

User Manual

IPM-925T/R

4K30 AVoverIP System with Xview software/APP control



Version: V23.08.24

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1. Product Introduction

This a 4K HDMI over IP Matrix, Video Wall and Multiview system, the transmitter and Receiver is same unit, it can be switched/defined by the PC software to work either as encoder or as decoder which can provide more application flexibilities and save the costs.

On the front panel with a LCD screen to show name, IP address and version info, it will be super helpful when do the system settings. With both DC and POE power supply to provide the installation easier, when set the unit working as Encoder, it will can support 1 HDMI loop out with 3.5mm audio embedded and de-embedded, support 1*RS232, 1*RS485, 1*Relay, 1*I/O central control ports, also the Keyboard and mouse transmission.

This system supports Windows software, Android/iOS tablet APP and UDP commands control, also support the control UI customization. Support to work as matrix switcher switching, Video Wall Control, Distribution and multiview(up to 16-win per screen), support preview functions, support the RTSP IP camera decoding etc functions.

Using 1G network switch, multicast working mode, the input and output resolutions are up to 4K30, low latency and seamless switching between the sources. This system can be widely used in the commercial, residential or governmental applications.

2. Product Features

- Transmitter and Receiver in one box, switchable by software
- Input and output resolutions are up to 4K30, distance up to 150m
- Support Matrix Switching, Video Wall, multiview and distributions
- Support preview, OSD, EDID management etc functions
- Support to open up to 16-window per screen, but no PIP and POP
- Support POE and DC both power supply
- Support the control UI customizing
- Support Windows software, APP control, no IP control box needed
- Support TCP/UDP control commands
- Support the central control interfaces(1*RS232, 1*RS485, 1*Relay, 1*I/O)
- Support the Keyboard and mouse transmission, audio in&out
- Support ONVIF and RTSP protocols

3. Technical Datasheet

Specification	
Video	HDMI1.4, HDCP1.4, resolution up to 4K30 in and out
Audio	3.5mm Line in/out, or HDMI audio
IP	Bandwidth up to 20Mbps
	Manually static IP address
	Protocol H.264/265

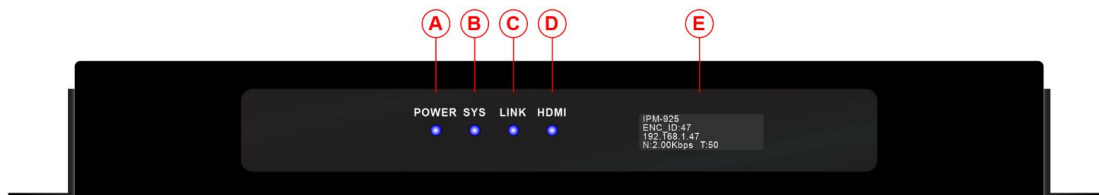
	Latency 80~120ms
Control	3 rd Party Control by TCP/ UDP
	Windows PC software, Android/iOS APP
Product dimension	175*110.5*25 (L*W*H)(mm)
Temperature	-20°C~+60°C
Humidity	10-90%
Power	DC 12V 1A

4. Packing Details

Transmitter/Receiver1 unit
 Power adapter1 pcs

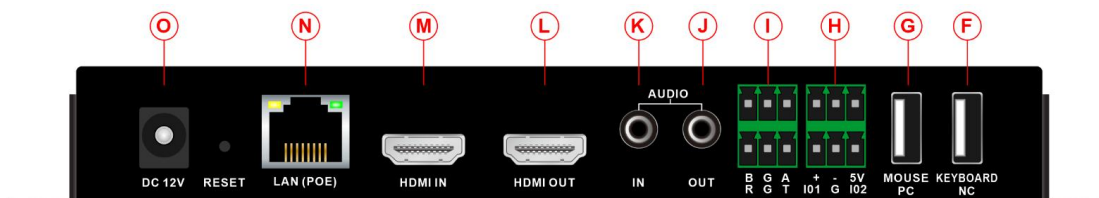
5. Panels

Front Panel



A/BC/D(Indicators)	PWR: power indicator SYS: System indicator LINK: LAN cable connection indicator HDMI: HDMI signal status
E	OLED Screen Showing the Model, ID, IP, status

Rear Panel:

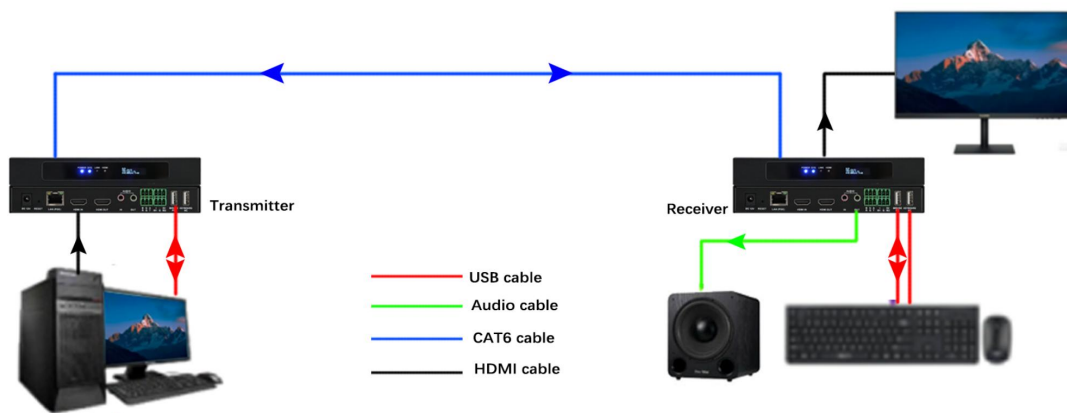


O	DC12V1.5A power supply
RESET	Press and hold for 5 seconds to factory reset
N(LAN POE)	RJ45 LAN port with standard POE
M(HDMI IN)	When it works as Transmitter, for HDMI input

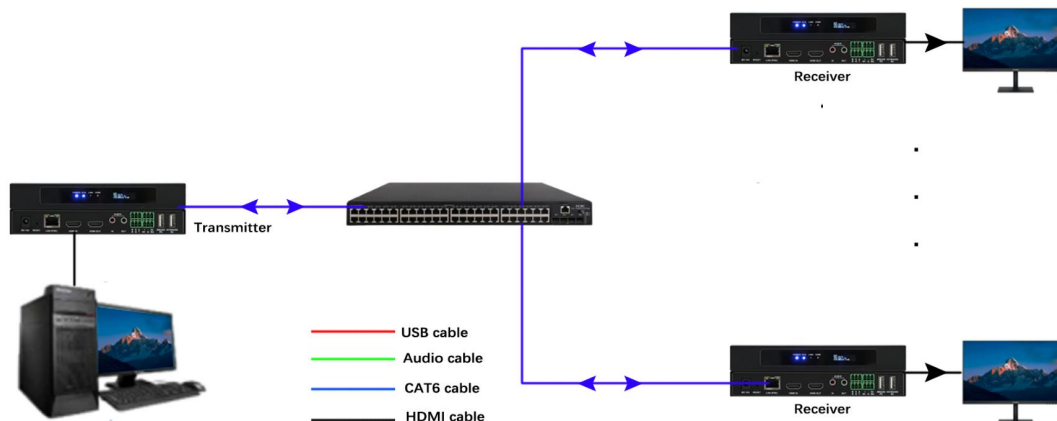
	*When it works as Receiver, HDMI IN is not function
N(HDMI OUT)	When it works as Transmitter, for HDMI Loop out
K(AUDIO IN)	For the 3.5mm audio embedded in
J(AUDIO OUT)	For the 3.5mm audio de-embedded out
I/H(Control ports)	1*RS485(BGA)phoenix connector 1*RS232(RGT) phoenix connector 1*Replay(+ - 5v) phoenix connector 1* I/O(IO1, IO2)phoenix connector
G(MOUSE/PC)	When it's work as Transmitter, this port will connect to host When it's working as Receiver, it's for Mouse connection
F(Keyboard/NC)	*When it's work as Transmitter, this port is not functional When it's working as receiver, it will be for keyboard connection

6. Equipment Connection Diagram

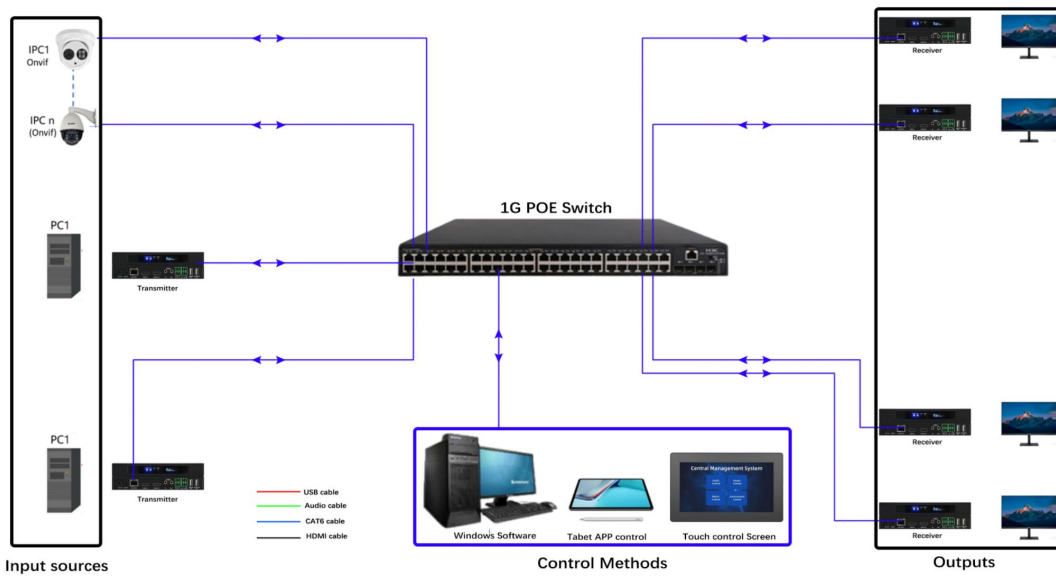
Working as Extender, one to one



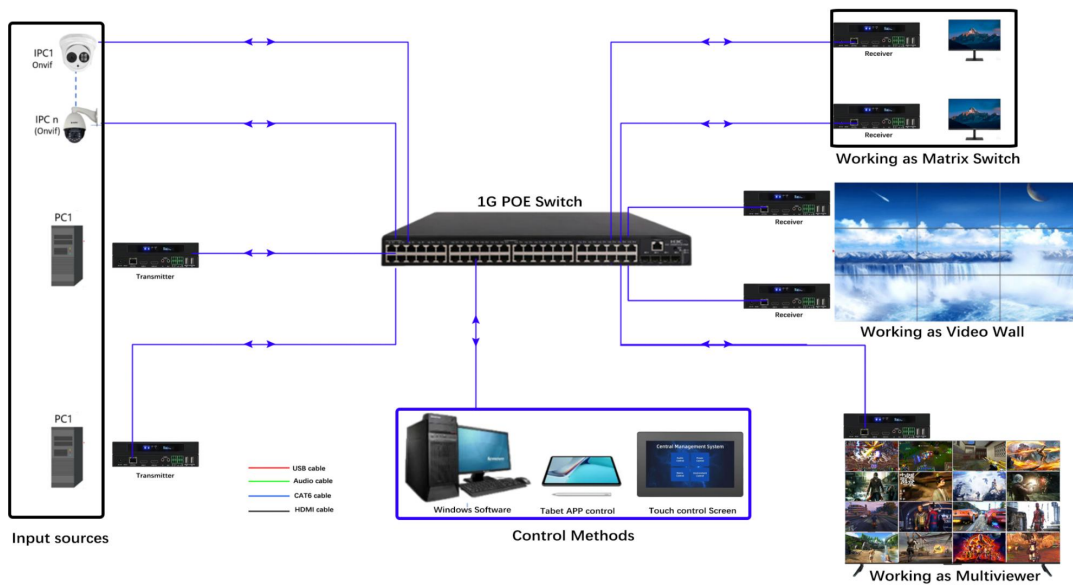
Working as Distribution, one to many



Working as Matrix Switcher, Many to Many



Working as Video Wall Processor and Multiviewer:



7. Xview PC control software

With the Xview control software, users can configure the devices ID, IP, Upgrade, video wall, matrix, OSD etc function.

8.1 Xview software login

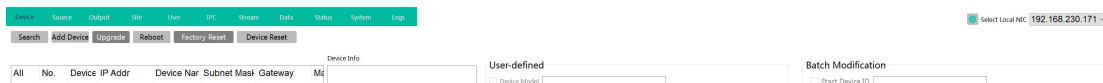
The default user name is admin, password is 123456, local IP is the control PC IP address, then click to login:



After login the software, need to click the Setting icon on the right top corner for the system setting first:



Then it will be showing the setting page with different setting tabs:



Device: for finding all the devices, adding, upgrade, reboot, etc

Source: after setting the device IP/ID/working type as encoders, then add them as sources

Output: after setting the device IP/ID/working type as decoders, then add them as outputs

Site: for creating the video wall, matrix etc

User: for adding different users with different level rights

IPC: for adding the IP cameras

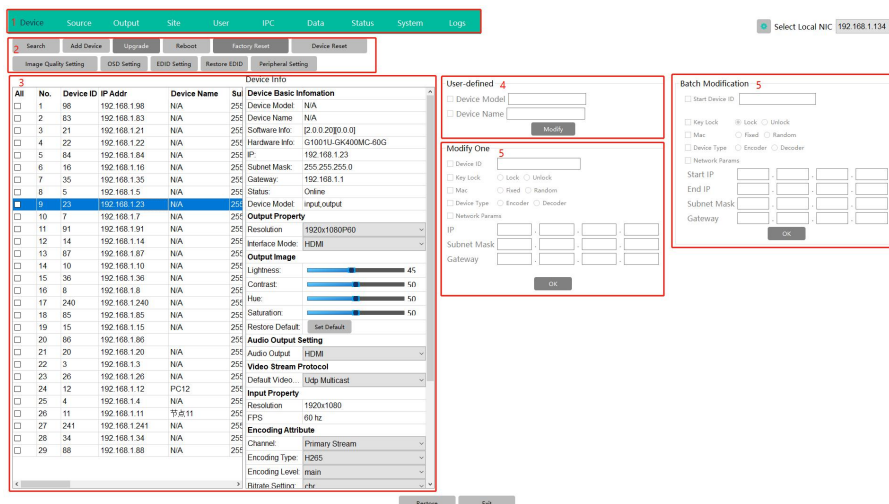
Data: for uploading the data/configuration to different control devices

Status: for the devices' working status checking/disply

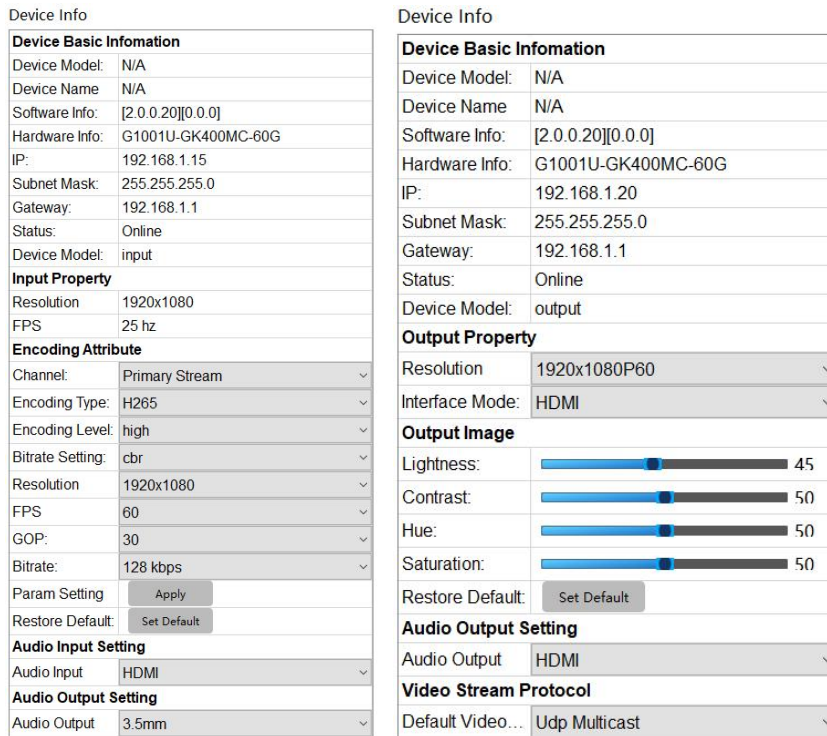
System: for the preview mode settings, etc

Logs: for the system operation logs records

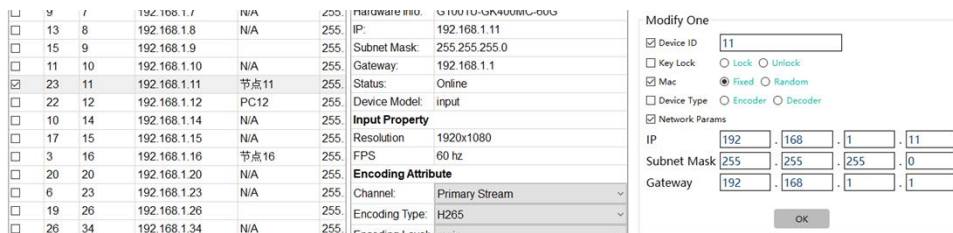
Device: for finding all the devices, adding, upgrade, reboot, etc



After selected a device, then users can do the setting for the devices accordingly, change the name/ID/IP/work type(as encoder or decoder)/resolution/audio

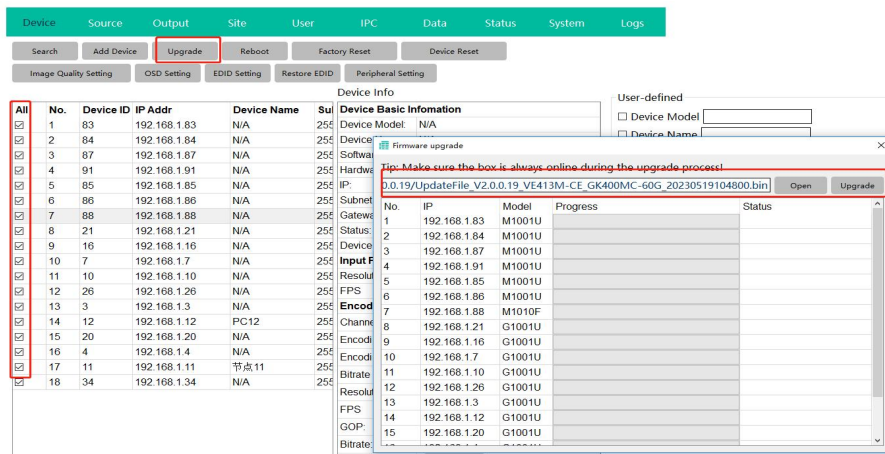


* When set the device Type and Network IP address can't not at the same time, as when change device type and IP address both will auto restart the device.



Upgrade the devices, can select all devices to upgrade at once:

*Note the M1001U and G1001U models can't use the same firmware and upgrade, need to upgrade separately:



Factory reset: All the devices will be back to factory default sa ID and IP at 192.168.5.50

Device Reset: Clear the ID, MAC, device type and IP address

Search Add Device Upgrade Reboot **1 Factory Reset** **2 Device Reset**

Image Quality Setting OSD Setting EDID Setting Restore EDID Peripheral Setting

All	No.	Device ID	IP Addr	Device Name	Sub	Device Basic Information
<input checked="" type="checkbox"/>	21	3	192.168.1.3	N/A	255.	Device Model: PC16
<input checked="" type="checkbox"/>	24	4	192.168.1.4			
<input checked="" type="checkbox"/>	4	5	192.168.1.5			
<input checked="" type="checkbox"/>	9	7	192.168.1.7			
<input checked="" type="checkbox"/>	13	8	192.168.1.8			
<input checked="" type="checkbox"/>	15	9	192.168.1.9			
<input checked="" type="checkbox"/>	11	10	192.168.1.10			

Prompt
All user configurations will be set to default, do you want to reset node?
Yes No

Once the device type set as Encoder, then it can support the OSD function:

Search Add Device Upgrade Reboot Factory Reset Device Reset

Image Quality Setting OSD Setting EDID Setting Restore EDID Peripheral Setting

Device Info User-defined

All	No.	Device ID	IP Addr	Device Name	Sub	Device Basic Information
<input type="checkbox"/>	21	3				
<input type="checkbox"/>	24	4	192.168.1.11			
<input type="checkbox"/>	4	5				
<input type="checkbox"/>	9	7				
<input type="checkbox"/>	13	8				
<input type="checkbox"/>	15	9				
<input type="checkbox"/>	11	10				
<input checked="" type="checkbox"/>	23	11				
<input type="checkbox"/>	22	12				
<input type="checkbox"/>	10	14				
<input type="checkbox"/>	17	15				
<input type="checkbox"/>	3	16				
<input type="checkbox"/>	20	20				
<input type="checkbox"/>	6	23				
<input type="checkbox"/>	19	26				
<input type="checkbox"/>	26	34				
<input type="checkbox"/>	7	35				
<input type="checkbox"/>	1	83				

Osd Setting

Osd Content INPUT-11

Position X 20 ≤200 Position Y 20 ≤200

Font Type Imitation Song

Font Width 100 ≤200 Font Height 100 ≤200

Color [Red]

Background Color [Yellow]

Background Transparent Status Background Opacity

On Off Background Transparent Show Hide Exit

EDID setting and restore Add by EDID file with bin format at HEX code or restore the EDID.

Search Add Device Upgrade Reboot Factory Reset Device Reset

Image Quality Setting OSD Setting **1 EDID Setting** **2 Restore EDID** Peripheral Setting

Device Info

All	No.	Device ID	Device Name	Sub	Device Basic Information
<input type="checkbox"/>	21	3			
<input type="checkbox"/>	24	4			
<input type="checkbox"/>	4	5			
<input type="checkbox"/>	9	7			
<input type="checkbox"/>	13	8			
<input type="checkbox"/>	15	9			
<input type="checkbox"/>	11	10			
<input checked="" type="checkbox"/>	23	11			
<input type="checkbox"/>	22	12			
<input type="checkbox"/>	10	14			
<input type="checkbox"/>	17	15			
<input type="checkbox"/>	3	16			
<input type="checkbox"/>	20	20			
<input type="checkbox"/>	6	23			
<input type="checkbox"/>	19	26			
<input type="checkbox"/>	26	34			
<input type="checkbox"/>	7	35			
<input type="checkbox"/>	1	83			

EDID Setting

```
00 FF FF FF FF FF 00 26 85 02 68 01 01 01 21 1D 01 03 80 55 30 78 2A 63 BDA1 54 52
9E 26 0C 47 4A 21 08 00 81 80 D1 C0 81 C0 01 01 01 01 01 01 01 01 01 01 02 3A 80 18 71 38
2D 40 58 2C 45 00 C4 8E 21 00 00 1A 04 74 00 30 F2 70 5A 80 B0 58 8A 00 A2 0B 32 00 00 1E
00 00 00 FD 00 18 4C 1E 53 1E 00 0A 20 20 20 20 20 20 00 00 00 FC 00 58 76 69 65 77 0A 20
20 20 20 20 20 01 CF 02 03 25 F1 43 84 10 03 23 09 07 07 83 01 00 00 E2 00 0F E3 05 03 01
6D 03 0C 00 10 00 38 3C 20 00 60 03 02 01 01 1D 00 72 51 D0 1E 20 6E 28 55 00 A0 5A 00 00
00 1E 8C 0A D0 8A 20 E0 2D 10 10 3E 96 00 A0 5A 00 00 00 18 F3 39 80 18 71 38 2D 40 58 2C
45 00 E0 0E 11 00 00 1E 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 15
```

EDID

Open File Clear Content Upload EDID

Peripheral setting is for the RS232/RS485/Relay/I/O those control ports

Search Add Device Upgrade Reboot Factory Reset Device Reset

Image Quality Setting OSD Setting EDID Setting Restore EDID Peripheral Setting

All	No.	Device ID	IP Addr
<input type="checkbox"/>	1	83	192.168.1.21
<input type="checkbox"/>	2	84	192.168.1.22
<input type="checkbox"/>	3	23	192.168.1.23
<input type="checkbox"/>	4	5	192.168.1.16
<input type="checkbox"/>	5	16	192.168.1.16
<input type="checkbox"/>	6	35	192.168.1.14
<input type="checkbox"/>	7	7	192.168.1.87
<input type="checkbox"/>	8	98	192.168.1.8
<input type="checkbox"/>	9	91	192.168.1.91
<input type="checkbox"/>	10	36	192.168.1.14
<input type="checkbox"/>	11	240	192.168.1.15
<input type="checkbox"/>	12	9	192.168.1.9
<input type="checkbox"/>	13	85	192.168.1.11
<input type="checkbox"/>	14	15	192.168.1.15
<input type="checkbox"/>	15	86	192.168.1.11
<input type="checkbox"/>	16	26	192.168.1.26
<input checked="" type="checkbox"/>	17	12	192.168.1.12
<input type="checkbox"/>	18	3	192.168.1.3
<input type="checkbox"/>	19	11	192.168.1.11
<input type="checkbox"/>	20	4	192.168.1.4
<input type="checkbox"/>	21	241	192.168.1.241
<input type="checkbox"/>	22	34	192.168.1.34
<input type="checkbox"/>	23	88	192.168.1.88

Central Control Settings

Serial Port Parameter

Serial Port: RS232

Bitrate: 115200

Data Bit: 8

Stop Bit: 1

Parity Check Bit: None

Receive RS232 Options

RS232 RS485

Forwarding Address Setting

RS232 Target IP: 192.168.11.88 Port: 16232

RS485 Target IP: 192.168.11.88 Port: 16458

IR Target IP: 192.168.11.88 Port: 16457

Local Receiving Port

RS232 UDP Receiving Port: 16232

RS485 UDP Receiving Port: 16458

IR UDP Receiving Port: 16457

TCP Port OF IR Learning: 20001

IO/Relay UDP Port: 6004

Apply Refresh Exit

IO Setting

IO01 Setting

Output High

Input Low

IO02 Setting

Output High

Input Low

Replay Setting

Replay

Disconnect Close

Source: after setting the device IP/ID/working type as encoders, then add them as sources:

Select from the list, then choose the source group, and click add button to add.

System Configuration

Select Local NIC 192.168.1.134

1 Search 3 Add Device

All	No.	ID	IP Addr	Device Name	Input Resolution	Encoding Resolution
<input type="checkbox"/>	2	21	192.168.1.21	N/A	1920x1080	1920x1080
<input type="checkbox"/>	2	22	192.168.1.22	N/A	1920x1080	1920x1080
<input type="checkbox"/>	3	23	192.168.1.23	N/A	1920x1080	1920x1080
<input type="checkbox"/>	4	16	192.168.1.16	N/A	1920x1080	1920x1080
<input type="checkbox"/>	5	91	192.168.1.91	N/A	1920x1080	1920x1080
<input type="checkbox"/>	6	14	192.168.1.14	N/A	1920x1080	1920x1080
<input type="checkbox"/>	7	87	192.168.1.87	N/A	1920x1080	1920x1080
<input type="checkbox"/>	8	8	192.168.1.8	N/A	1920x1080	1920x1080
<input type="checkbox"/>	9	9	192.168.1.9	N/A	1920x1080	1920x1080
<input type="checkbox"/>	10	15	192.168.1.15	N/A	1920x1080	1920x1080
<input type="checkbox"/>	11	3	192.168.1.3	N/A	1920x1080	1920x1080
<input type="checkbox"/>	12	12	192.168.1.12	PC12	1920x1080	1920x1080
<input type="checkbox"/>	13	11	192.168.1.11	节点11	1920x1080	1920x1080
<input type="checkbox"/>	14	4	192.168.1.4	N/A	1920x1080	1920x1080
<input type="checkbox"/>	15	241	192.168.1.241	N/A	1920x1080	1920x1080
<input type="checkbox"/>	16	88	192.168.1.88	N/A	1920x1080	1920x1080

4 Create Group 5 Delete Move Up Move Down Rename

6 Property

Source Group

- 192.168.1.3 192.168.1.3
- 192.168.1.5 192.168.1.5
- Encoder 192.168.1.170
- 192.168.1.2 192.168.1.2
- 192.168.1.4 192.168.1.4

Source Property

Name 192.168.1.3

IP 192.168.1.3

Width 3840

Height 2160

SubStream Width 1280

SubStream Height 720

Main Stream URL 192.168.1.3:9705/channel=0/stream=0

SubStream URL 192.168.1.3:9705/channel=0/stream=1

Add

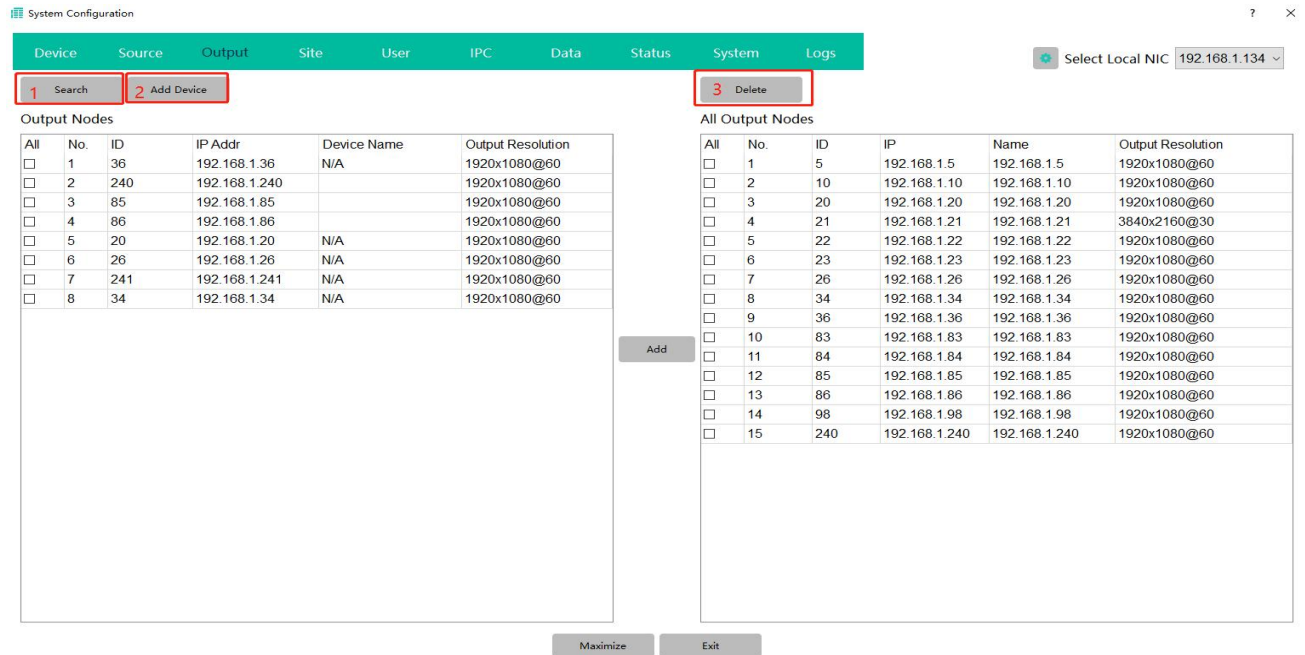
Maximize Exit

① Search to find all the same LAN devices

② Device list with details

- ③ Add device manually when not finding the devices
- ④ Create group is for having different source groups
- ⑤ Sources management: select the sources to delete, adjust order etc
- ⑥ Property is for check out the sources mainstream/substream, url address

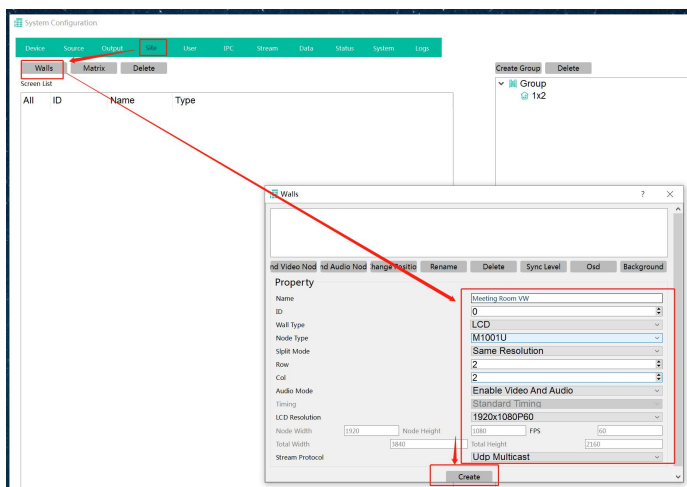
Output: after setting the device IP/ID/working type as decoders, then add them as outputs
 Search to find all decoder, then click add to the right side



- ① Search to find all the decoders
- ② Add the decoder manually
- ③ Delete the added decoders

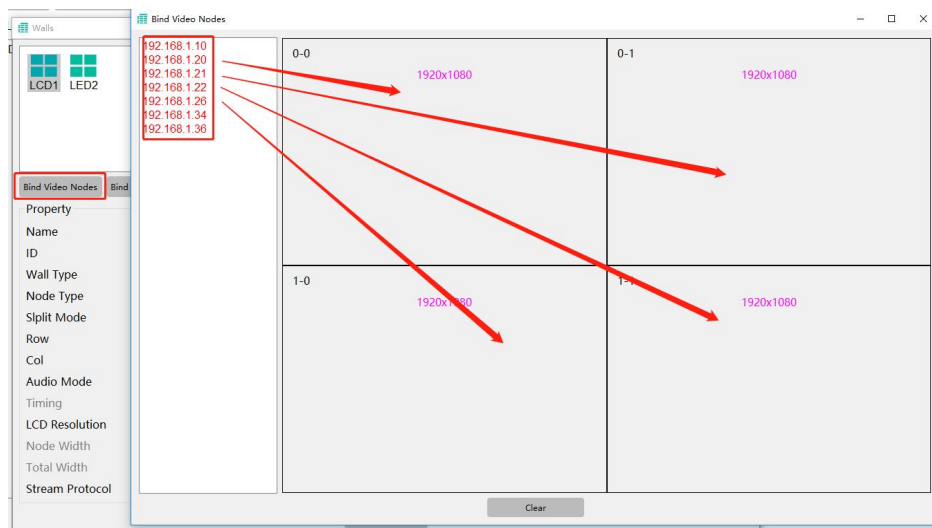
Site: for creating the video wall, matrix etc

To create a LCD video wall: site---walls--name---ID---Wall type(LCD/LED)---VW row/col----Create

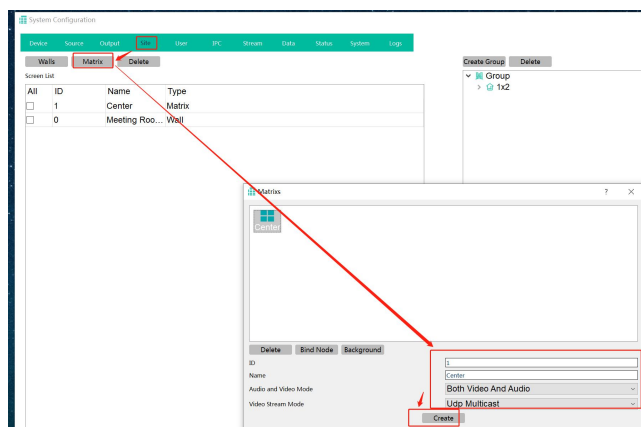


Next step will need to bind the Decoders with this new created VW: Drag the decoder IP address

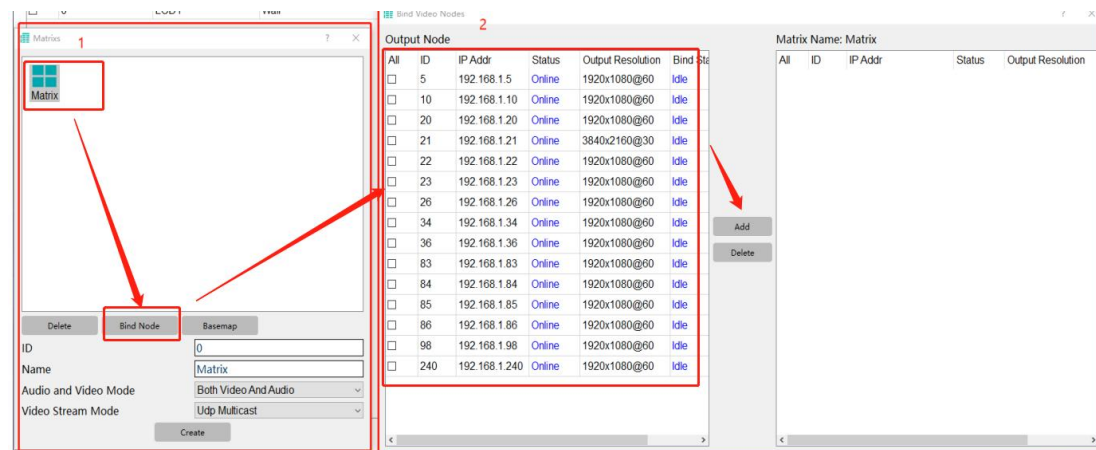
one by one to the video wall box on the right side:



To create Matrix: site---matrix--name---ID---Create



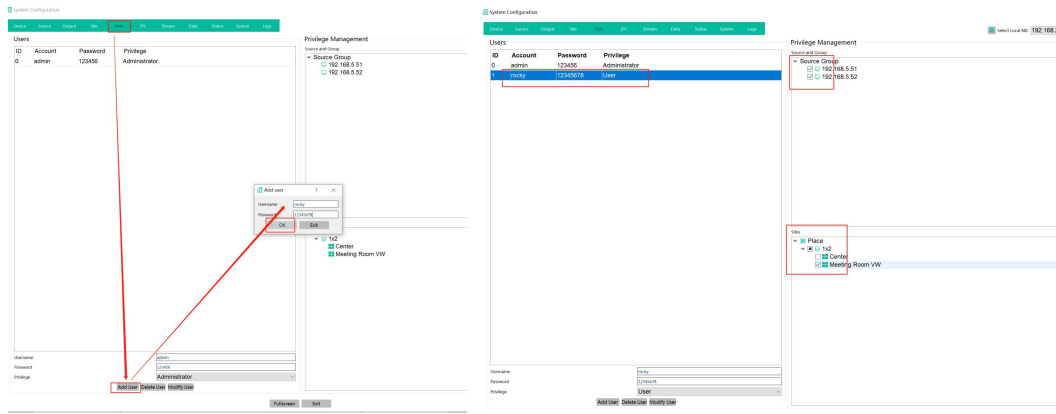
Then select the Matrix to bind the decoders



User: for adding different users with different level rights

Add user: User---Add user---name/password---OK

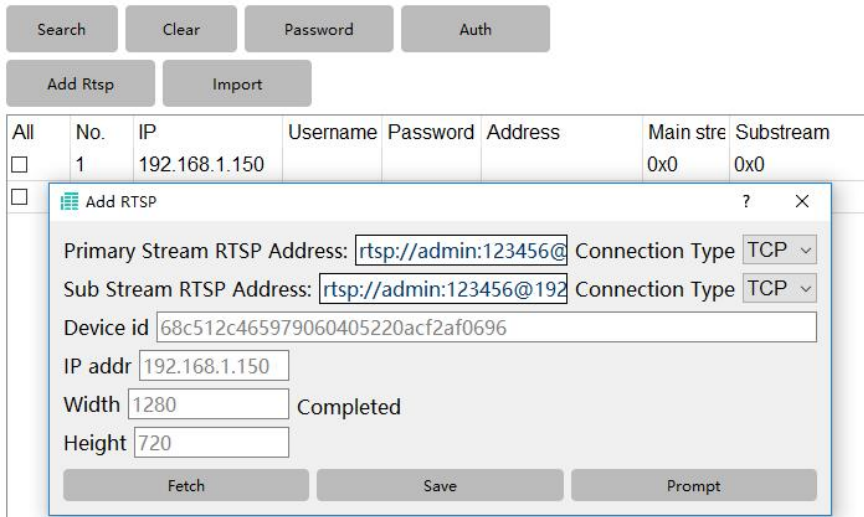
Give the user level right: double click the new added user, choose the source and site for this user.



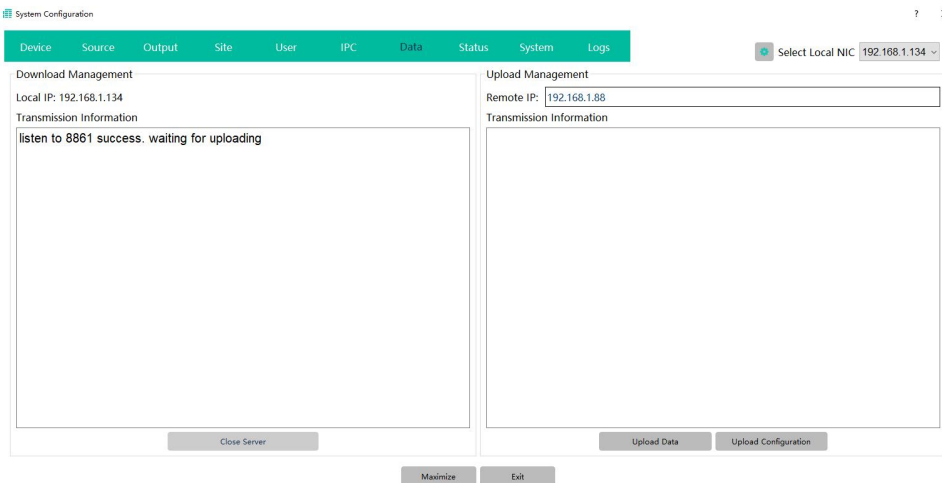
IPC: for adding the IP cameras

Click search to find all the same LAN IP cameras.

Use add RTSP mainstream to add



Data: for uploading the data/configuration to different control devices



- ① Open/closer Server is for the other control devices to send data to this control device, need to keep it as Open status for data downloading.
- ② Upload Data/configuration is for upload the current control PC to the other control devices,

also need the other device is with Open server status.

Status: for the devices' working status checking/dispalpy

System Configuration ? X

Device	Source	Output	Site	User	IPC	Data	Status	System	Logs
ID	IP	Device Name	Type	Status	Transmit	Receive	CPU	Memory	
21	192.168.1.21	192.168.1.21	Input	Online	53.00 Kbps	2.54 Mbps	11.11%	total:243.99 MB, used:65.32 MB	
22	192.168.1.22	192.168.1.22	Input	Online	53.00 Kbps	2.53 Mbps	7.40%	total:243.99 MB, used:65.87 MB	
23	192.168.1.23	192.168.1.23	Input	Online	53.00 Kbps	2.46 Mbps	10.71%	total:243.99 MB, used:65.04 MB	
16	192.168.1.16	192.168.1.16	Input	Online	0.00 Kbps	16.00 Kbps	8.23%	total:243.99 MB, used:61.54 MB	
15	192.168.1.15	192.168.1.15	Input	Online	0.00 Kbps	15.00 Kbps	3.90%	total:243.99 MB, used:62.01 MB	
3	192.168.1.3	192.168.1.3	Input	Online	0.00 Kbps	15.00 Kbps	3.94%	total:243.99 MB, used:62.13 MB	
11	192.168.1.11	节点11	Input	Online	0.00 Kbps	15.00 Kbps	6.56%	total:243.99 MB, used:51.09 MB	
12	192.168.1.12	PC12	Input	Online	252.00 Kbps	23.00 Kbps	8.12%	total:243.99 MB, used:62.25 MB	
10	192.168.1.10	192.168.1.10	Output	Online	0.00 Kbps	15.00 Kbps	1.49%	total:243.99 MB, used:47.12 MB	
20	192.168.1.20	192.168.1.20	Output	Online	100.00 Kbps	2.48 Mbps	7.40%	total:243.99 MB, used:50.70 MB	
21	192.168.1.21	192.168.1.21	Output	Offline	0	0	0	0	
22	192.168.1.22	192.168.1.22	Output	Offline	0	0	0	0	
26	192.168.1.26	192.168.1.26	Output	Online	46.00 Kbps	16.00 Kbps	1.68%	total:243.99 MB, used:47.70 MB	
34	192.168.1.34	192.168.1.34	Output	Online	0.00 Kbps	15.00 Kbps	1.45%	total:243.99 MB, used:47.39 MB	
36	192.168.1.36	192.168.1.36	Output	Online	0.00 Kbps	15.00 Kbps	1.27%	total:243.99 MB, used:47.18 MB	
83	192.168.1.83	192.168.1.83	Output	Online	0.00 Kbps	50.00 Kbps	8.00%	total:256.44 MB, used:39.11 MB	
84	192.168.1.84	192.168.1.84	Output	Online	0.00 Kbps	50.00 Kbps	6.34%	total:256.44 MB, used:38.84 MB	
86	192.168.1.86	192.168.1.86	Output	Online	46.00 Kbps	5.00 Kbps	1.03%	total:256.44 MB, used:39.03 MB	
91	192.168.1.91	192.168.1.91	Output	Online	126.00 Kbps	7.00 Kbps	22.44%	total:256.44 MB, used:55.31 MB	
98	192.168.1.98	192.168.1.98	Output	Online	41.00 Kbps	1.73 Mbps	7.37%	total:70.86 MB, used:24.56 MB	

Select Local NIC 192.168.1.134

Maximize Exit

System: for the preview mode settings, etc

System Configuration ? X

Device	Source	Output	Site	User	IPC	Stream	Data	Status	System	Logs
--------	--------	--------	------	------	-----	--------	------	--------	--------	------

System Setting

Preview Mode: Source Window Scene

Multi-vlans

Current Streaming Mode

Search Mode

Off

Primary Stream Substream

Multicast Broadcast

Restore Factory Data Save

Configure Delivery Fullscreen Exit

Logs: for the system operation logs records

System Configuration ? X

Device	Source	Output	Site	User	IPC	Data	Status	System	Logs
--------	--------	--------	------	------	-----	------	--------	--------	------

Select Local NIC 192.168.1.134

Level

Notice Warning Error

Time Period

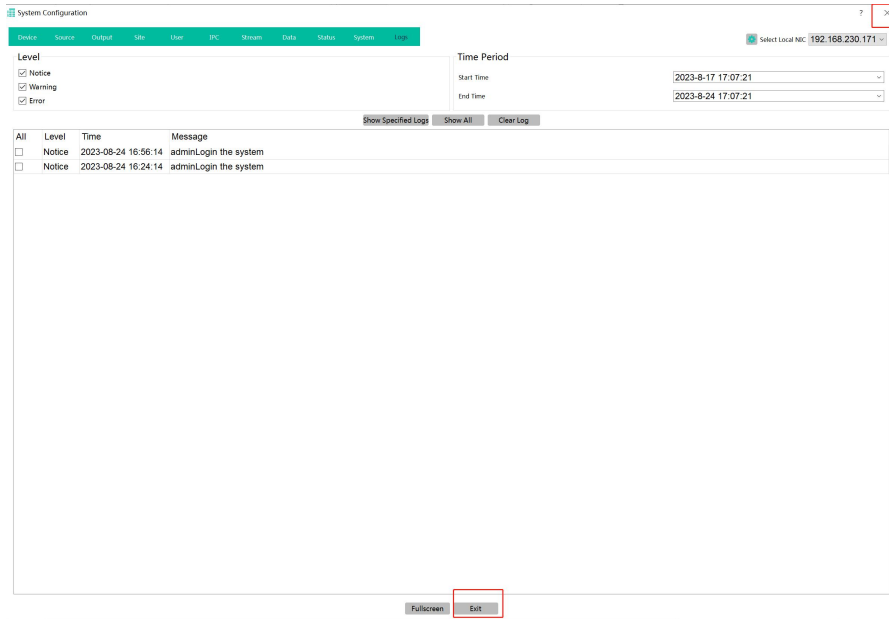
Start Time 2023-5-25 9:36:29

End Time 2023-6-1 9:36:29

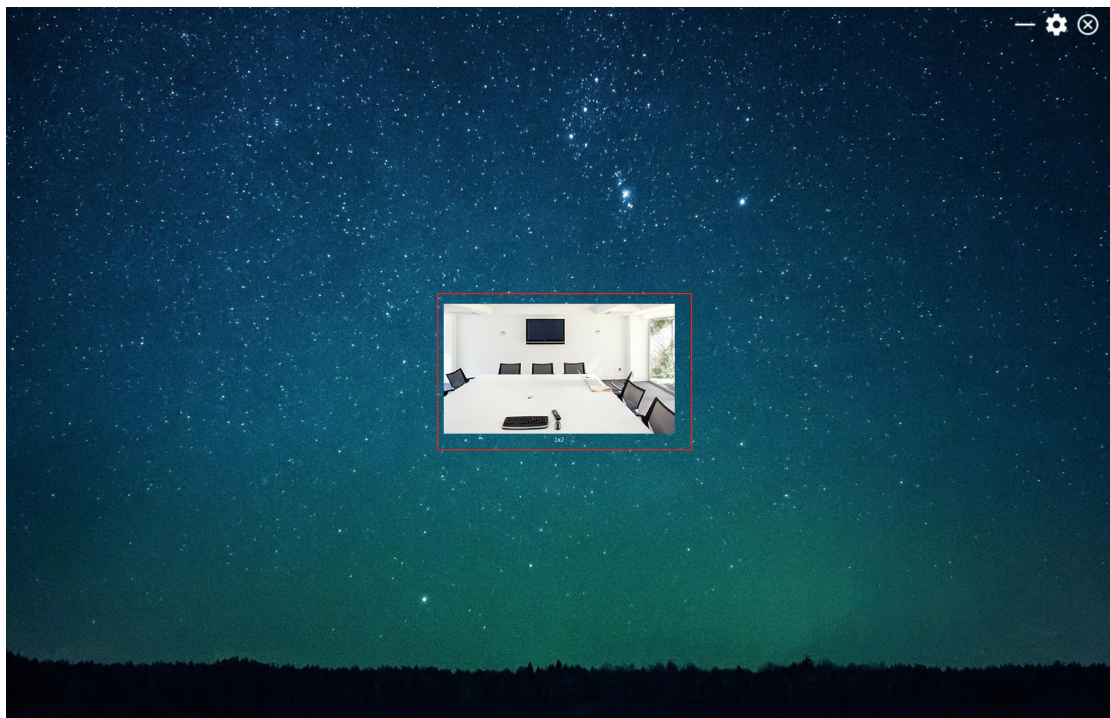
OK Show All Clear Log

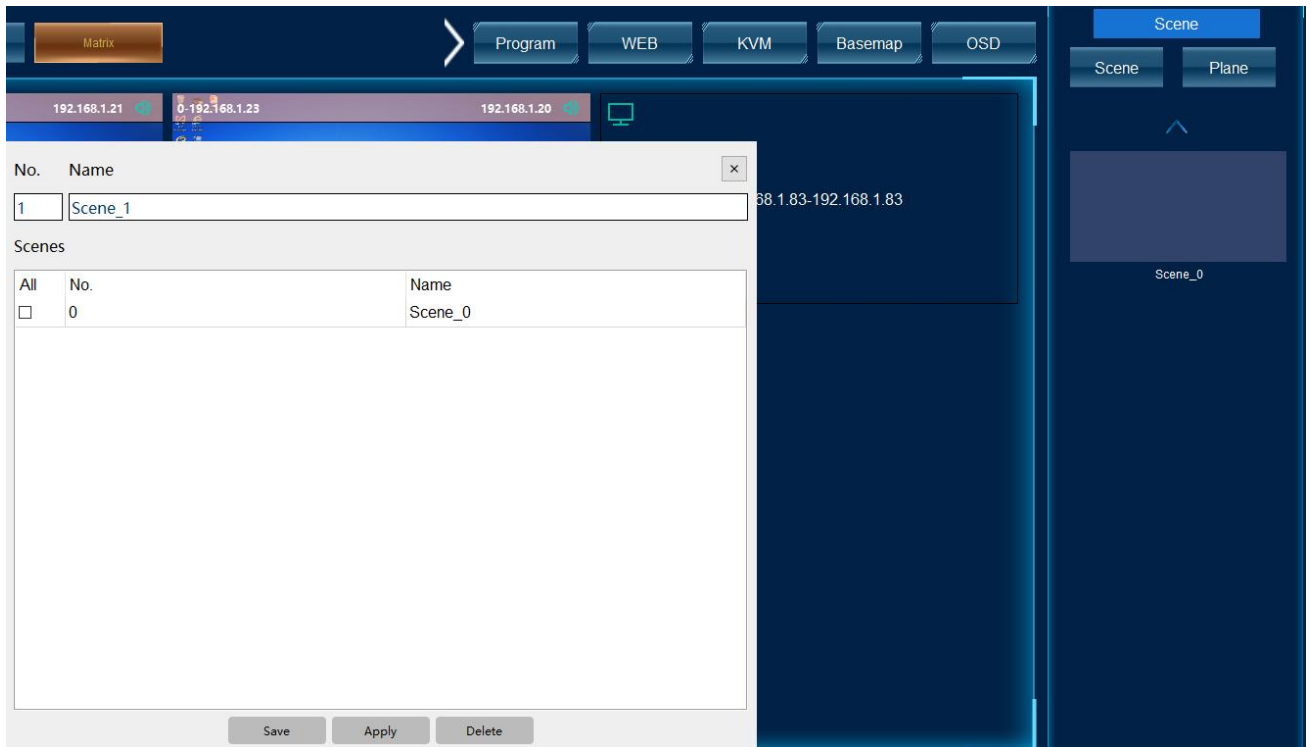
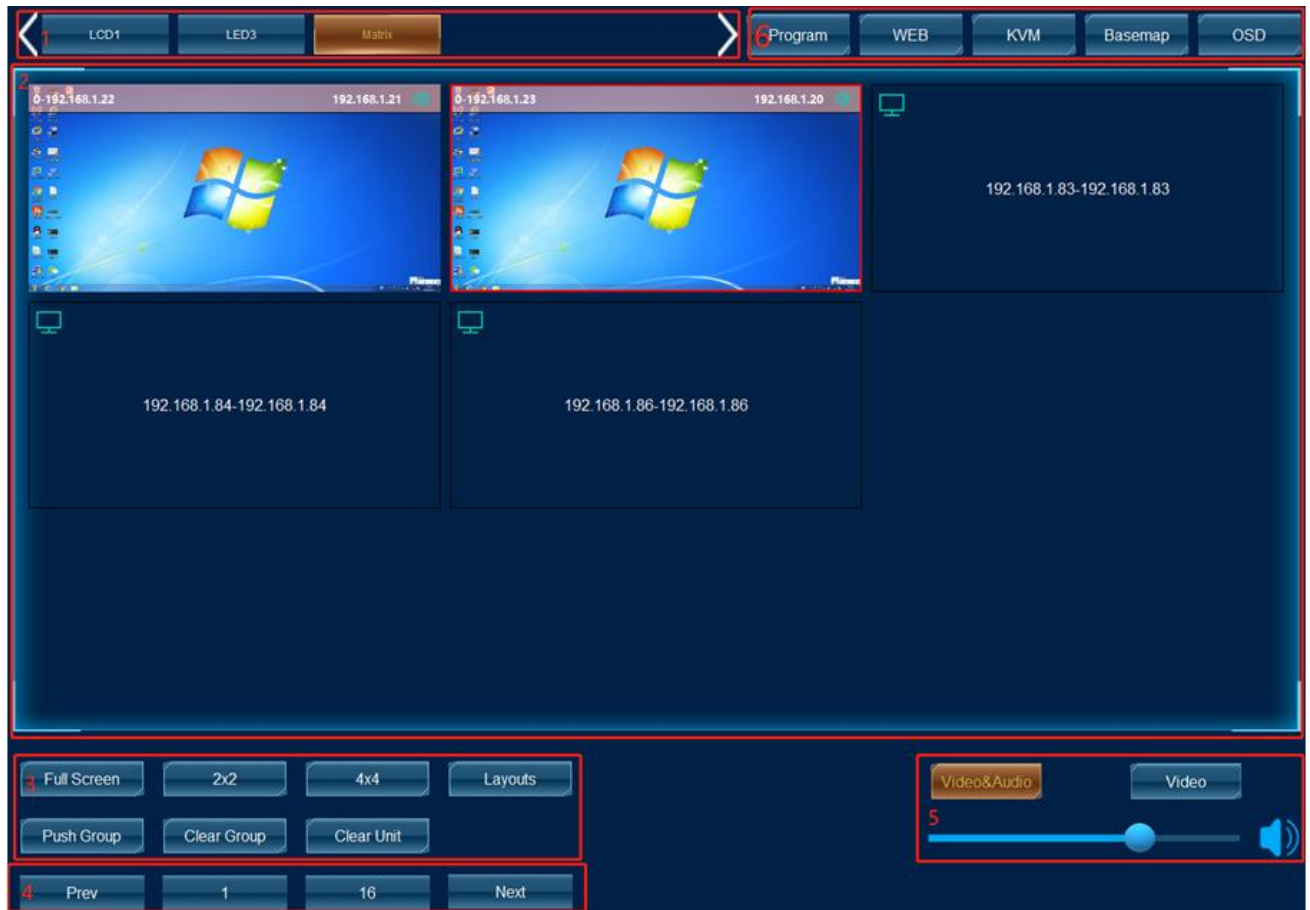
All	Level	Time	Message
<input type="checkbox"/>	Notice	2023-06-01 09:36:24	adminLogin the system
<input type="checkbox"/>	Notice	2023-05-31 18:32:34	adminLogin the system
<input type="checkbox"/>	Notice	2023-05-31 17:33:15	adminLogin the system
<input type="checkbox"/>	Notice	2023-05-31 16:42:25	adminLogin the system

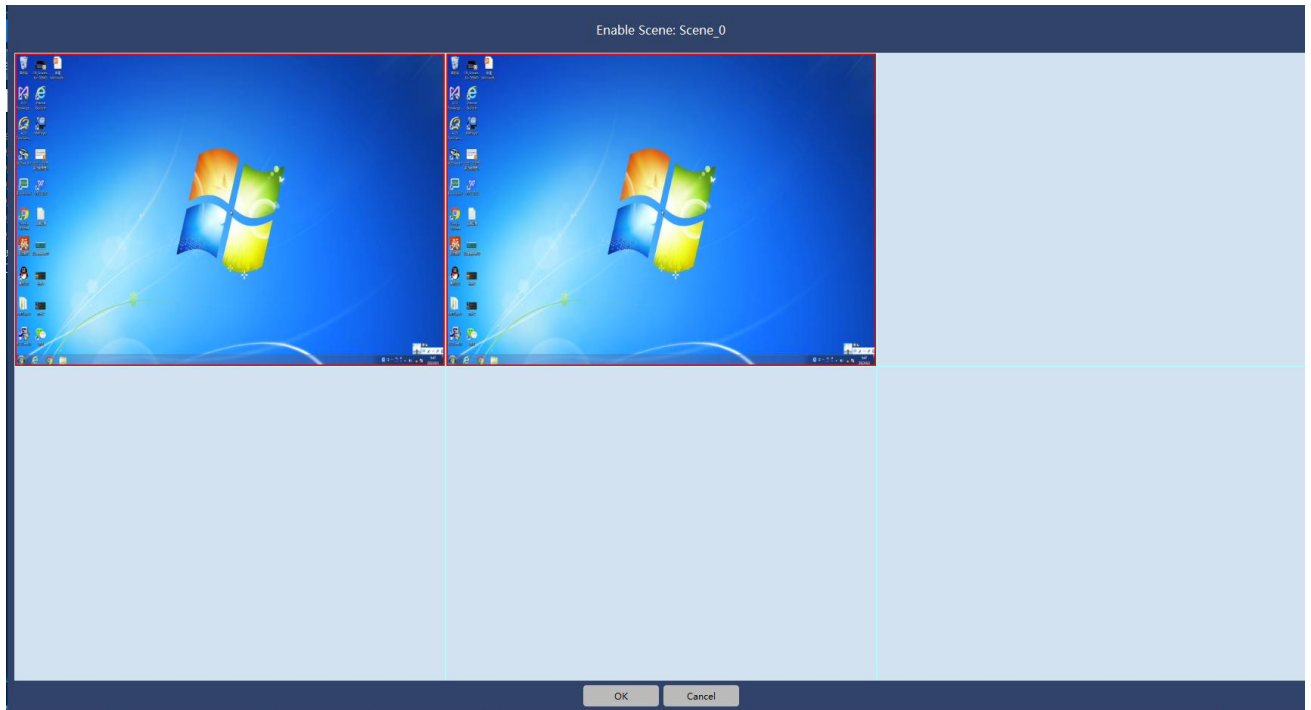
After the system configuration settings, then can exit/close this setting page:



Then can click the site to start control the Video wall or matrix:







Matrix > Program WEB KVM Basemap OSD

192.168.1.21 0-192.168.1.23 192.168.1.20

192.168.1.83-192.168.1.83

Scene Plane

All Scenes

All	No.	Name
<input checked="" type="checkbox"/>	0	Scene_0
<input checked="" type="checkbox"/>	1	Scene_1
<input checked="" type="checkbox"/>	2	Scene_2

Add Delete

Plan Scenes

All	No.	Name	Time(s)
<input type="checkbox"/>	0	Scene_0	10
<input type="checkbox"/>	1	Scene_1	10
<input type="checkbox"/>	2	Scene_2	10

No. Name

1 Plan_1

Time(s) 10

Save

Plans

No.	Name	Action
0	Plan_0	Start

Delete

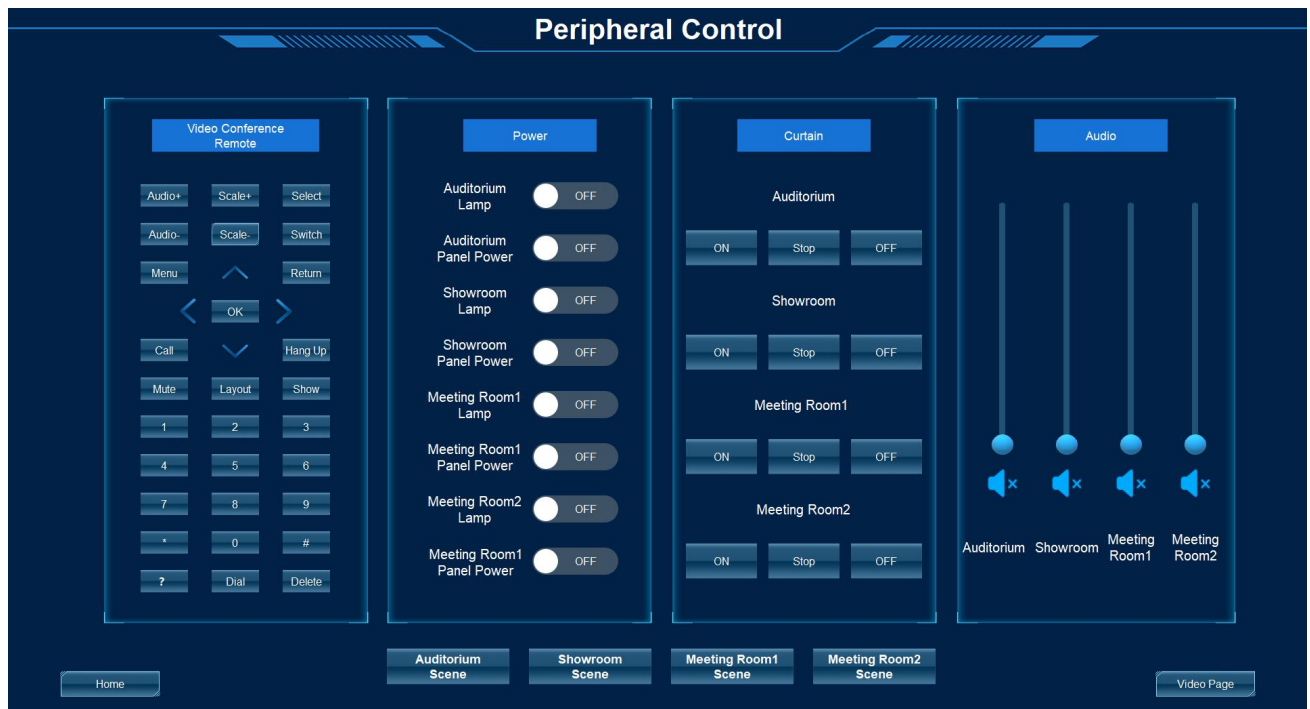
Scenes of the selected plan

No.	Name	Time(s)
0	Scene_0	10
1	Scene_1	10
2	Scene_2	10

Scene_0

Scene_1

Scene_2



8. After Sales

8.1 Warranty Information

The Company warrants that the process and materials of the product are not defective under normal use and service for 2 (2) year following the date of purchase from the Company or its authorized distributors.

If the product does not work within the guaranteed warranty period, the company will choose and pay for the repair of the defective product or component, the delivery of the equivalent product or component to the user for replacement of the defective item, or refund the payment which users have made.

The replaced product will become the property of the Company.

The replacement product could be new or repaired.

Whichever is longer, any replacement or repaired of the product or component is for a period of ninety (90) days or the remaining period of the initial warranty. The Company shall not be responsible for any software, firmware, information, or memory data contained in, stored in, or integrated with the product repaired by the customer's return, whether or not during the warranty period.

8.2 Warranty limitations and exceptions

Except above limited warranty, if the product is damaged by over usage, incorrectly use, ignore, accident, unusual physical pressure or voltage, unauthorized modification, alteration or services rendered by someone other than the Company or its authorized agent, the company will not have to bear additional obligations. Except using the product properly in the proper application or normal usage