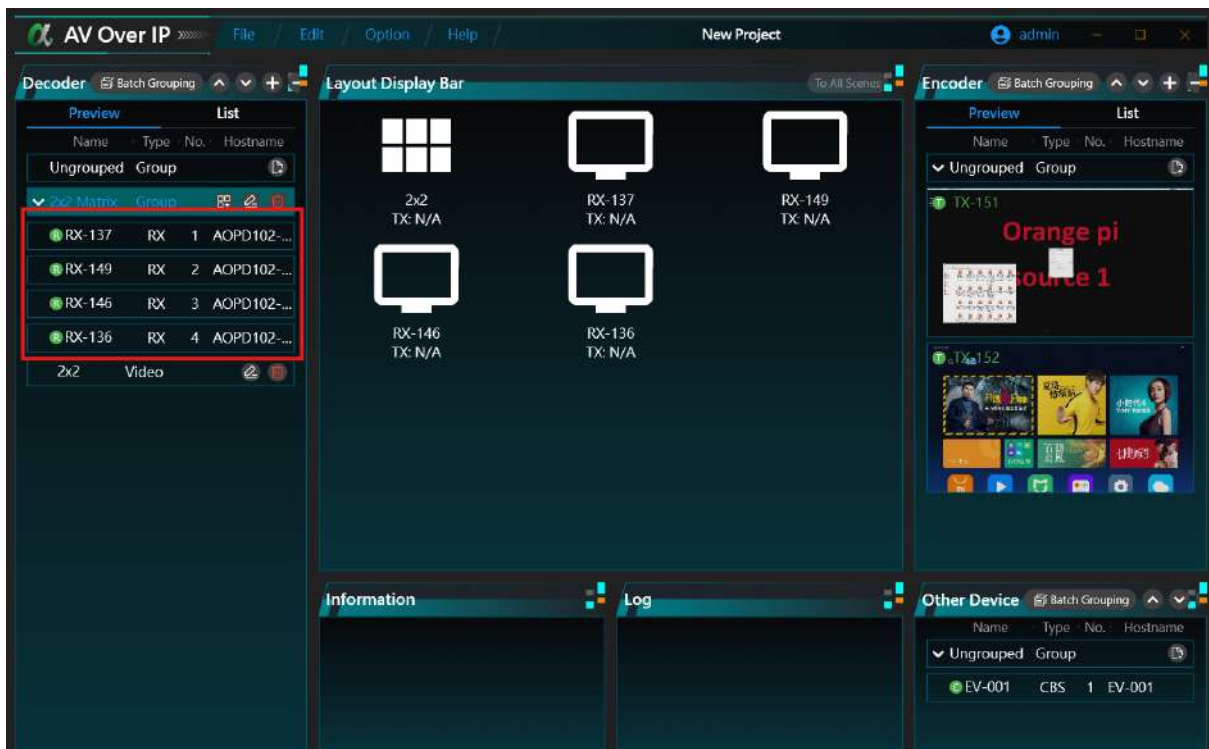
By Default ,all devices are added to the ungrouped Group ◦



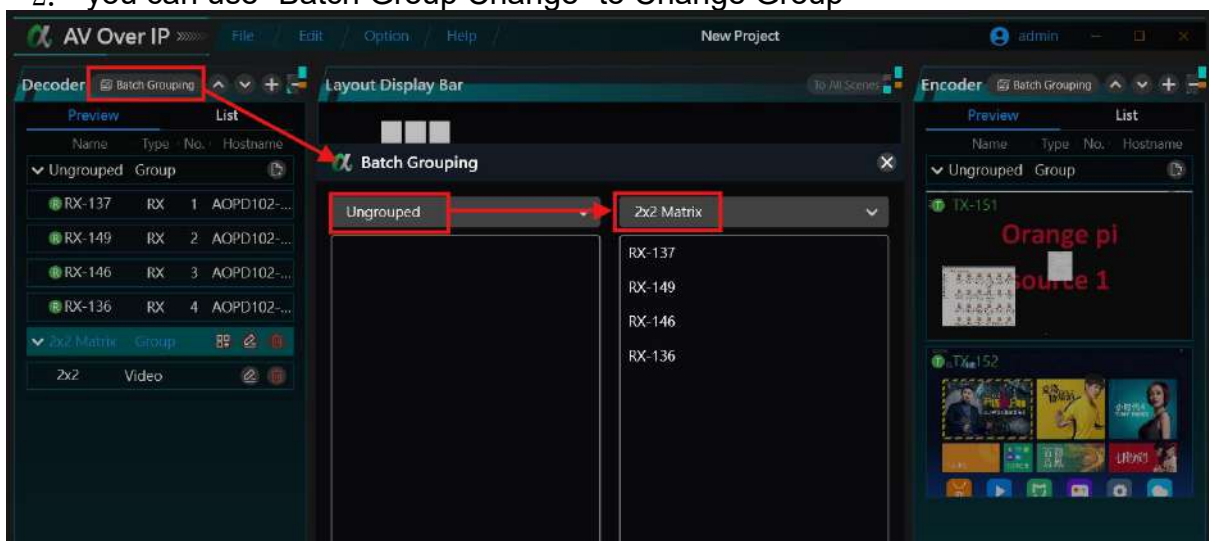
- **Add Decoders to Group**

1. Add decoders to the group by right clicking them, select Change Group and then select the desired group ◦

AVP-Controller-100 & AVP-Controller-101



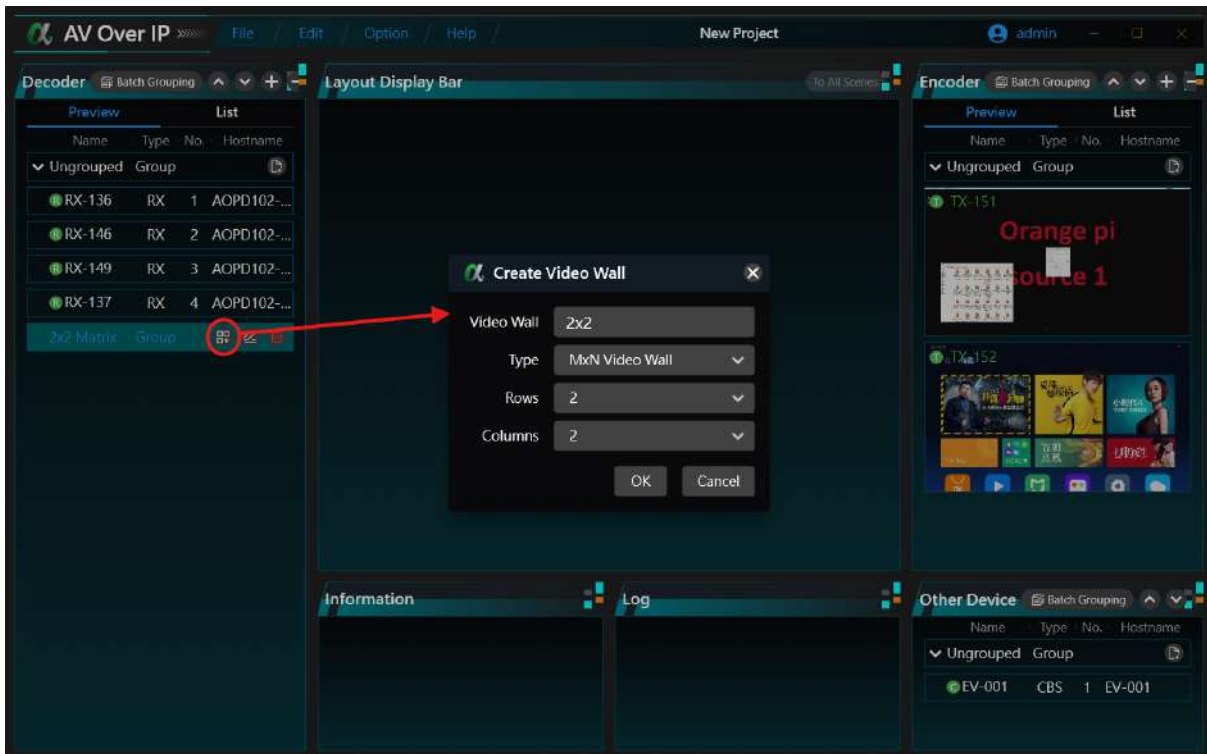
2. you can use “Batch Group Change” to Change Group



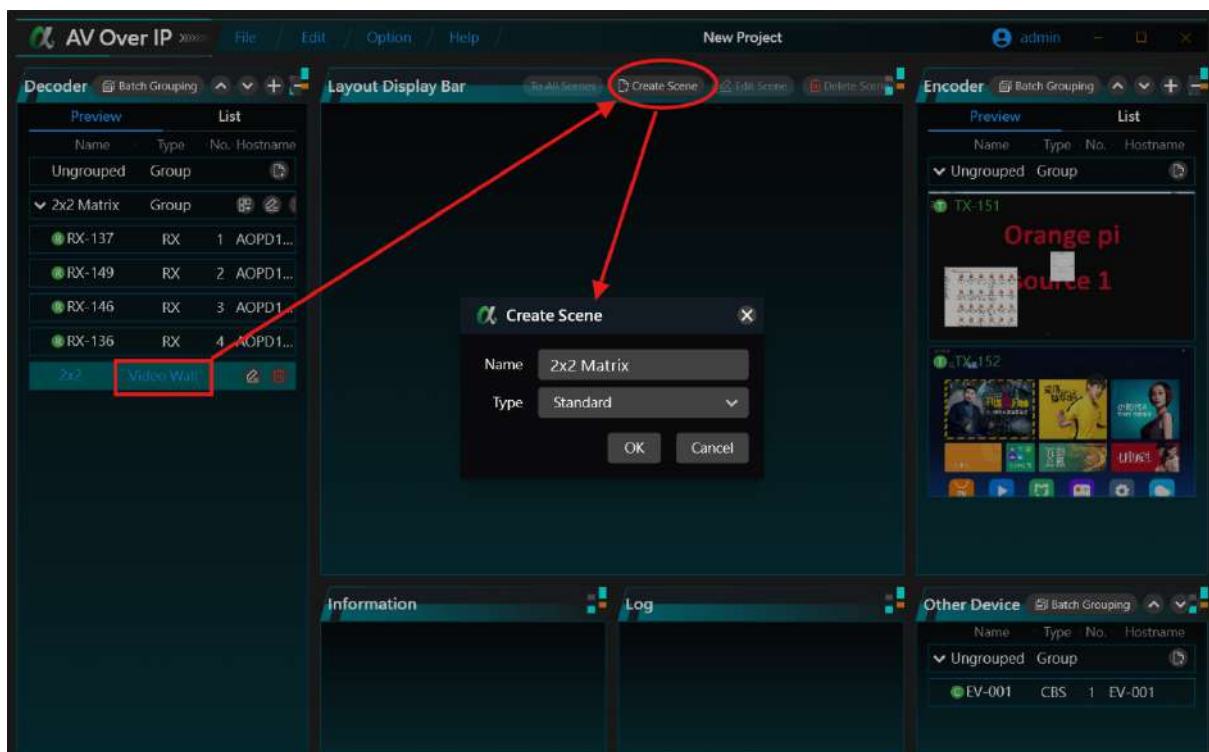
● Create Matrix

1. Create a Group ◦
2. Select a Group and press the Create Video Wall ◦
3. Give a name for Video Wall and Choose the Size ,Each Video Wall can Create multiple Scenes

AVP-Controller-100 & AVP-Controller-101



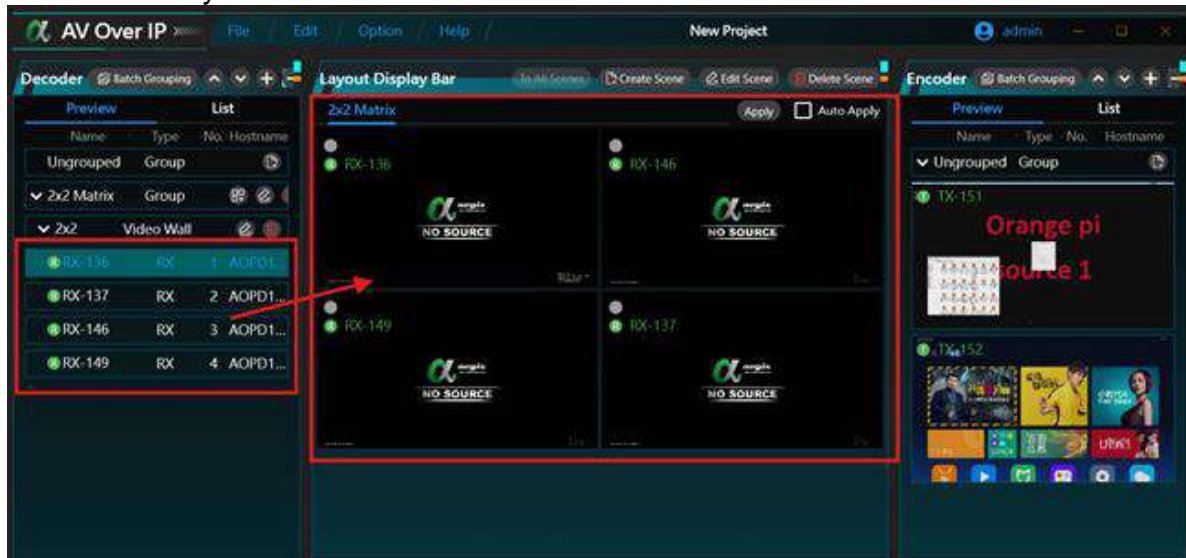
4. Choose Video Wall and Create a Scene, Type as Standard



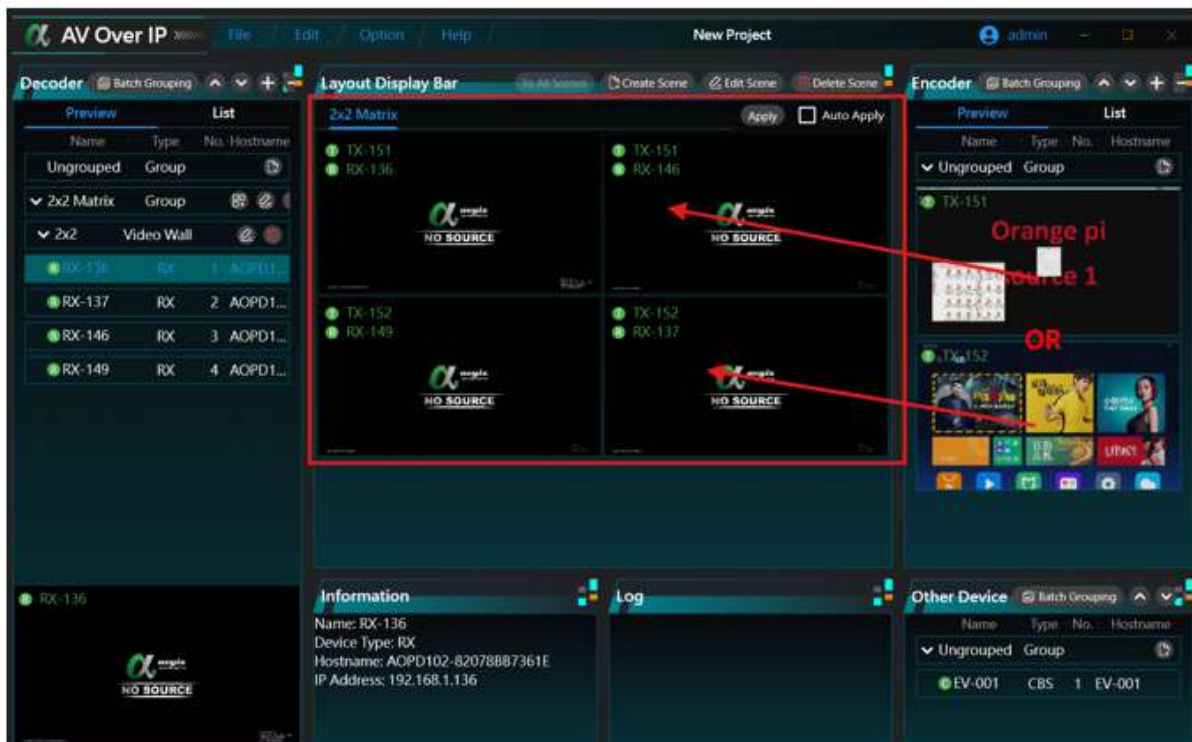
AVP-Controller-100 & AVP-Controller-101

5. Matrix Function Setting control (DragRight-Click)

- a. Drag and place the corresponding Decoder for the display into the middle layout bar

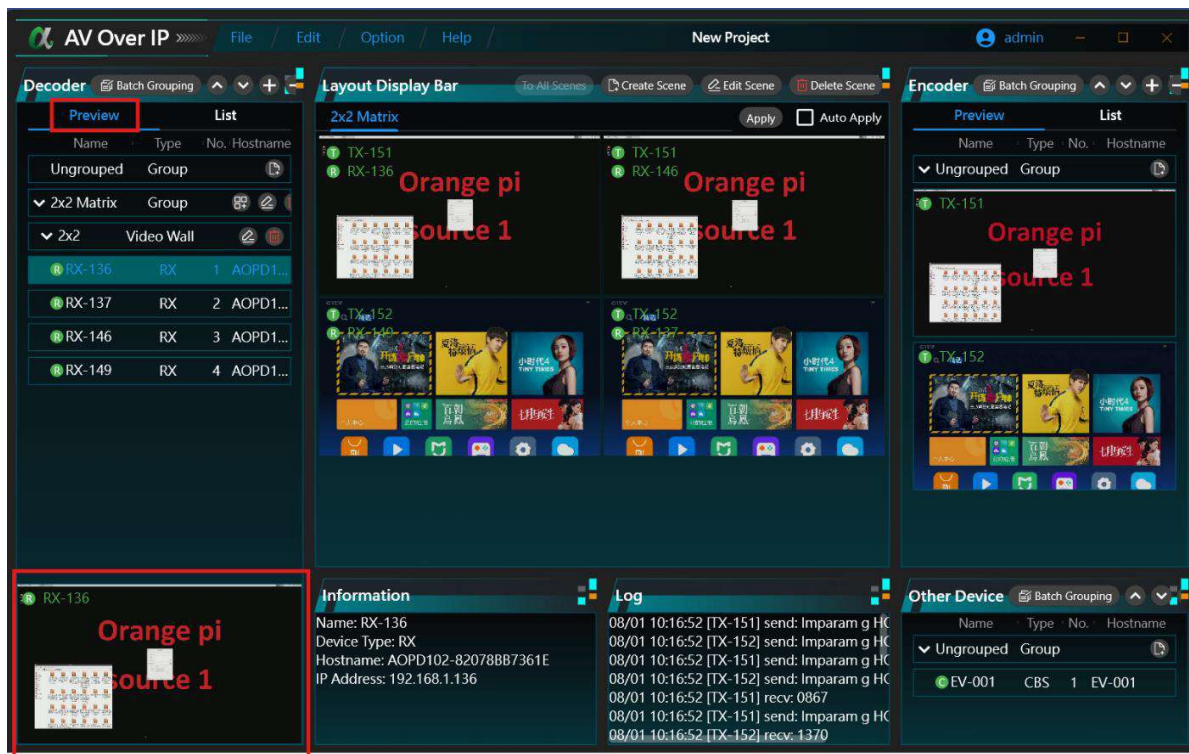


- b. Drag and place the source Encoder to be placed into the corresponding display position into the Layout Display Bar .



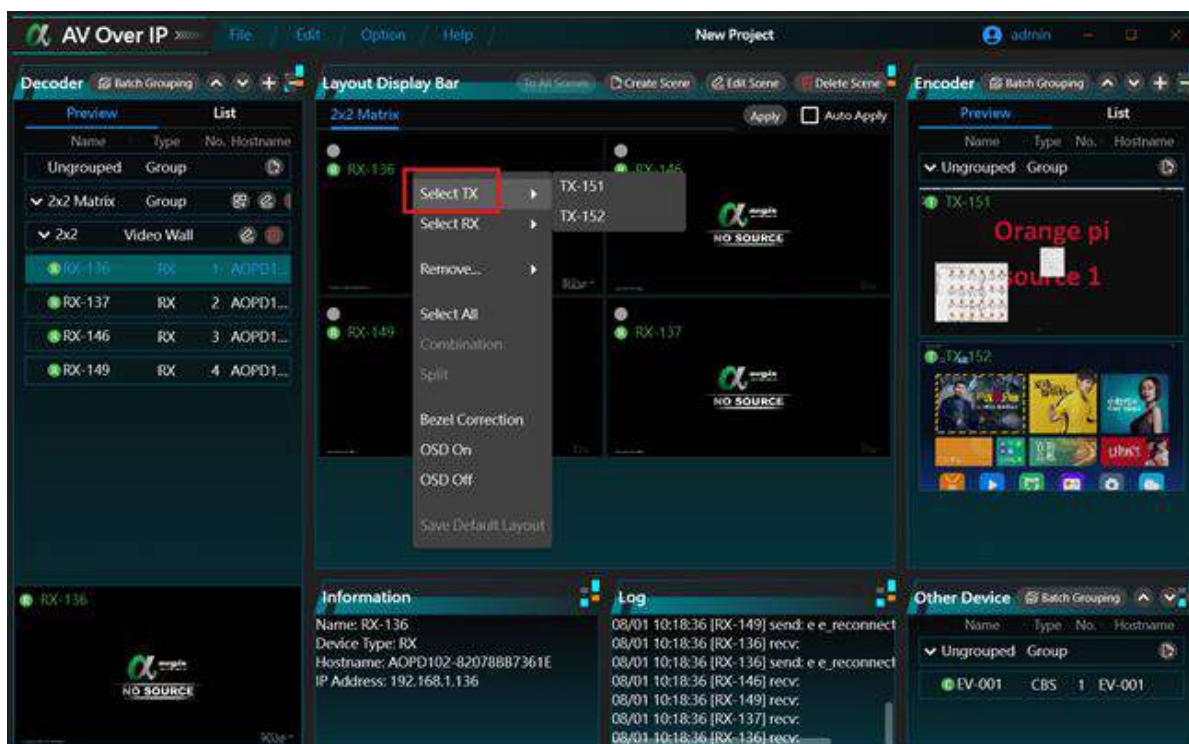
- c. Click 'Apply' to complete the settings. You will see the Layout Display window show corresponding Encoder Video. Also you can see the Preview of Decoder to make sure the settings applied .

AVP-Controller-100 & AVP-Controller-101

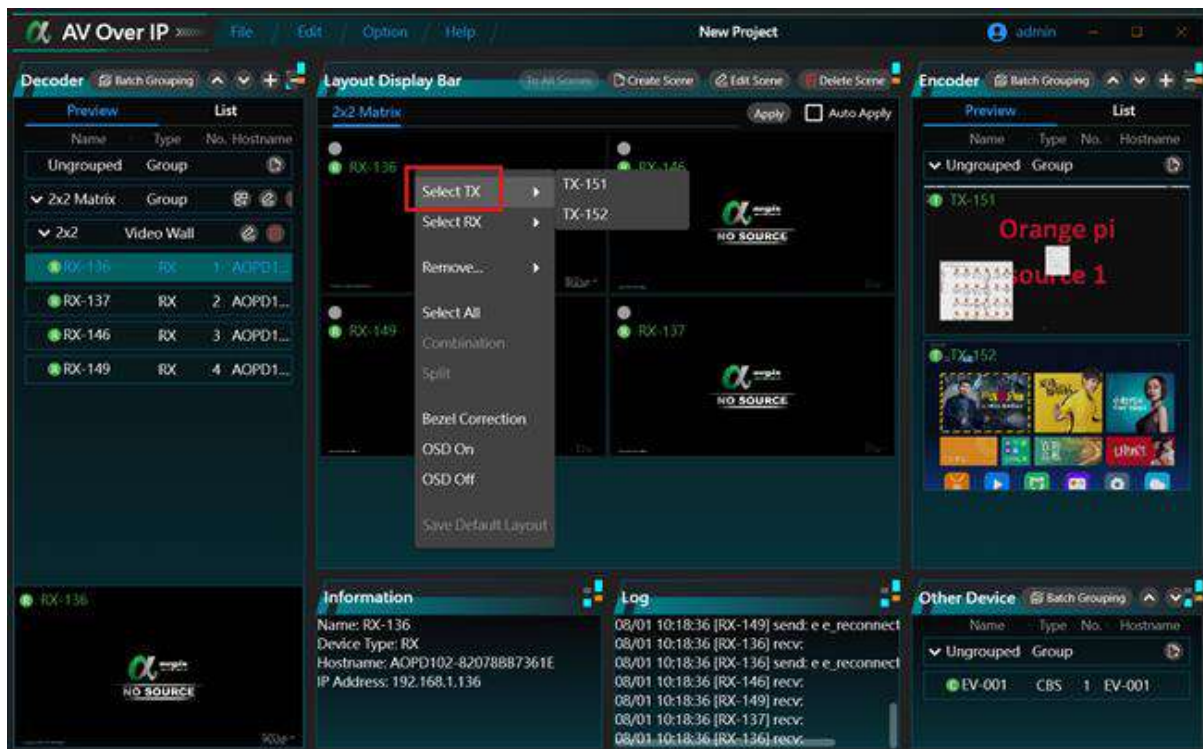


6. Matrix Function Setting Control (Right-Click)

- a. Right-Click on Layout wall and Select TX(Encoder) / RX(Decoder) in corresponding display position



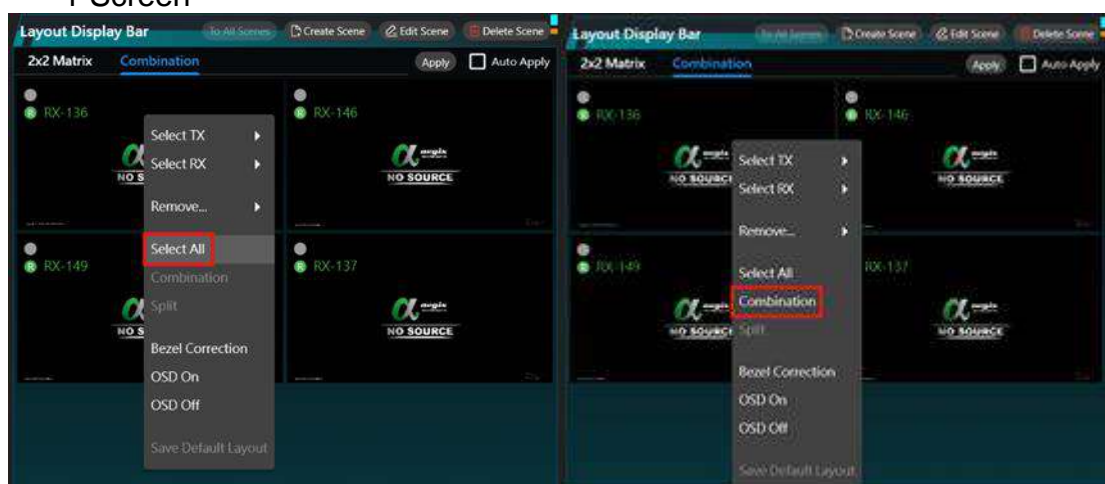
AVP-Controller-100 & AVP-Controller-101



- b. Click 'Apply' to complete the settings. You will see the Layout Display window show corresponding Encoder Video. Also you can see the Preview of Decoder to make sure the settings applied

● Create Video Wall

1. You can create a new layout. Right-click on the layout wall and select 'Select All', then choose 'Combination'. Once completed, 4 Screens will combine to 1 Screen



AVP-Controller-100 & AVP-Controller-101

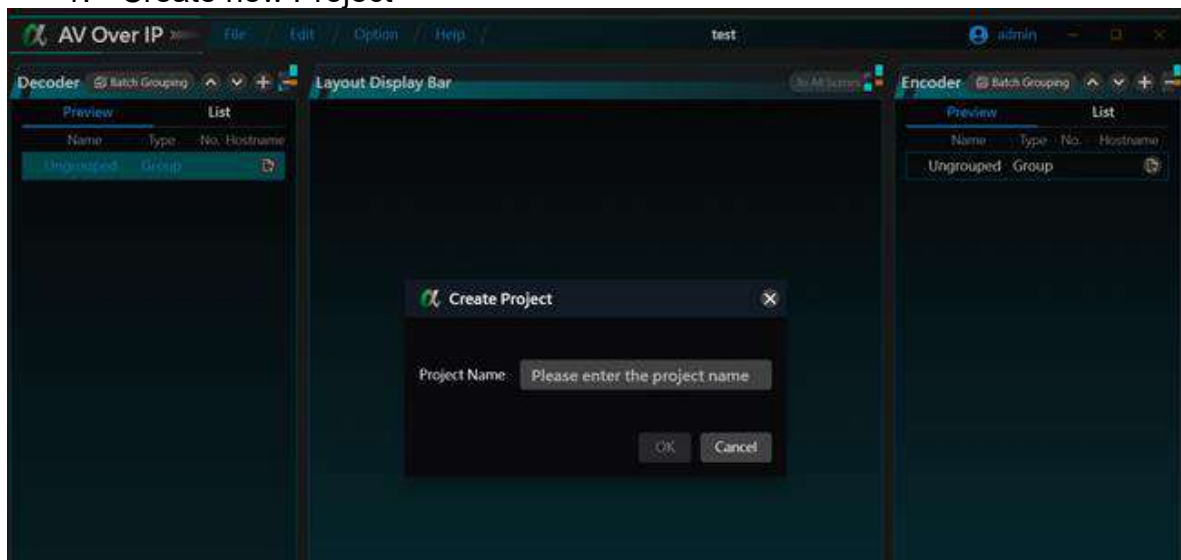


2. You can drag and drop the video source onto the combined display

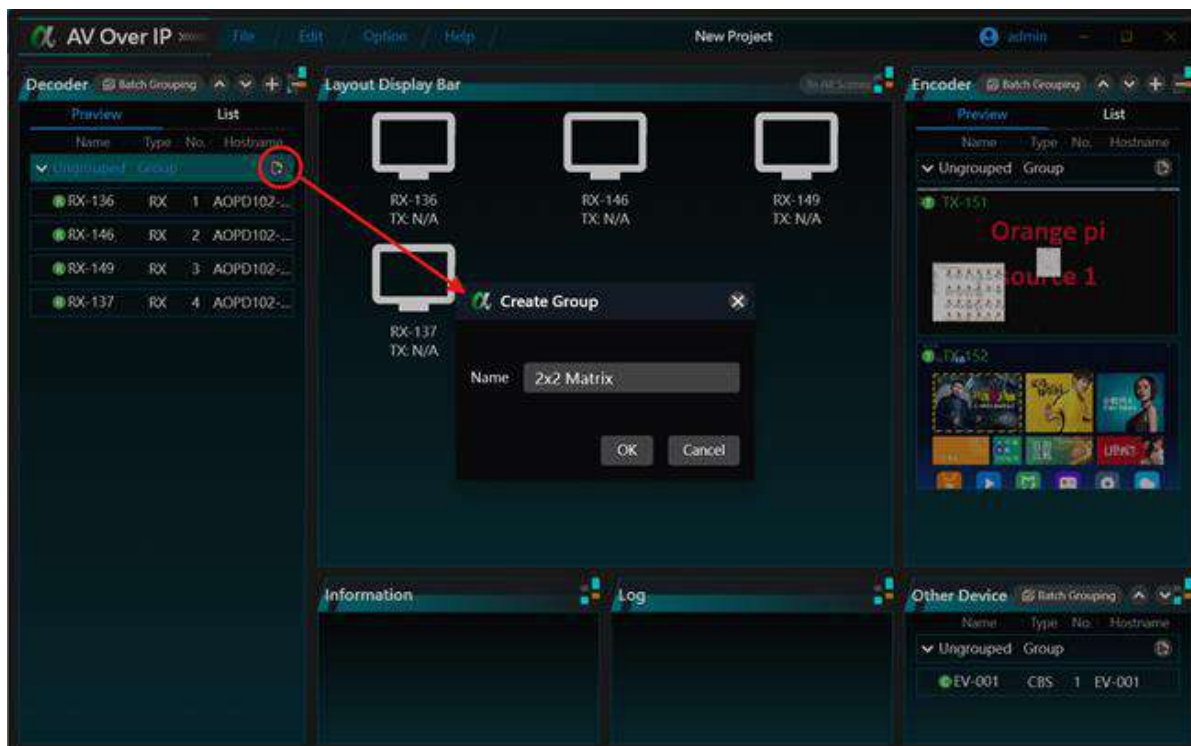
- **Create Mouse Roaming**

AOP-102 series products support Mouse Roaming. With configuration you can move the mouse to the edge of the screen to control different computers in a system. They support one set of mouse and keyboard to control up to 16 host computers. The following are the setup instructions.

1. Create new Project

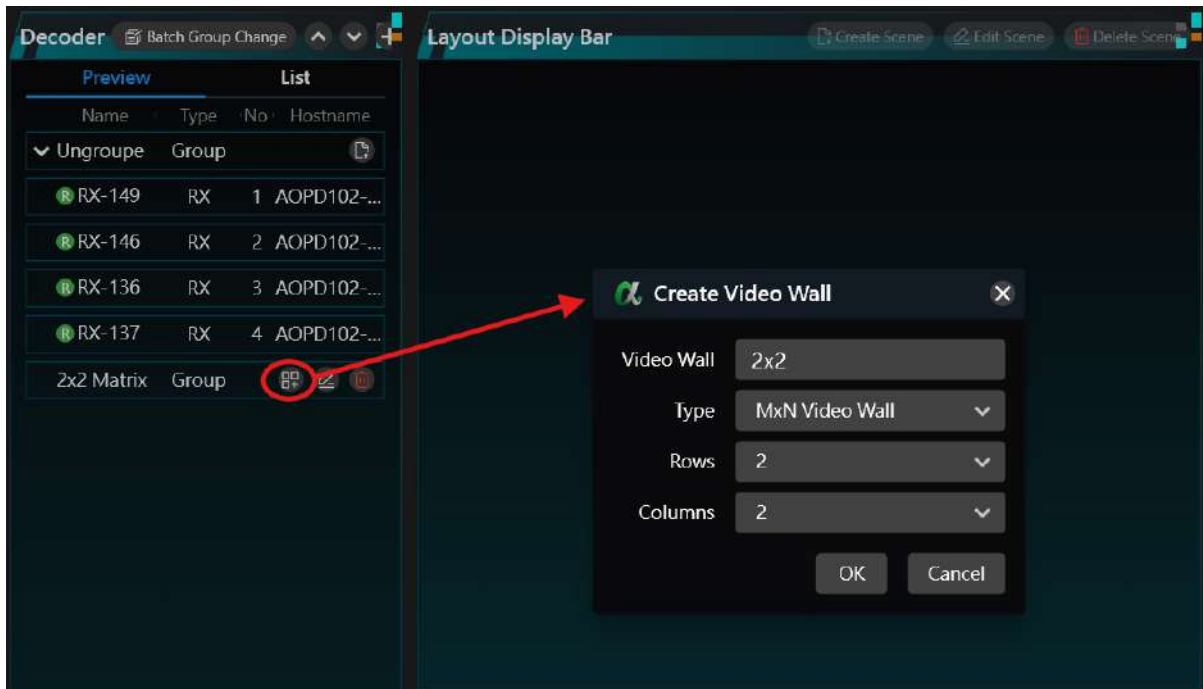


2. Create a New Group

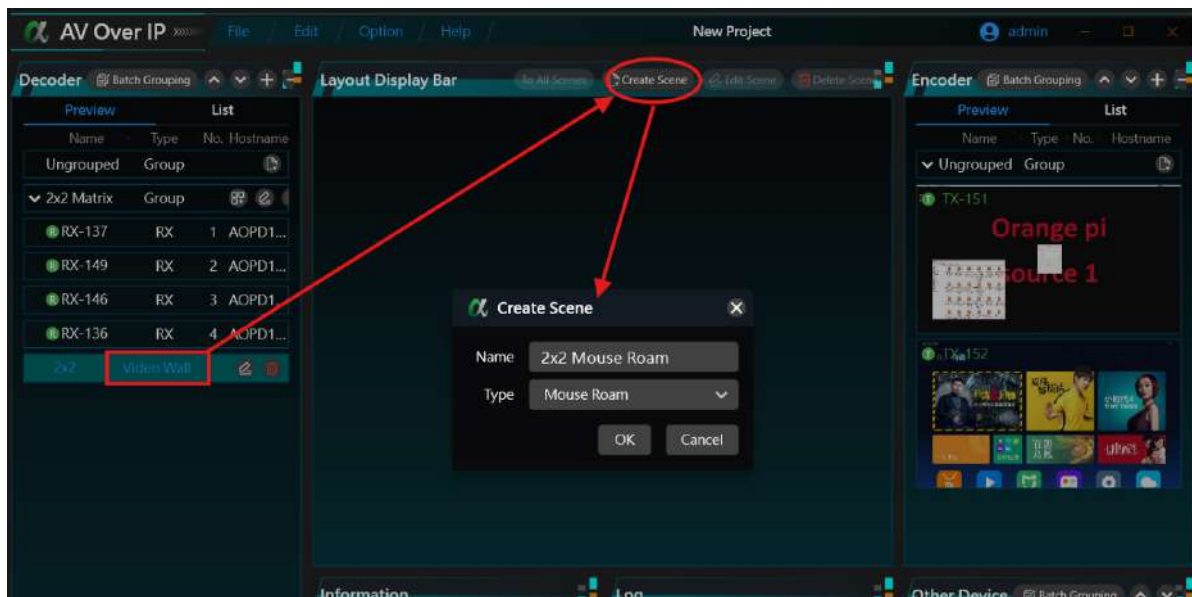


AVP-Controller-100 & AVP-Controller-101

3. Create a Video Wall



4. Choose Video Wall and Create a Scene, Type as Mouse Room

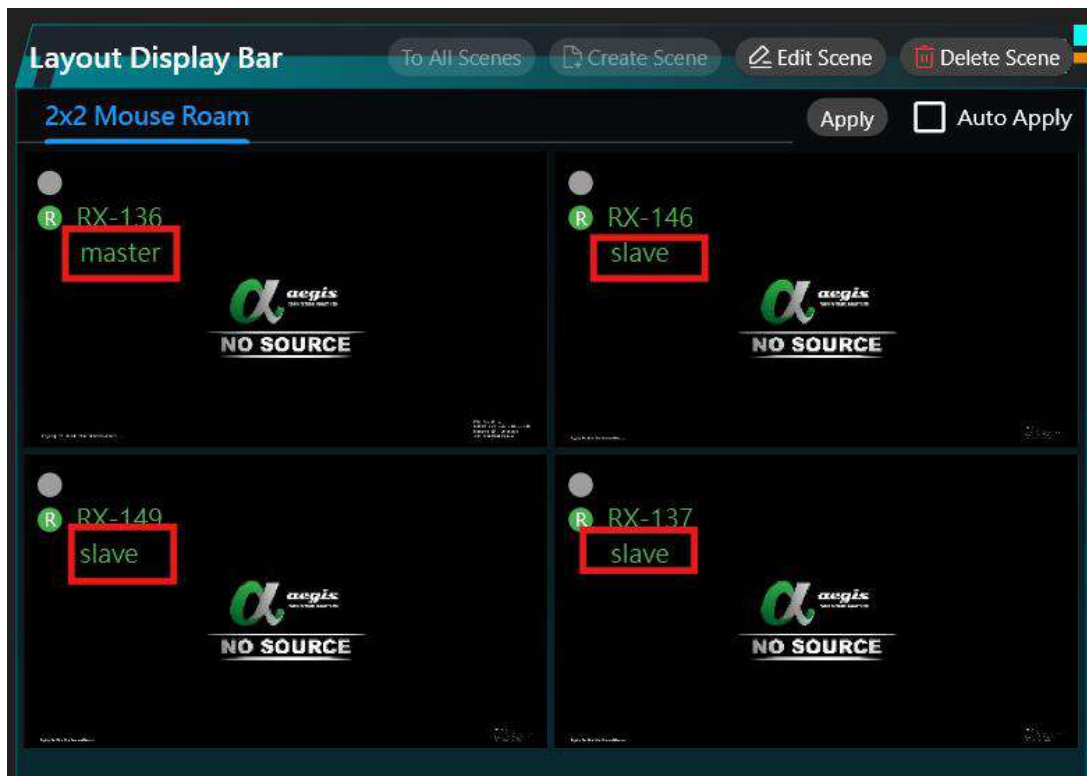


5. Setup Master and Slave

- 5.1 Right click the Decoder to which the mouse and keyboard are connected and choose Select Master ◦

AVP-Controller-100 & AVP-Controller-101

5.2 Right click the other Decoders and choose Select Slave



6. Restarting these Decoders will apply the settings. After rebooting, you can start controlling multiple computers

Decoder Function

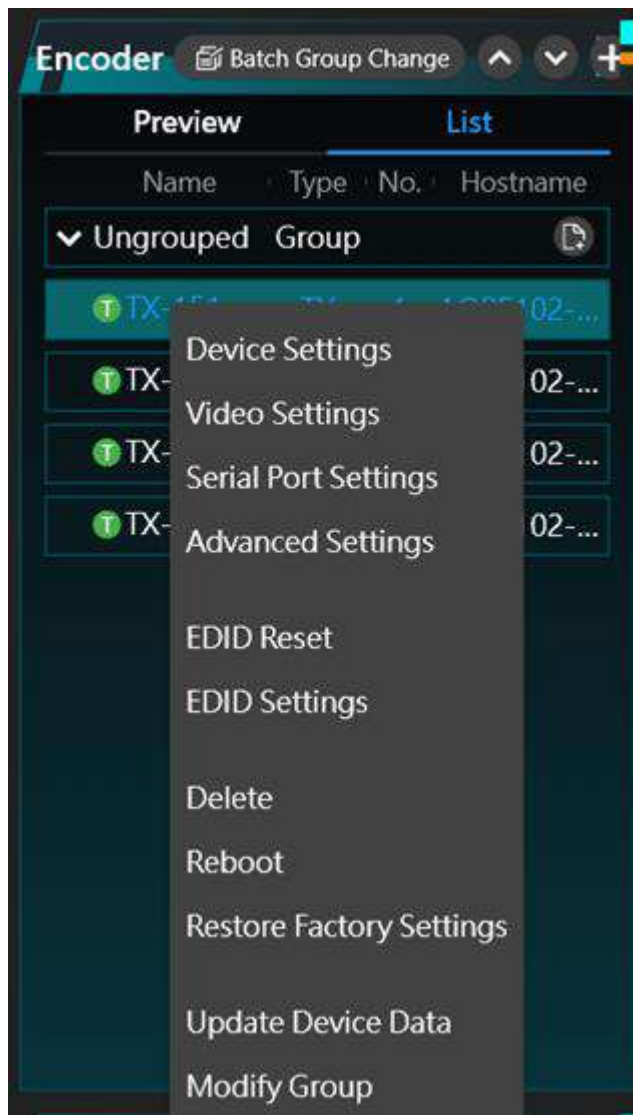


1. Device Setting : Setup Device IP configuration and Device name
2. Video Setting
 - a. HDCP Setting : Same as Source / HDCP1.x / HDCP2.2
 - b. HDMI Output Resolution
 - c. Screen Setting :
 - d. Extended Mode : Fit in / Stretch Out
 - e. Image Rotating Display : 0 / 90 / 180 / 270

AVP-Controller-100 & AVP-Controller-101

- f. Advanced Setting : Sync Lock Settings
- 3. Serial Port Settings
 - a. Baud rate : 600 ~ 230400
 - b. Data Bits : 5 ~ 8
 - c. Stop Bit : 1 or 2
 - d. Parity : Even / Odd / None
 - e. Working Mode : Feedback / Pass-through
- 4. Audio Settings
 - a. Audio Output Setting : Control Volume
- 5. Advanced Setting
 - a. Video over IP : Enable / Disable
 - b. Audio over IP
 - c. USB over IP
 - d. KM over IP
 - e. Serial over IP
 - f. IR over IP
- 6. No Source Image Settings
 - a. Upload Passive Image : The Passive image is presented to the Decoder when no Encoder Source connected.
 - b. Upload Startup Picture : The Startup Logo image is presented to the decoder's connected display when the decoder boots up
- 7. Overlay Image Settings
 - a. Upload Overlay Picture : An image can be uploaded to a decoder to be displayed on Screen (Note : Only support PNG format)
 - b. Screen Coordinate : Setup X Y For Overlay Picture location
 - c. Display Overlay Picture
- 8. Control
 - a. CEC Monitor On / CEC Standby / CEC Get values
 - b. OSD On / OSD Off : Display Device name on Screen
- 9. Device Settings : Delete / Reboot / Restore Factory Settings / Upload Device Data
- 10. EDID Export : Export Screen EDID
- 11. Service Capability : Remote SSH / Web Services
- 12. Modify Group : Change Group

Encoder Function



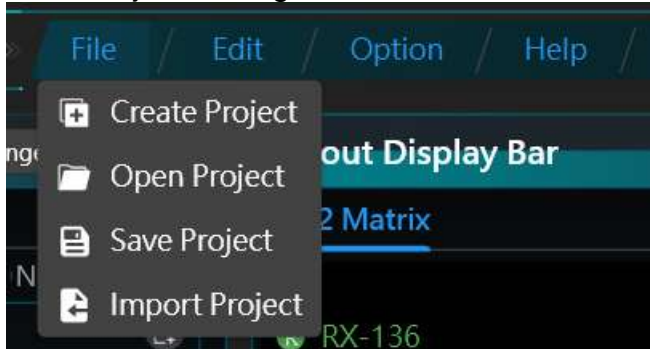
1. Device Setting : Setup Device IP configuration / Device name
2. Video Setting
 - a. Preview Setting
 - b. Video Quality
 - c. Bit Rate
3. Serial Port Settings
 - a. Baud rate : 600 ~ 230400
 - b. Data Bits : 5 ~ 8
 - c. Stop Bit : 1 or 2
 - d. Parity : Even / Odd / None
 - e. Working Mode : Feedback / Pass-through
4. Advanced Setting
 - a. Video over IP
 - b. Audio over IP
 - c. USB over IP
 - d. KM over IP
 - e. Serial over IP
 - f. IR over IP

AVP-Controller-100 & AVP-Controller-101

5. EDID : Reset / Settings
6. Service Capability : Remote SSH / Web Services
7. Device function : Delete / Reboot / Restore Factory Settings / Upload Device Data
8. Modify Group : Change Group

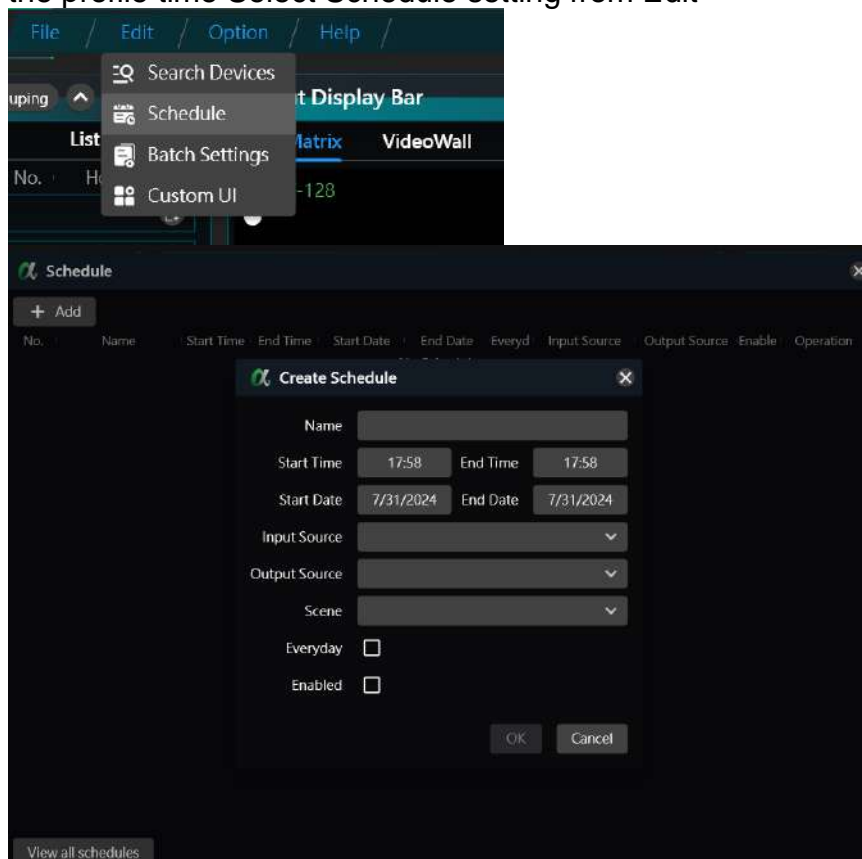
UI Function

1. File : Project manage



2. Edit :

- a. Search Device :
- b. Schedule : the function can execute the Encoder / Decoder connect on the profile time Select Schedule setting from Edit



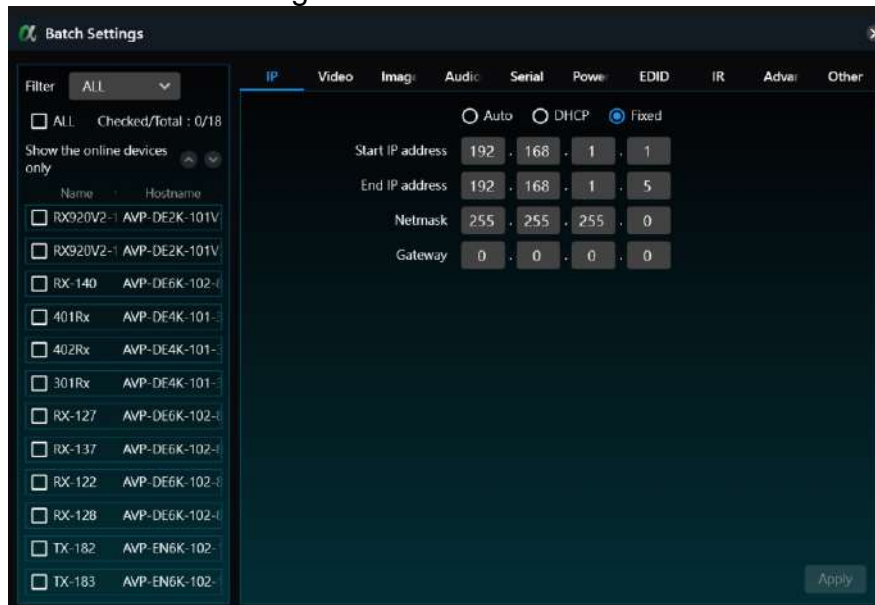
Input Source: Drop menu for Encoder list

AVP-Controller-100 & AVP-Controller-101

Output Source : Drop-Menu for Decoder list

Scene : Drop-Menu For Scene list

- c. Batch Settings : The function can batch setting more than one Device with the same settings

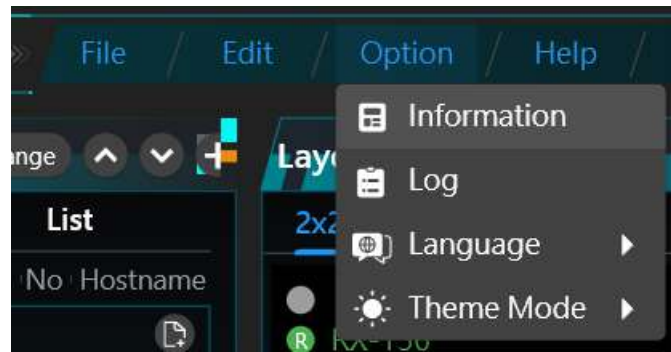


- d. Custom UI (for AVP-Controller-101) : Allow user to setup the environment control interfaces (Relay , RS232 , RS485 , I/O , IR)



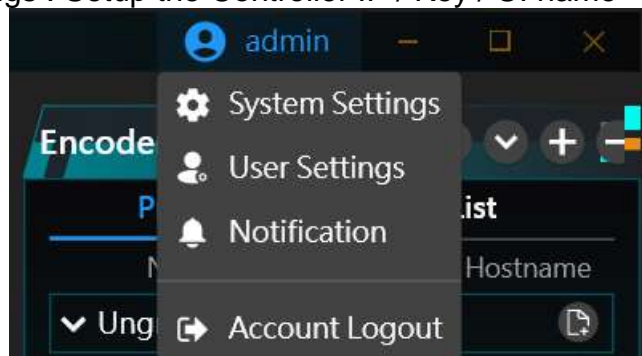
3. Option

AVP-Controller-100 & AVP-Controller-101



- a. Information : Device information
- b. Log : event record / Export
- c. Language : English / 繁體中文 / 簡體中文
- d. Theme mode : System / Bright / Dark

4. System Settings : Setup the Controller IP / Key / UI name

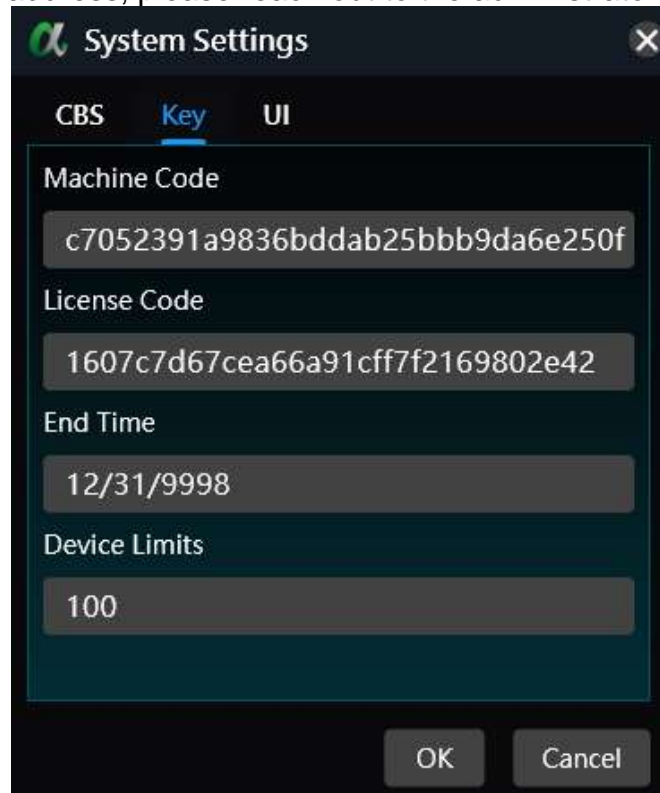


- a. System settings allow up to two backup device addresses in CBS and support setting a system logout time.

AVP-Controller-100 & AVP-Controller-101



- b. When accessing system settings, if you encounter a message indicating an incorrect key address, please reach out to the administrator for assistance.



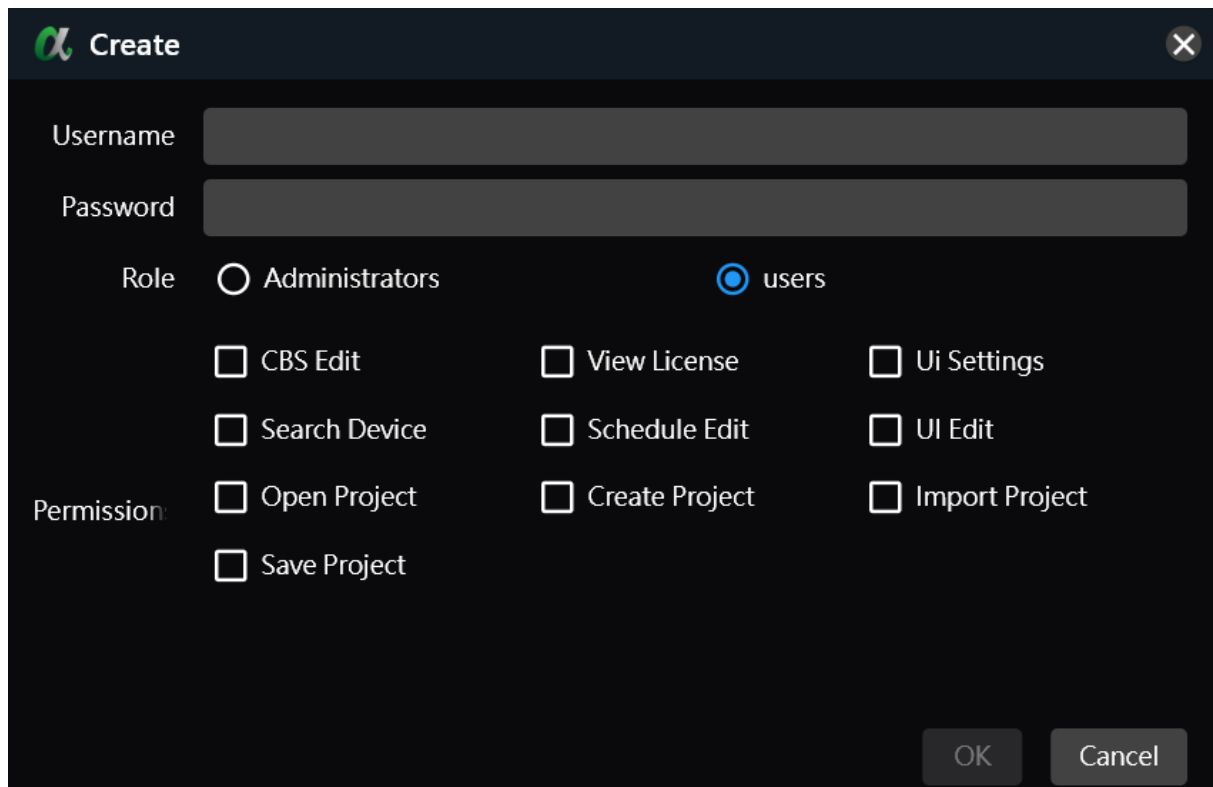
AVP-Controller-100 & AVP-Controller-101

- c. Upon entering system settings, the system name can be modified.



AVP-Controller-100 & AVP-Controller-101

User Settings : add / edit / delete for user account / password / Role / Permission



Create

Username

Password

Role Administrators users

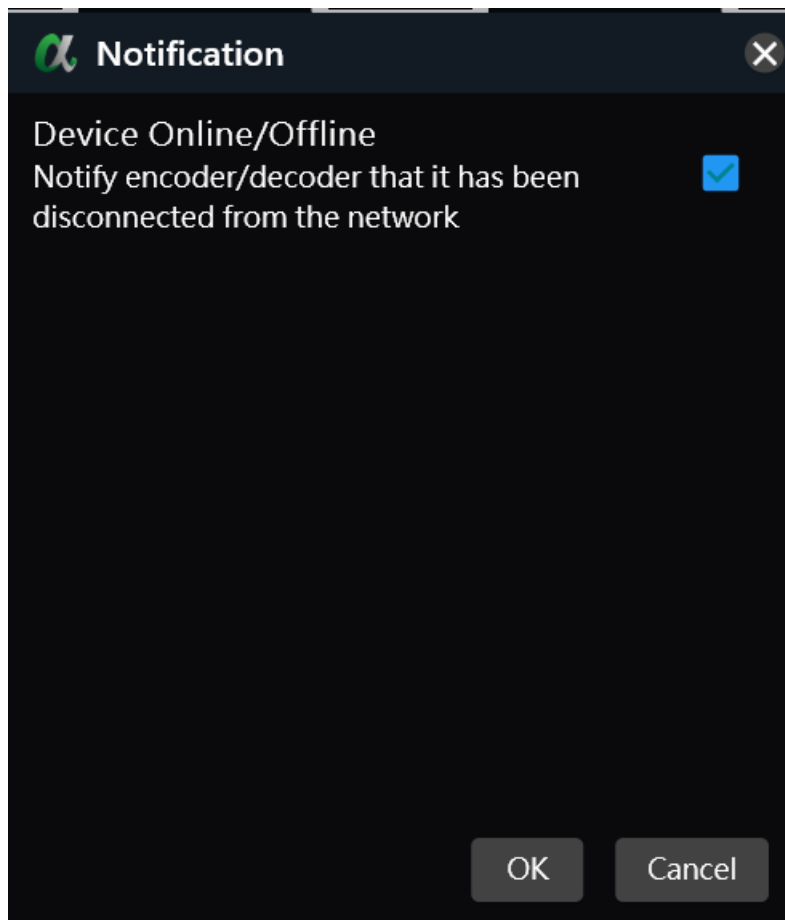
Permission

- CBS Edit
- View License
- Ui Settings
- Search Device
- Schedule Edit
- UI Edit
- Open Project
- Create Project
- Import Project
- Save Project

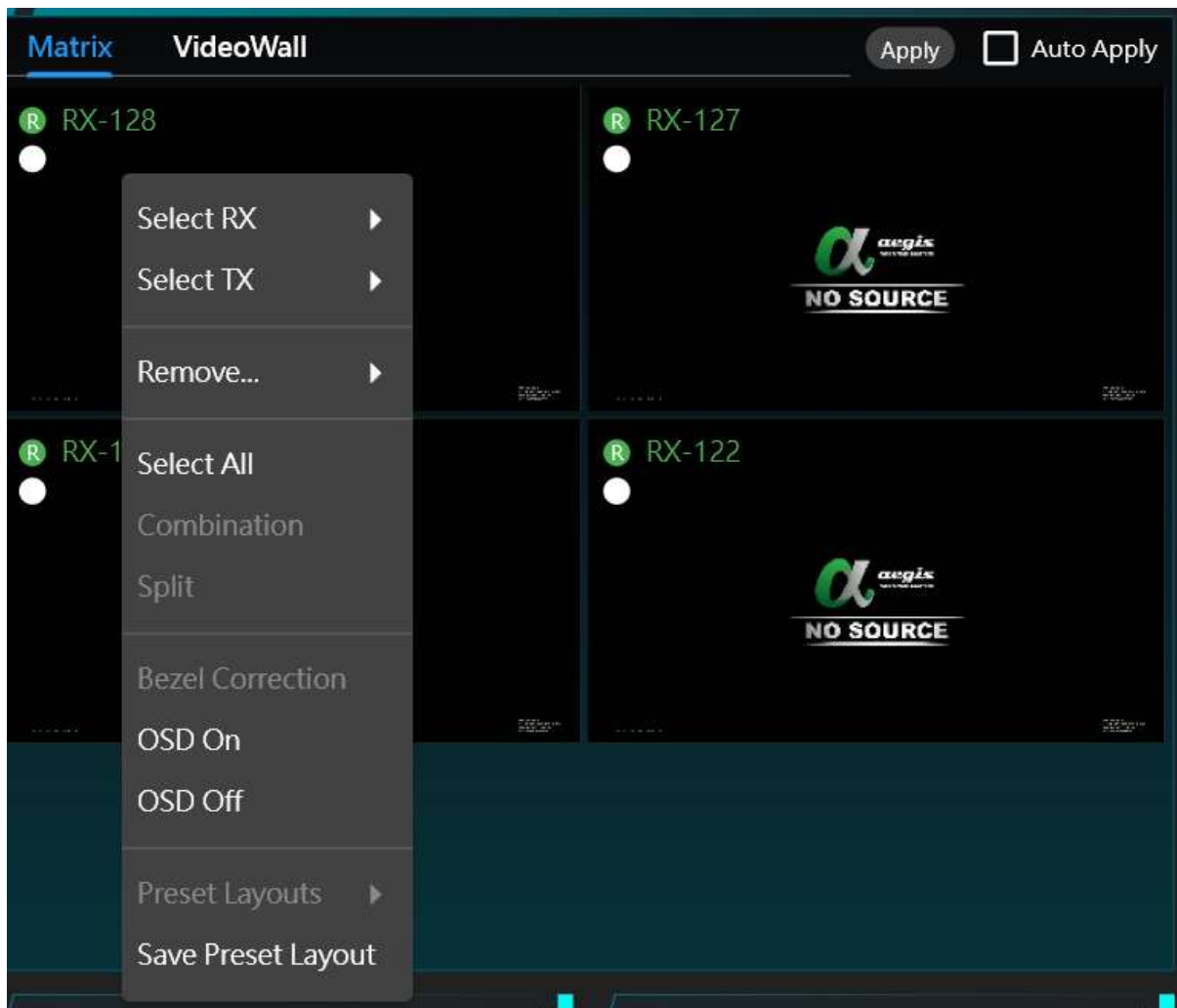
OK Cancel

Notification : To Notify Device on-line/off-line

AVP-Controller-100 & AVP-Controller-101



Layout Display Bar



1. To All Scenes : You can Drag a Video source on it , then all scenes will apply the Video Source.
2. Create Scene / Edit Scene / Delete Scene
3. Select TX / RX :
4. Remove TX / RX : To Remove one or all TX / RX
5. Select ALL / Combination / Split
6. Bezel Correction :
7. OSD On / Off
8. Save Default layout : To save current layout display

APP Overview

i-Touch+ is an easy-to-use AV control system app that gives users quick access to IP control box (referred to AVP-Control-100/101) directly from an iPad. After a quick initial setup, the iPad connects to IP control box, allowing for a seamless, highly-responsive control experience. All button presses are kept in sync between the app and your IP control box. This provides convenient and easy access to the IP distributed matrix system.

Before Using i-Touch+

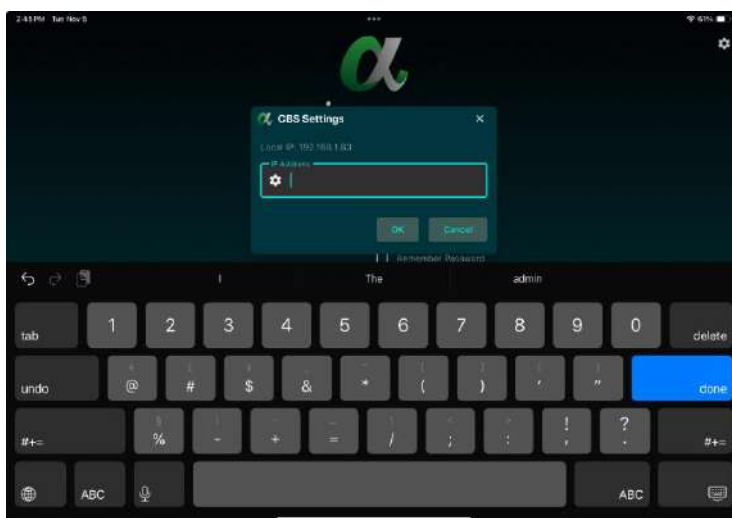
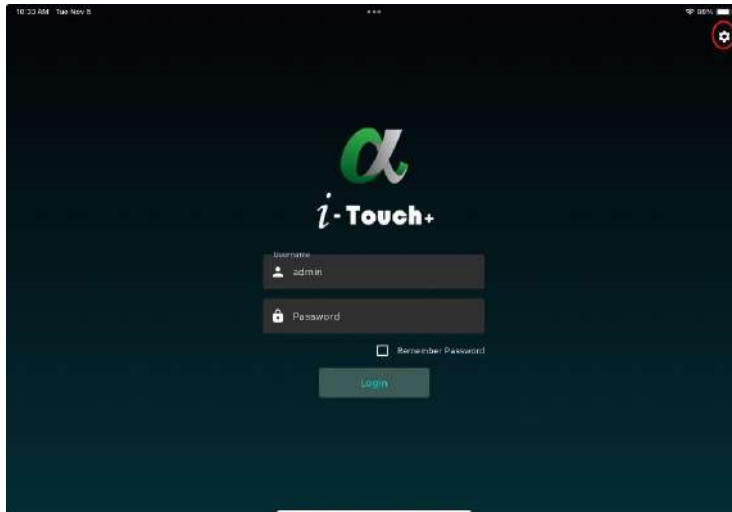
Before using the **i-Touch+**, perform the following:

- ✓ IP streaming system is correctly configured;
- ✓ Ethernet switch, wireless network router (or access point) are correctly configured;
- ✓ iPad running iOS14 or higher;
- ✓ **i-Touch+** (V1.24.11 or higher) is downloaded in Apple store;
- ✓ The IP control box is employed;
- ✓ Ensure your PC with PC configurator installed, IP control box and iPad are in the same network segment.

AVP-Controller-100 & AVP-Controller-101

Operating **i-Touch+**

On first startup, you need to enter the IP address of IP control box in **i-Touch+**:



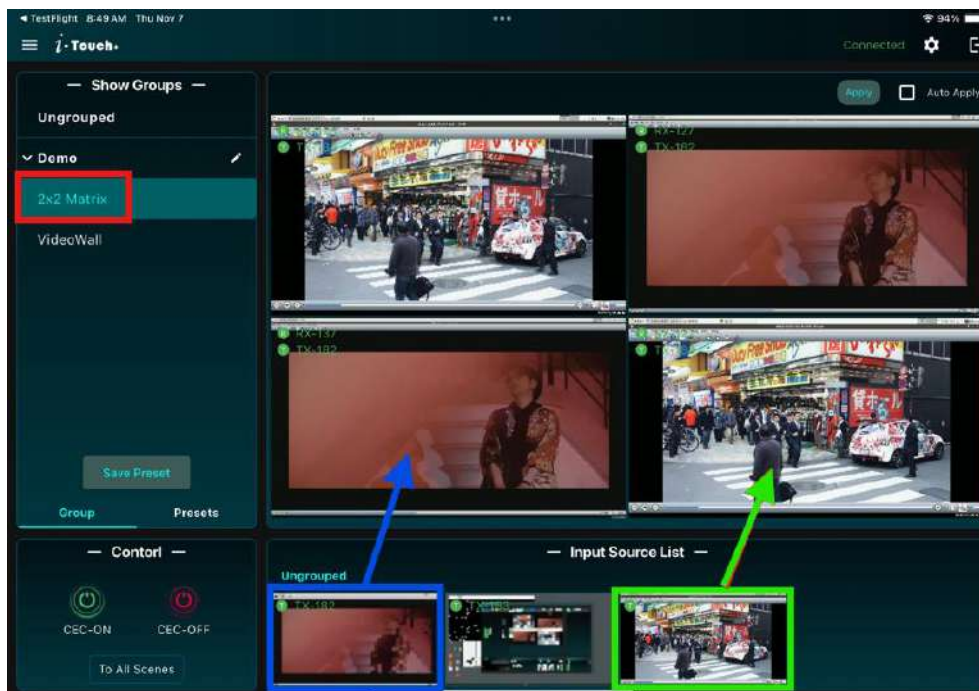
After entered IP, please login in (Default username / password as admin / admin)

i-Touch+ Main Screen UI



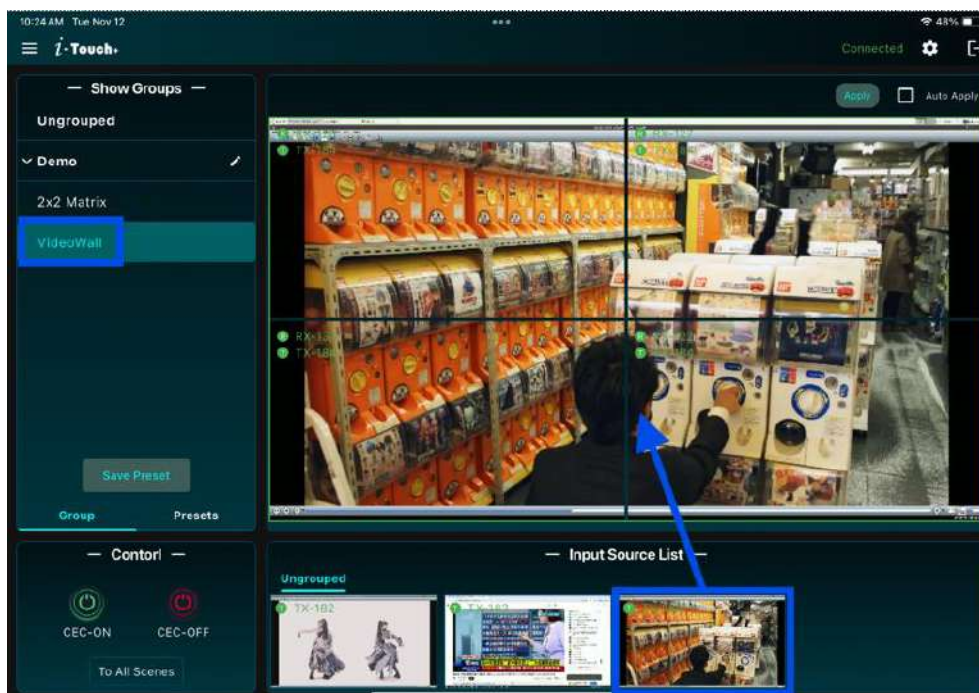
Item	UI Element	Description
1	Show Groups	Display all Decoder Group and scene
2	Connection Status	Connection status.
3	Scene Layout	Display current layout status with TX & RX
4	Settings	All the setting include this page
5	Save Preset	Save current scene layout to preset page
6	Control	CEC On: Turn on CEC function for selected scene CEC Off: Turn off CEC function for selected scene
7	To all screens	Drag a source from source list over this button means the switching of this source to the screens in all groups, including single screens and video walls.
8	Input Source List	All TX Group (include ungrouped)
9	Open Project	Open the Project of Control Box

Martix Layout



Configure Video-Wall scene on PC , After login, On this main Screen , you can drag the Input Source to Corresponding decoder position and Press apply to connect Encoder and Decoder , than you can see the same Video stream in the main screen and the monitor of Decoder.

Video-Wall Layout

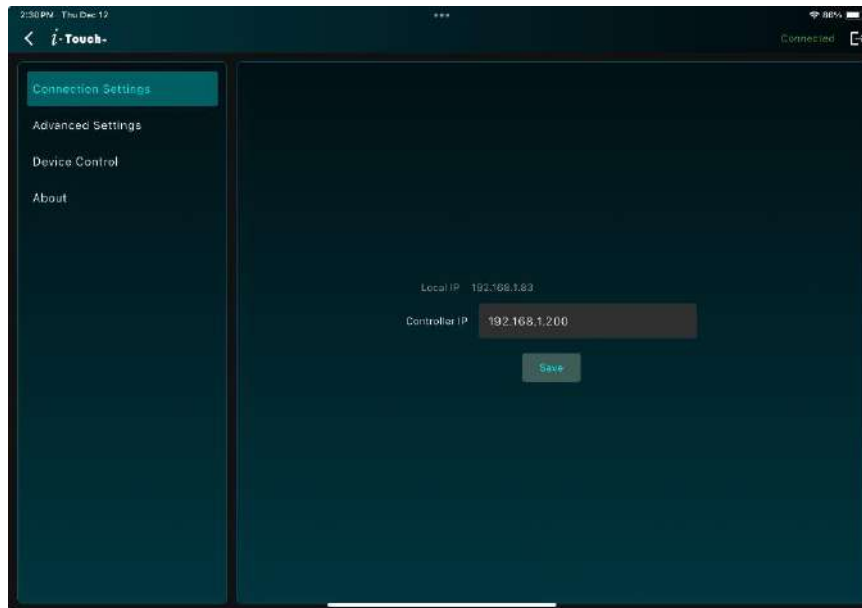


Configure Video-Wall scene on PC and Combine all Decoder to a big position, than drag Input Source to the big position and apply, Video Stream will display on main screen and all monitors.

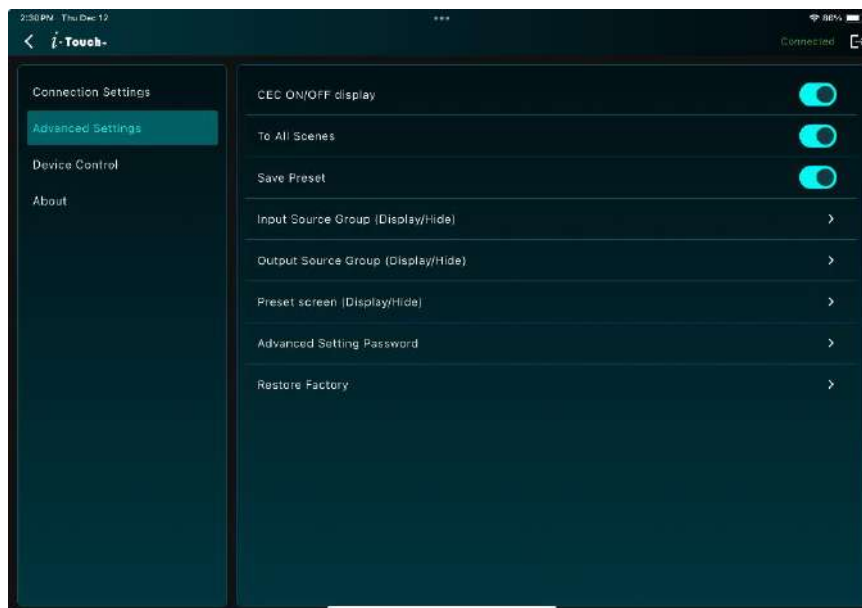
AVP-Controller-100 & AVP-Controller-101

Settings UI

1. Connection Settings : enter new controller IP when you need to change

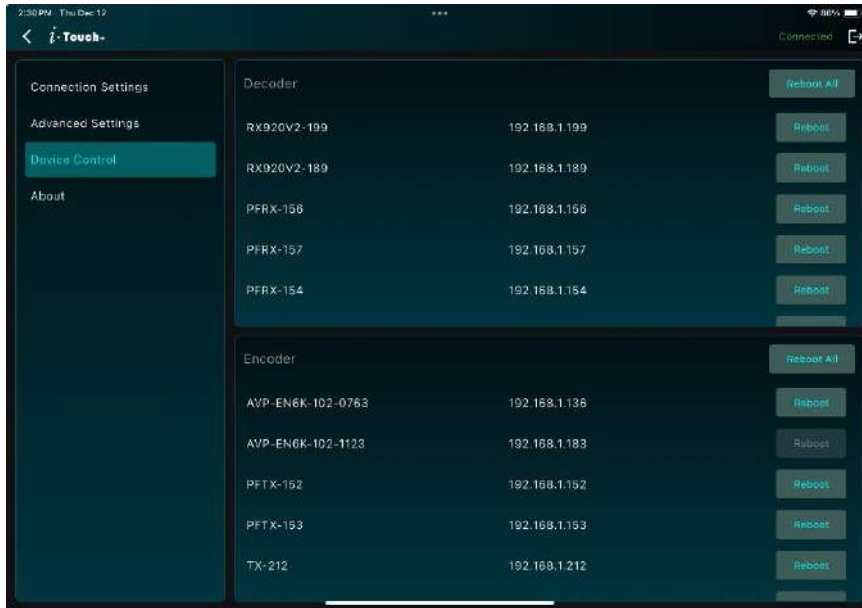


2. Advanced Settings : Display function hide or not on the main screen



AVP-Controller-100 & AVP-Controller-101

3. Device Control : reboot one device or reboot all



4. About : APP Version

