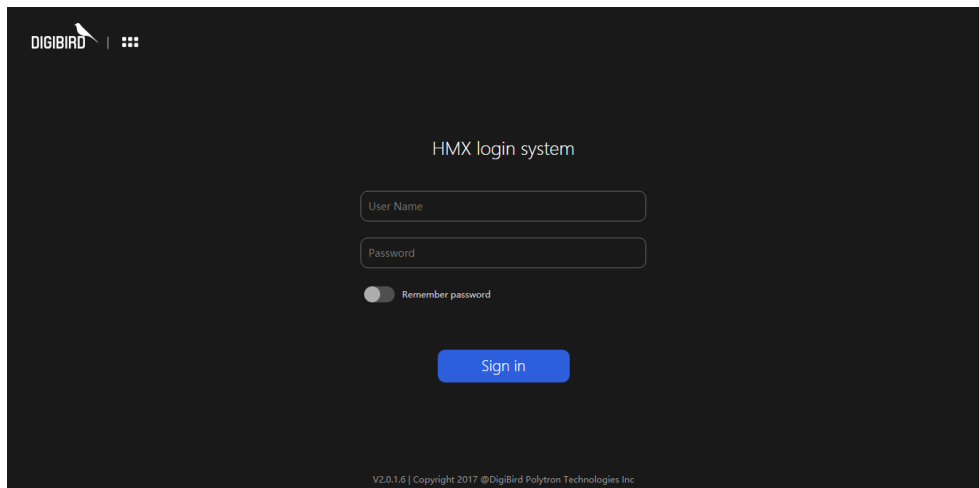# HMX2 Modular Hybrid Matrix Switchers

SOFTWARE OPERATION MANUALS
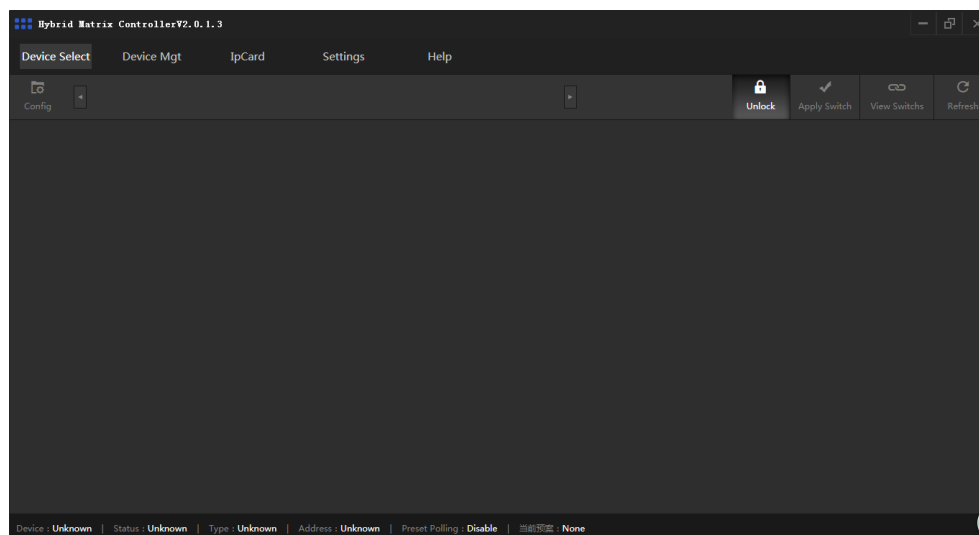
Recognition Software

Login

Double-click to open the software, the default user name is "admin" and password is "123".
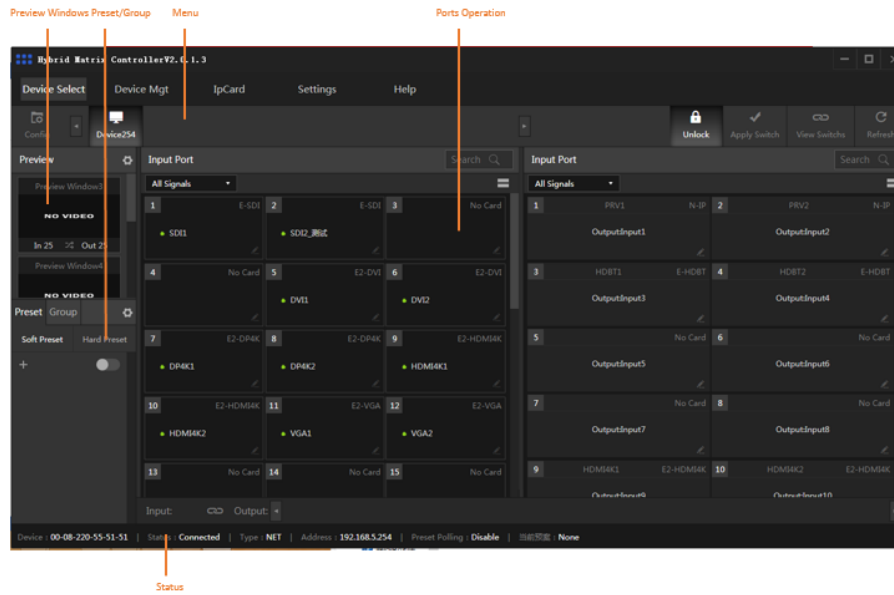

Software Interface

After login, the operation interface is shown as below before connecting with HMX.
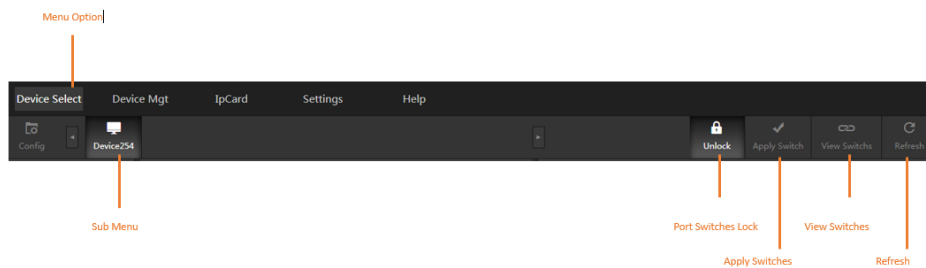

After successful connection, the operation interface is shown as below.

Menu

The menu is served to manage the HMX operation.

Port operation

In operation area, you can set the I/O port

Left side is input port area, right side is output port. There are 3x methods to filter port: signal type, keyword, port serial number

Each port is assigned as a rectangular box, right click view properties. For more details, please refer to port properties configuration. The icon ▨ in rectangular box can be clicked to set tag/note.
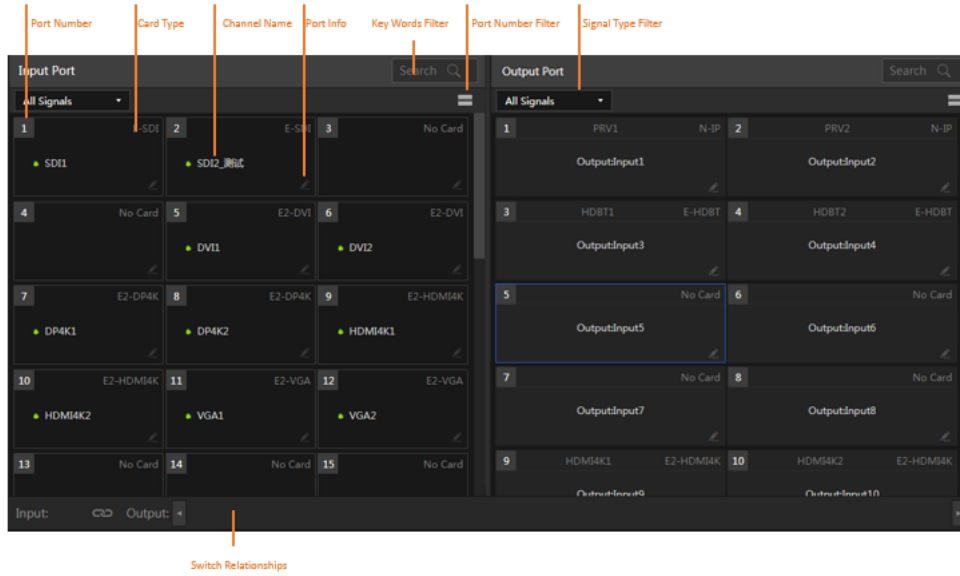
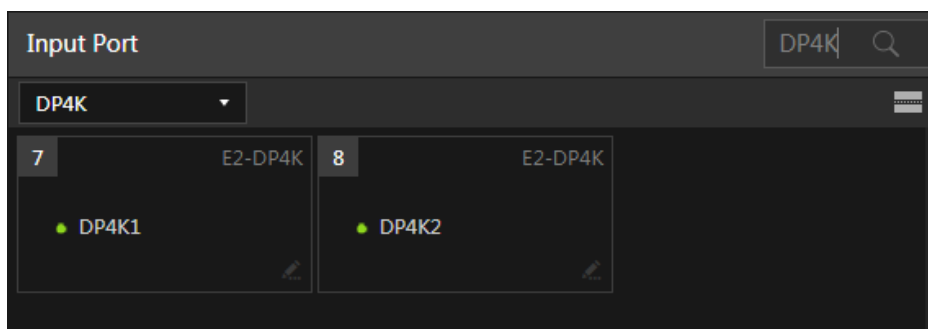- **Signal type filter**

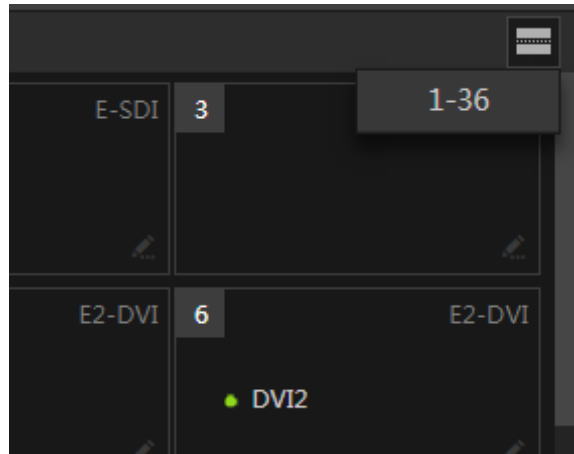 To filter according to cards type, e.g, enter SDI type, interface is shown as below
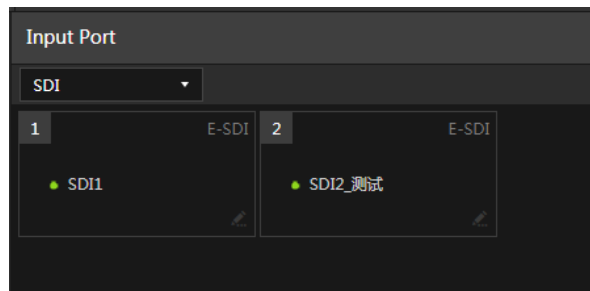
- **Keyword filter**

  Enter keyword "DP4K", interface is shown as below

- Fort serial number filter
- Interface is shown as below

- Port note
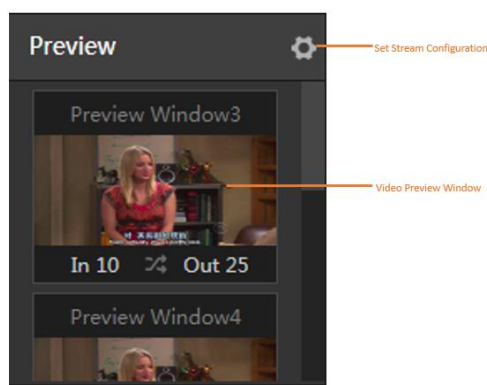
Click icon , can fill tag, move the mouse on the rectangular box, you can see the tag.
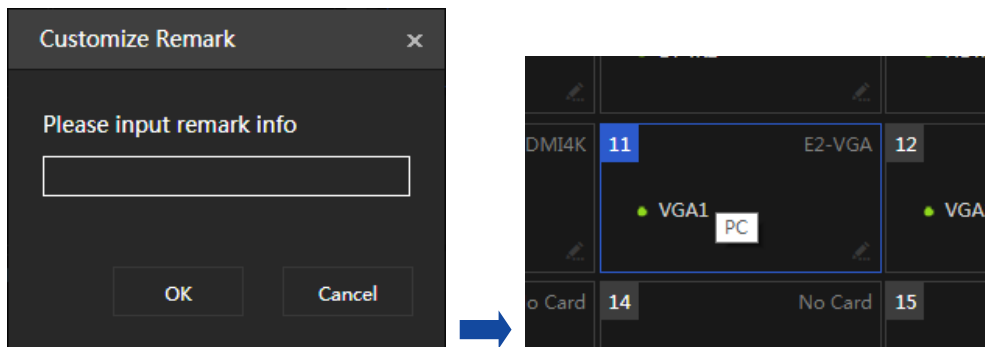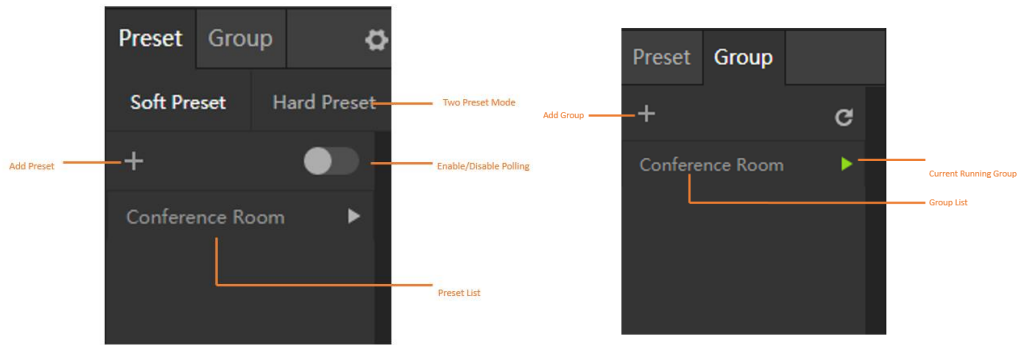

Window preview

It can preview input signal content, please refer to input source preview for more details.

Preset/Grouping setting

Preset: save the frequently-used switch model, single click to be recalled.
Grouping: group the I/o ports when have multiple ports to achieve simple management.
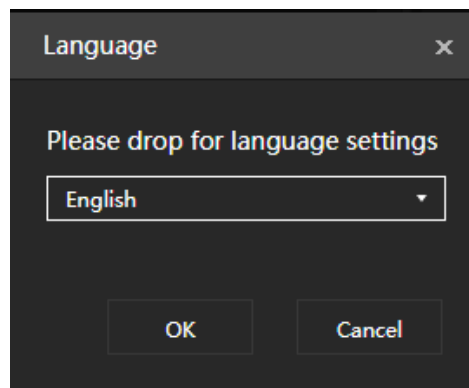
Status indicators

Status indicators stands for current hardware and software status

Software management

Language setting

HMX software support Simplified Chinese, traditional Chinese and English.

User management

Default user name is "admin", and support self-define.

- Add new user

  Click "Add" to add new user in user administration.
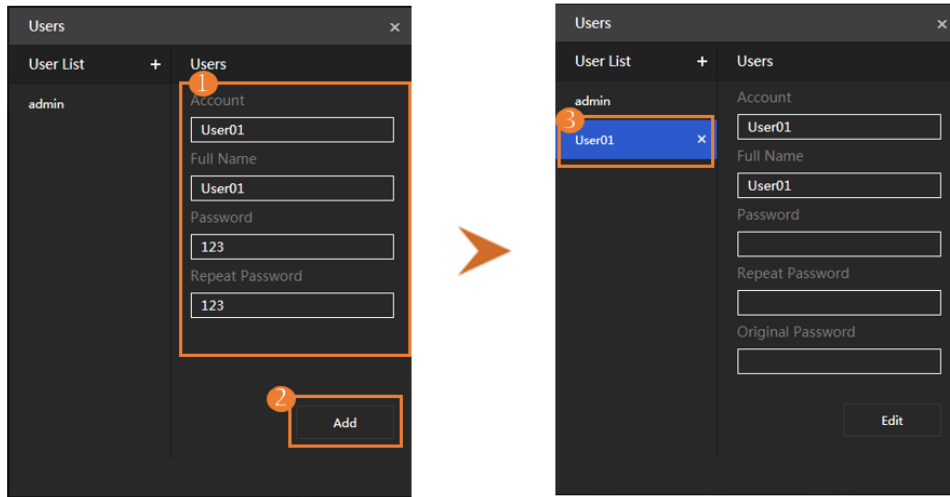
- Delete user

  Select one user name, click icon ![×] , or modify user information on the right information center.

- Switch user

  Click "Toggle user" in "settings" part, click to confirm to exchange another user..
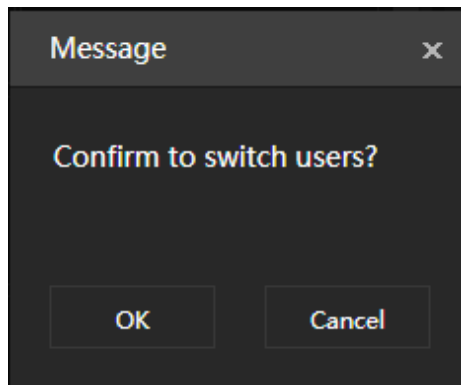
Project Setting

Support save all software configuration and export as back up.

Click "Device Mgt" >-->Export Project>-->PC
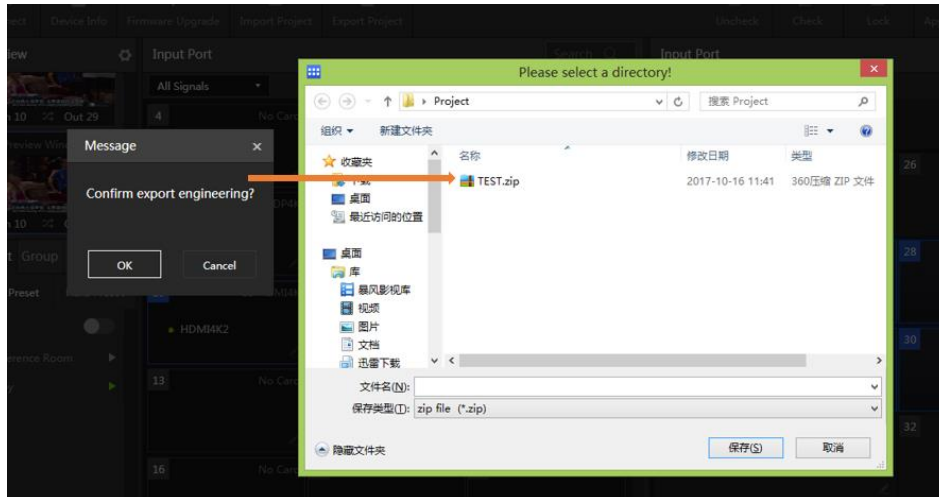
You are also able to import the file from PC.

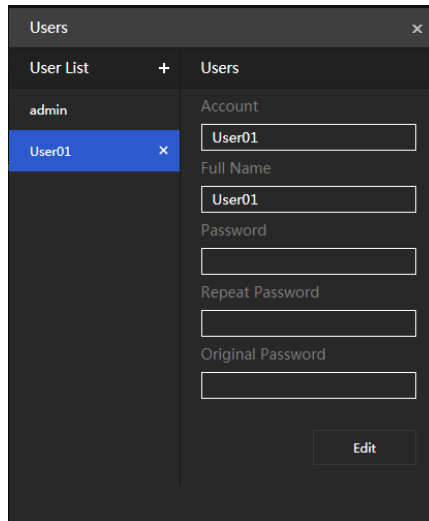
Test Application

Log

Support check operation record, easy to maintain and detect the failure.

- Record log in/out, windows operations(open/close windows), scenario operation (save, recall)

- Support multiple conditions checking

- Support show pages,

Log info

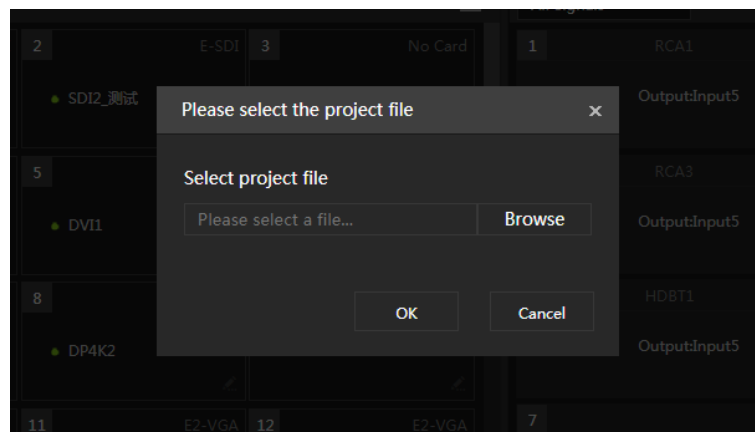| Order	User name	Time	Type	
1	admin	2017-09-18 17:40:17	Login-Logout	{"id":"150572761700064482","jsonrpc":"2.0","method":"system_login","hea
2	admin	2017-09-18 17:40:45	Add-Delete-Edit-Select	{"id":"150572764400052552","jsonrpc":"2.0","method":"hmx_device_add","
3	admin	2017-09-18 17:40:57	Add-Delete-Edit-Select	{"id":"1505727656000818","jsonrpc":"2.0","method":"hmx_device_edit","he
4	admin	2017-09-18 17:41:07	Select	{"id":"150572766700092695","jsonrpc":"2.0","method":"hmx_device_select
5	admin	2017-09-18 17:41:11	Add-Delete-Edit-Select	{"id":"150572767000075467","jsonrpc":"2.0","method":"hmx_preset_rule","
6	admin	2017-09-18 17:45:31	Add-Delete-Edit-Select	{"id":"150572793000093003","jsonrpc":"2.0","method":"hmx_preset_rule","
7	admin	2017-09-18 17:46:38	Login-Logout	{"id":"150572799700053838","jsonrpc":"2.0","method":"system_login","hea
8	admin	2017-09-18 17:46:41	Add-Delete-Edit-Select	{"id":"150572800000080802","jsonrpc":"2.0","method":"hmx_preset_rule","
9	admin	2017-09-18 17:47:49	Add-Delete-Edit-Select	{"id":"150572806900079848","jsonrpc":"2.0","method":"hmx_device_delete
10	admin	2017-09-18 17:47:52	Add-Delete-Edit-Select	{"id":"150572807100046729","jsonrpc":"2.0","method":"hmx_preset_rule","
11	admin	2017-09-18 17:48:17	Add-Delete-Edit-Select	{"id":"150572809600020726","jsonrpc":"2.0","method":"hmx_device_add","

Start time End time All Please enter keywords... search

20 |◄ ◄ 1 of 5 ► ►| 92

Device communication and management

Device communication

There are 2 ways for communication, network, and serial, select suitable communication way depend on actual environment. User can operate after the successful connection.

Network

Connect the HMX to LAN by cat cable, device IP and control PC IP should be within the same LAN.
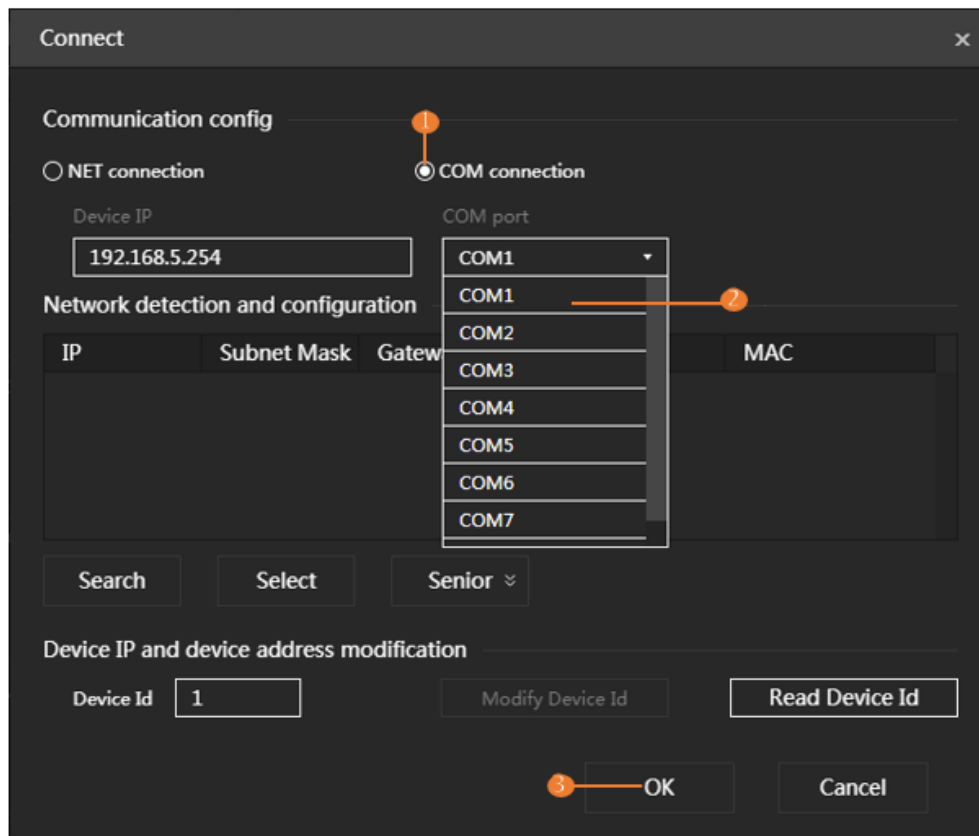Default IP address is 192.168.1.200

① Select network connection

② Click "Connect" button

③Choose the equipment in IP list

④Then click "OK" to complete connection
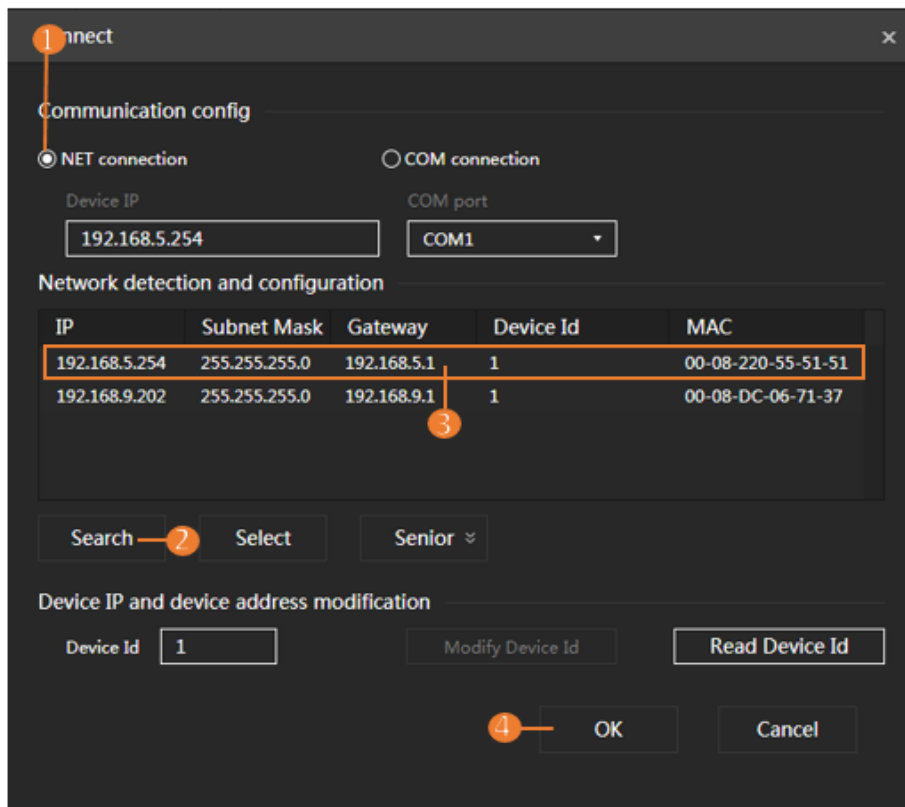
ⓘ Or enter equipment IP directly

Serial port

① Select COM connection

② Select available COM port in the list
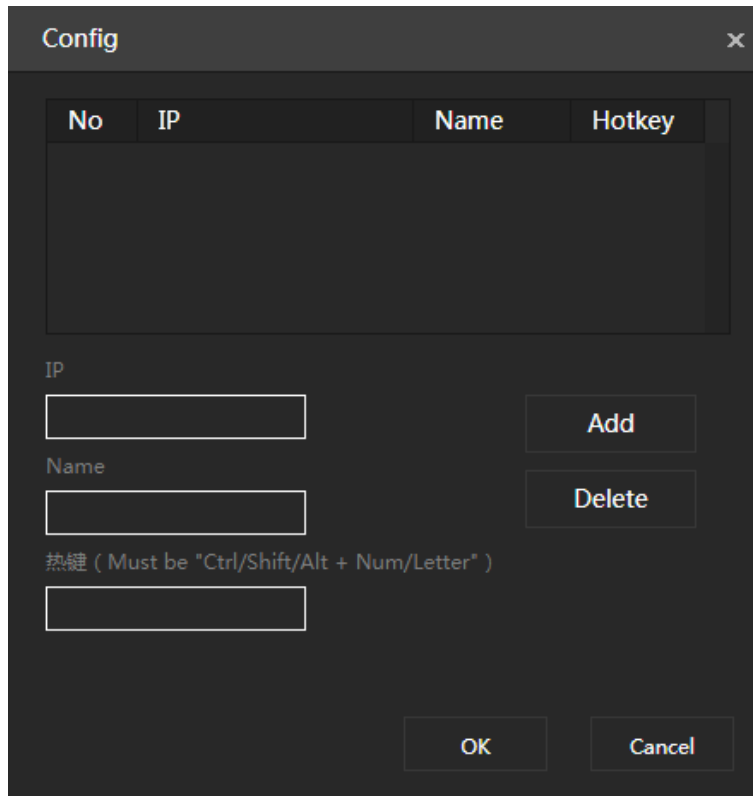
③ Click "Ok"

Device switch

Support multiple equipment simultaneously, each device configuration data is saved independently, just one key to switch the equipment
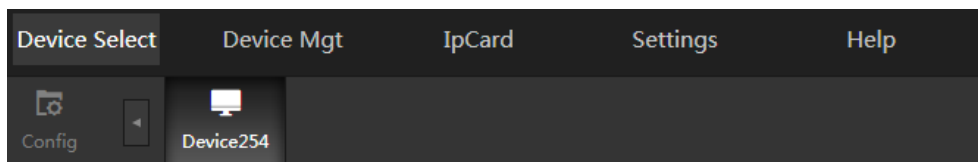
Add device

Click 〝Device Select〞>--> "config", to open management window

Enter device IP address, self-defined name and hot key, click "OK" to finish adding, then close window. Click "Add" to continue to add device.

You can see multiple device in toolbar

Device switch

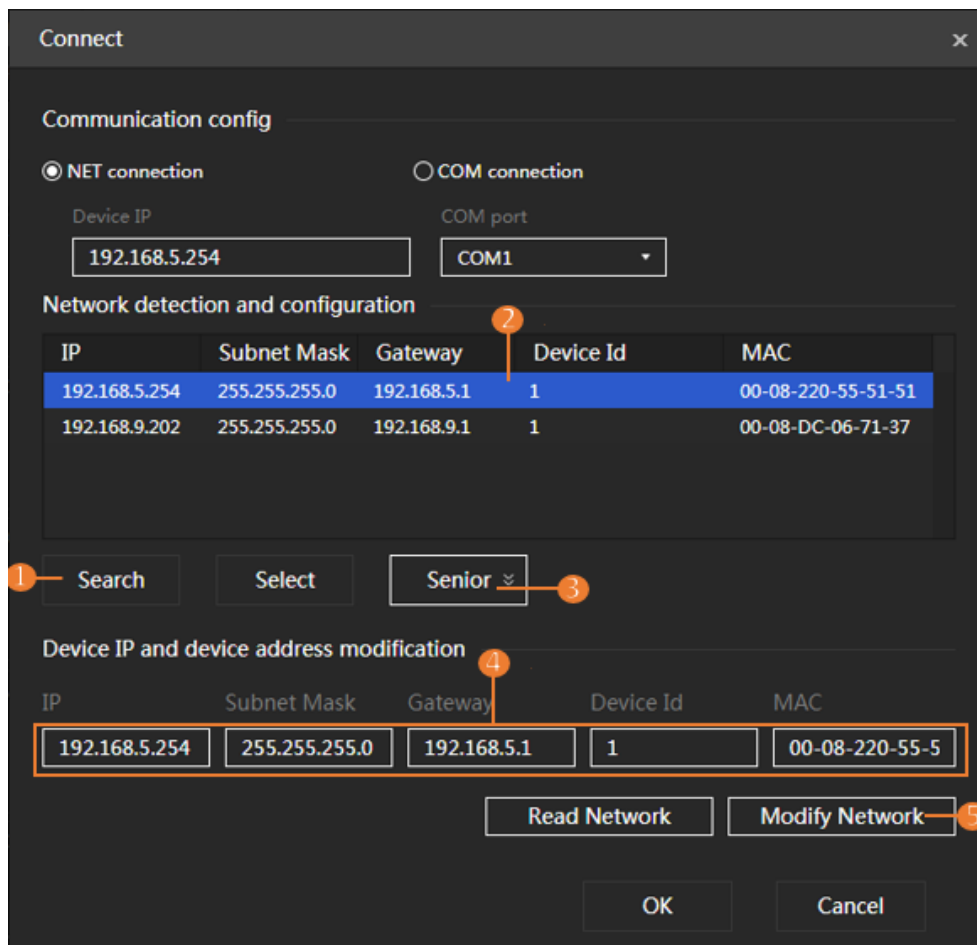Click any device in toolbar, then click "ok" to switch the device you want.

Device IP setting

Support two ways: network, serial port

Network connection way

1) Click "Search" to search device
2) Select the device IP address need to be modified.

3) Click "Senior"

4) Modify IP address, sub net mask, etc.

5) Click "Modify Device IP", if success , will pop-up window tips, click "OK" to finish.


Serial port connection way

1) Select "COM connection" in communication preset interface.

2) Choose available effective COM port

3) Click "Senior" to show advanced information

4) Click "Read Network by serial port" to read IP information

5) Modify IP information

6) Click "Modify Network" by serial port" to finish.
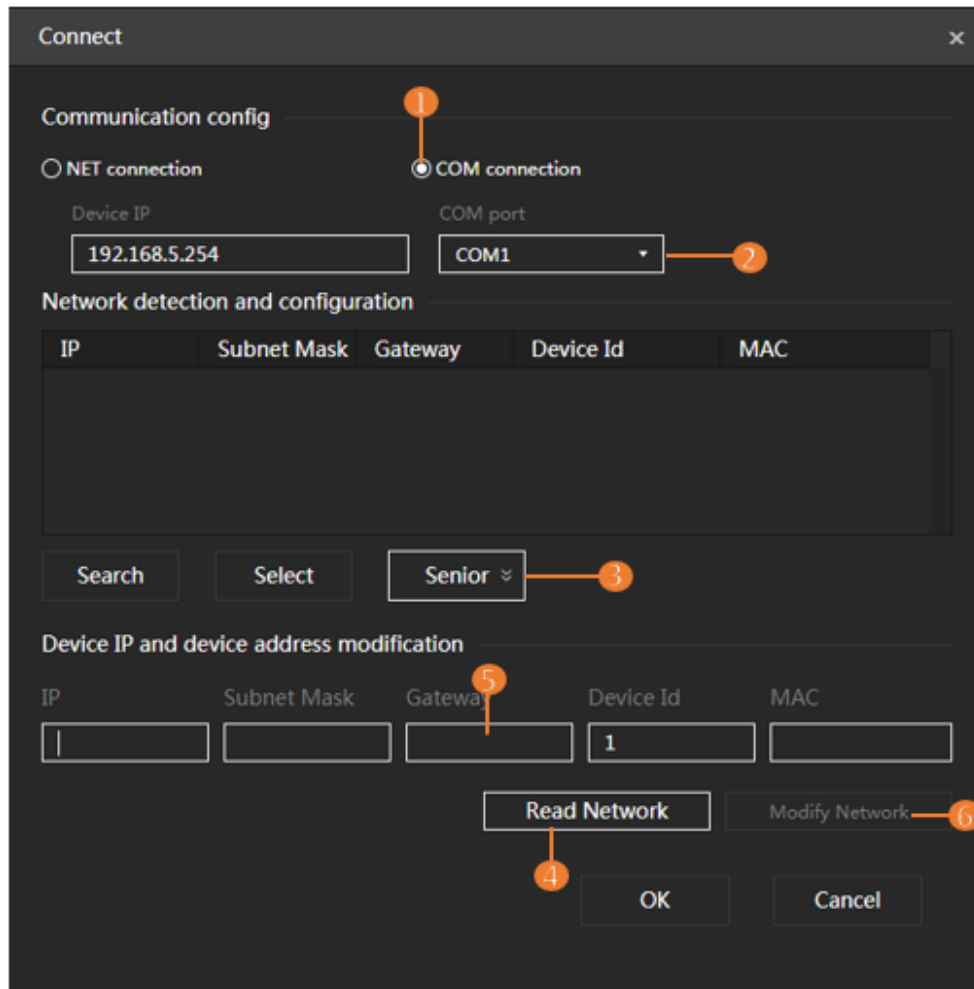
Note; If Choose COM connection way, please connect PC and control control card "RS232 IN" by serial port cable, with the PC serial port setting as: Baud Rate 96001, Stop Bit, and No Parity.

Device information check

Click "Device Info" in "Device Mgt", pop up window "Device information", shows current device system type, device address, hardware and firmware version, IP address, etc.
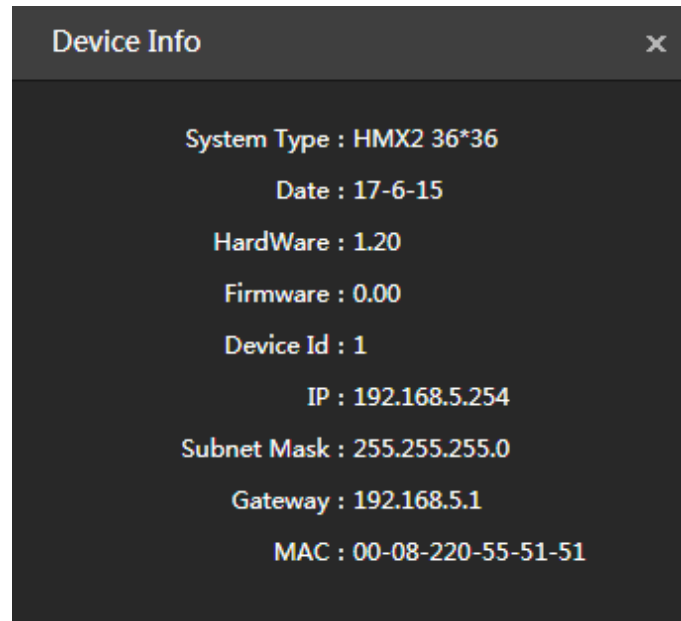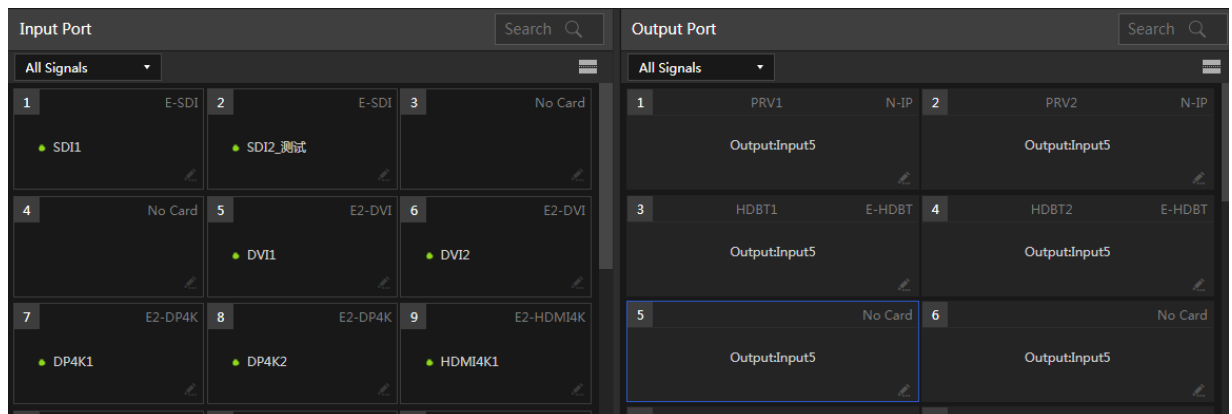
Port switch and configuration
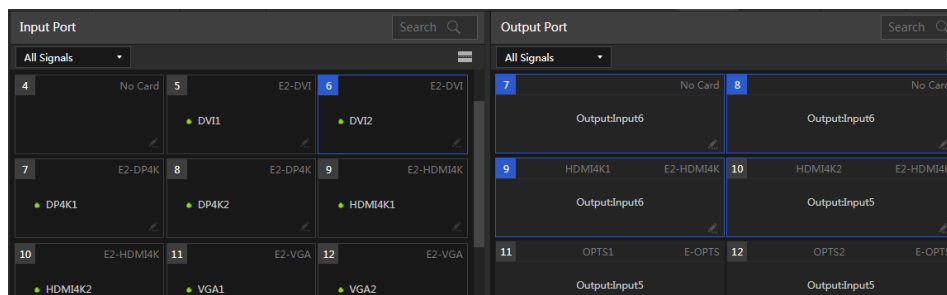
Switch

Normal Switch

Achieve I/o switching by simple click in the I/O port management area.
When select one input port, the current corresponding output will be highlighted in high blue. Meanwhile, user is able to select any output port to switch.
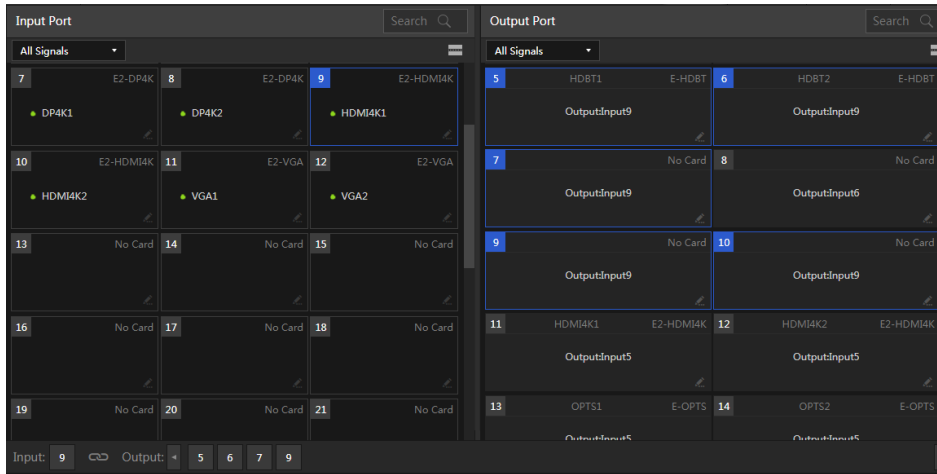
When select one output port, the system will highlight the related input port.

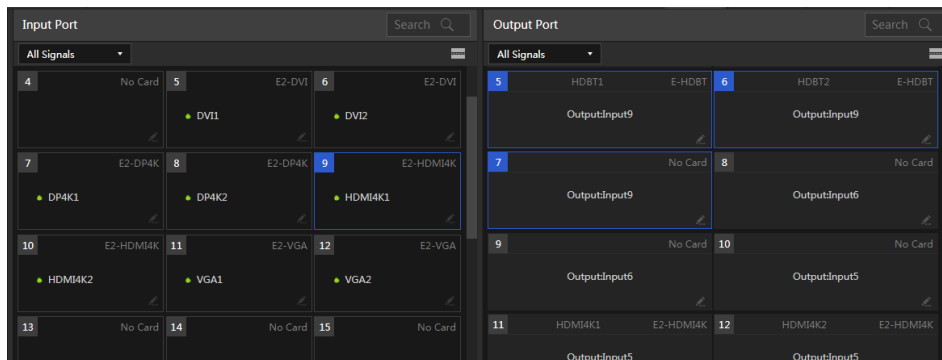- Select one input port, click "Check" switch to all output ports.

- Click "Apply switch", Click "OK" in the pop up window, then can apply all set switch relations, as below:
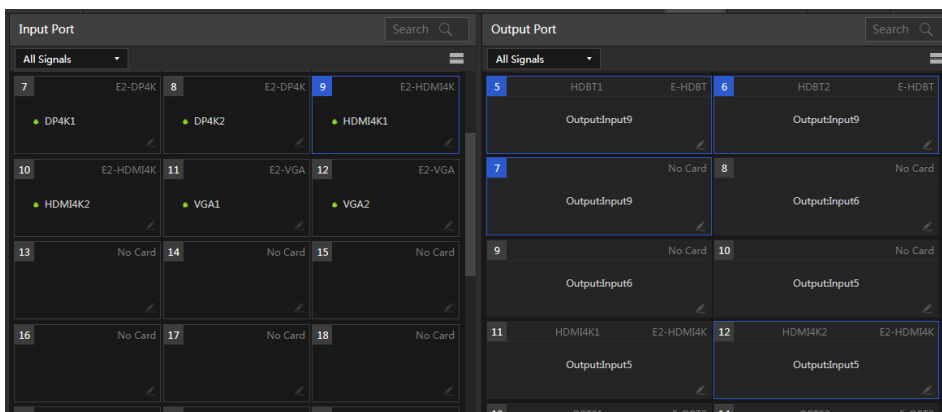
Switch under lock status

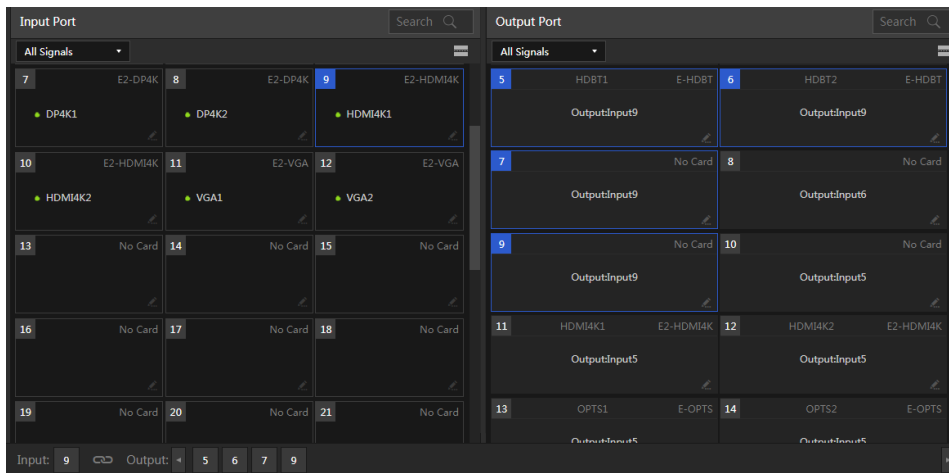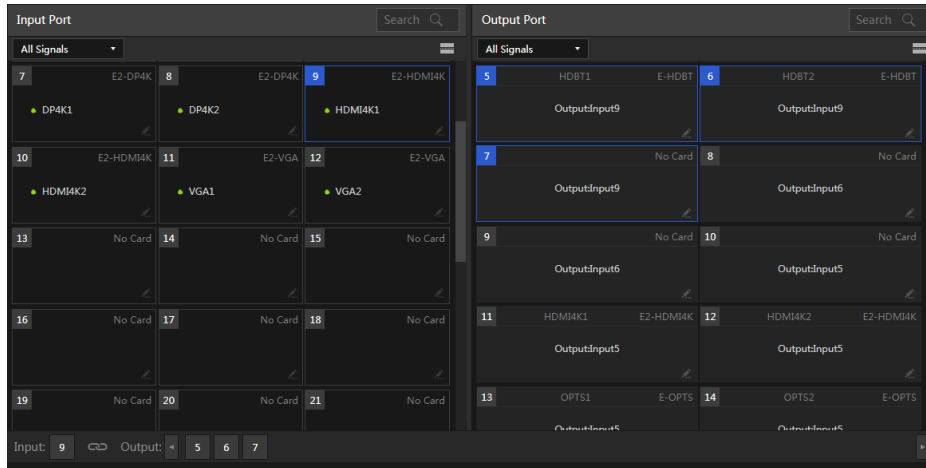Under lock status, click any ports, only to view the related switch relations.

• Click any input port, right side output area highlight current effective switch output port.
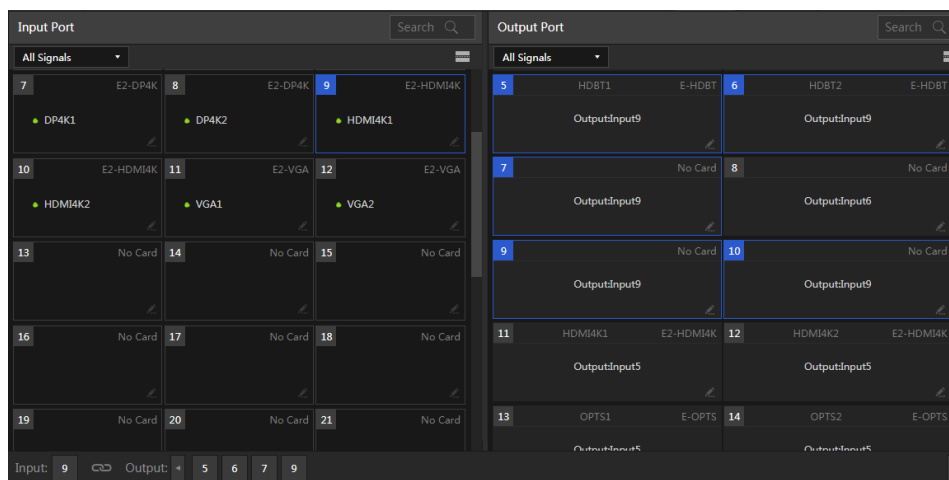

Click any output ports, the two sides will hint all related switch I/O ports, as below:

• The switch under lock status, user has to drag input port to output port to achieve.
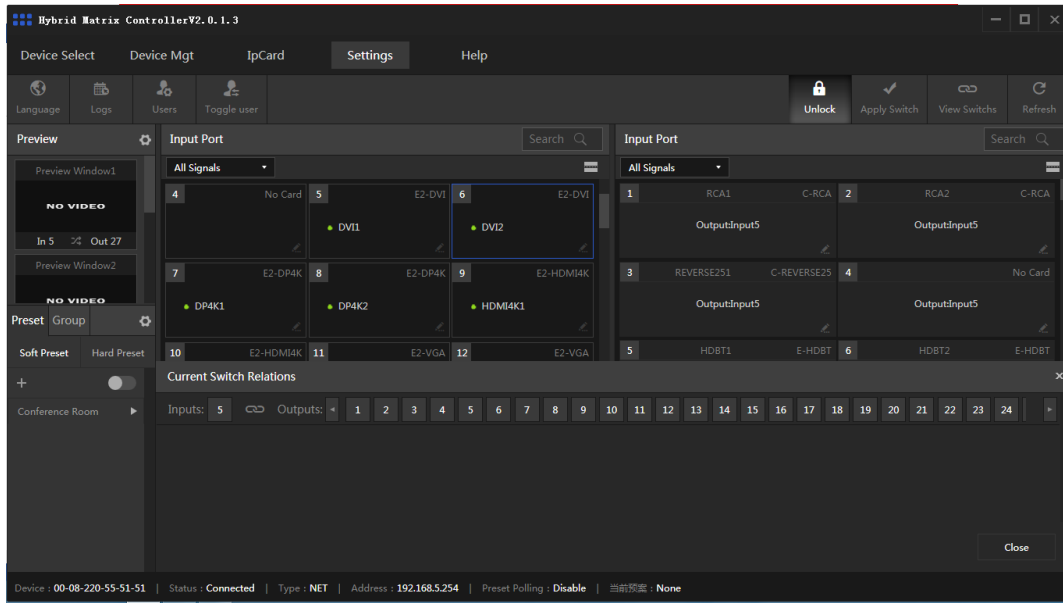
•

Meanwhile, it is the same when drag output to input.

Check switch

Click "View Switches" to view current input and output switching on the popped window.
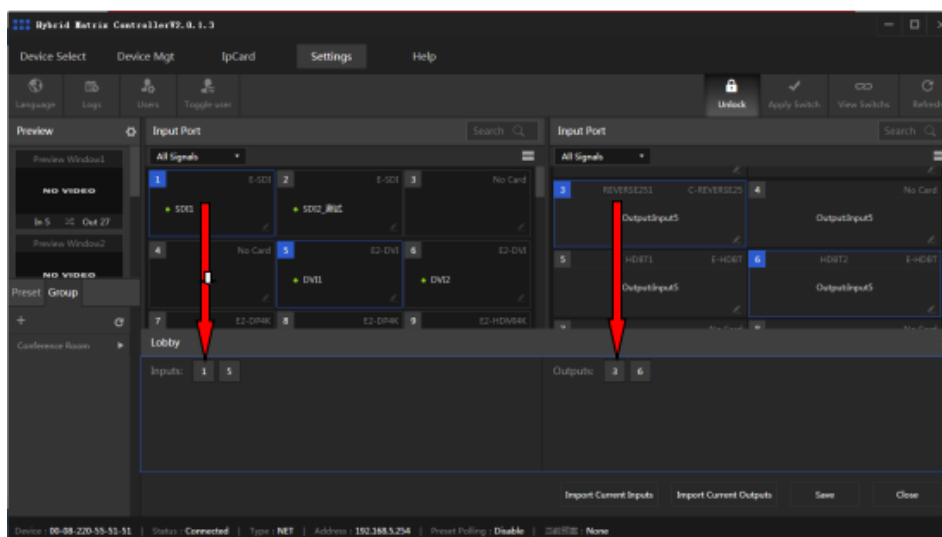
Grouping

Support I/O ports grouping, user can only check the I/O ports belong to the group.

Click in group sidebar, enter group name to create new group.

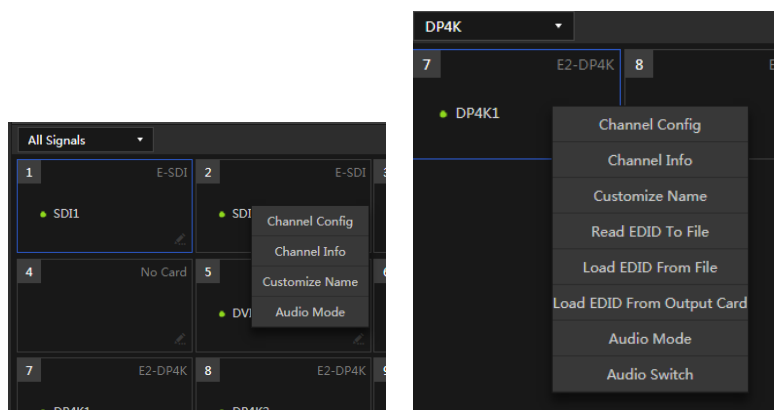Drag wanted I/O ports to assigned area, click "save"

After adding, click group name in the group list of the sidebar, pop up switching prompt window, click "OK" button.

Right click the group name for filter, rename, edit, and delete operation.
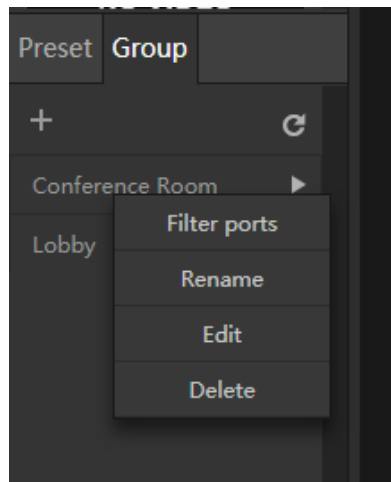
Property Configuration

In the main interface of the software, right click on any input or output channel to get the properties list.

Right-click list of the input port:

PortType	4K DP	4K HDBT	4K HDMI	DVI	VGA	YPbPr
Channel configuration	√	√	√	√	√	√
Read EDID to file	√	√	√	√	-	-
Load EDID from file	√	√	√	√	-	-
Load EDID from output	√	√	√	√	-	-
Input property configuration	-	-	-	-	√	√
Change audio mode	√	√	√	-	-	-
Audio switch	√	√	√	√	-	-
Channel information	√	√	√	√	√	√
Customize name	√	√	√	√	√	√

Right-click list of the output port:

| Port Type	4K HD BT	4K HDMI	HDMI	EDVI	DVI	VGA
Channel configuration	√	√	√	√	√	√
Change resolution	√	√	√	√	√	√
Read EDID to file	√	√	√	√	√	-
Audio switch	√	√	√	-	√	√
Card Restore	√	√	-	√	-	-
Channel information	√	√	√	√	√	√
Customize name	√	√	√	√	√	√

Configure channel type
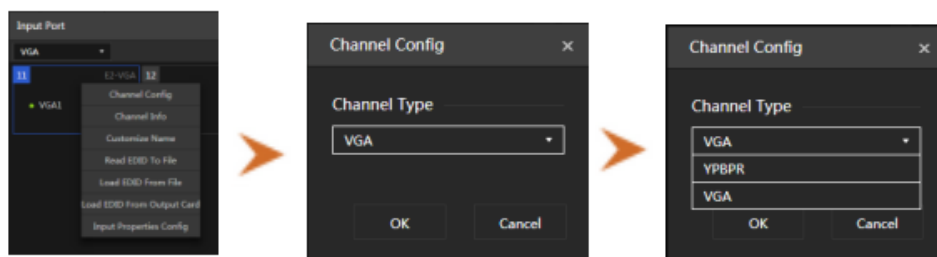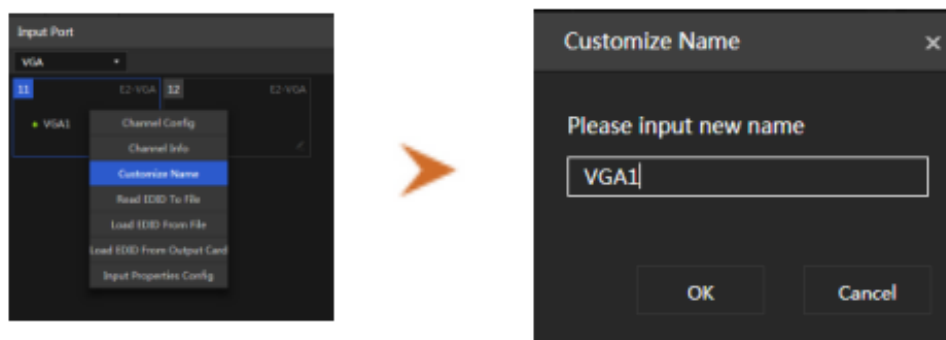

Input property configuration
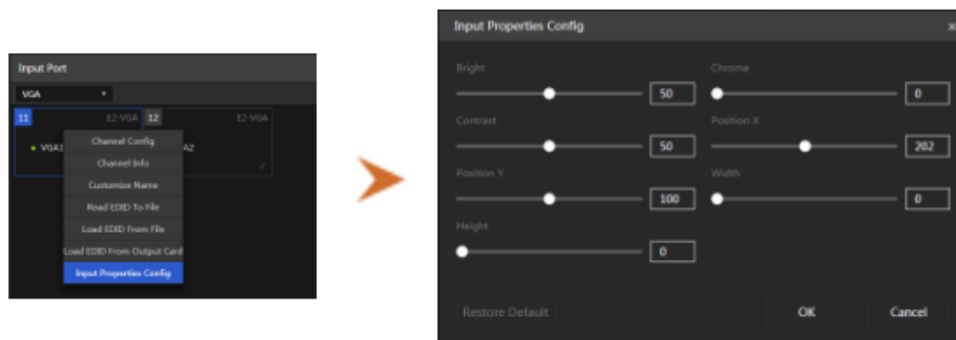
VGA Automatic Adjustment

For VGA input ports, support auto adjust content to remove the black edge by right click the VGA input port and applying VGA Automatic Adjustment.
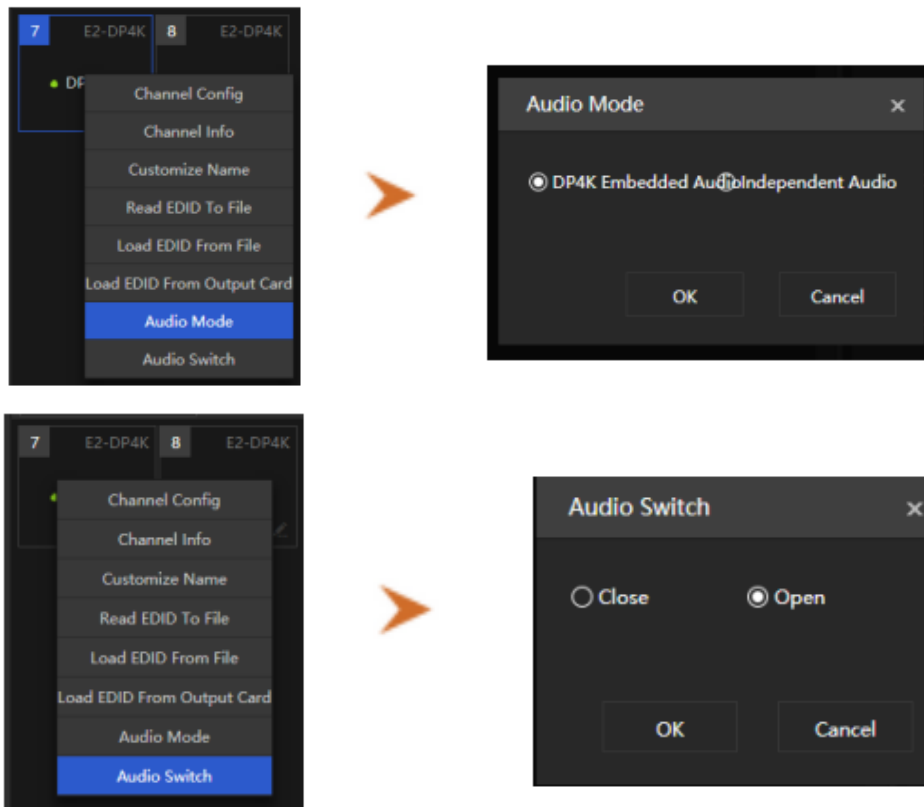
Channel information
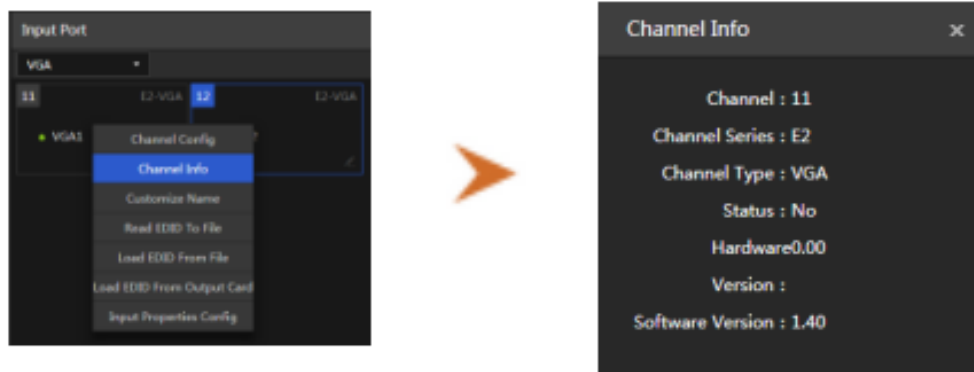
Rename

CVBS Stretching mode

For CVBS input, the system support set stretching adjustment to avoid the nonproper display due to the difference between original input and display devices' resolution ratio.
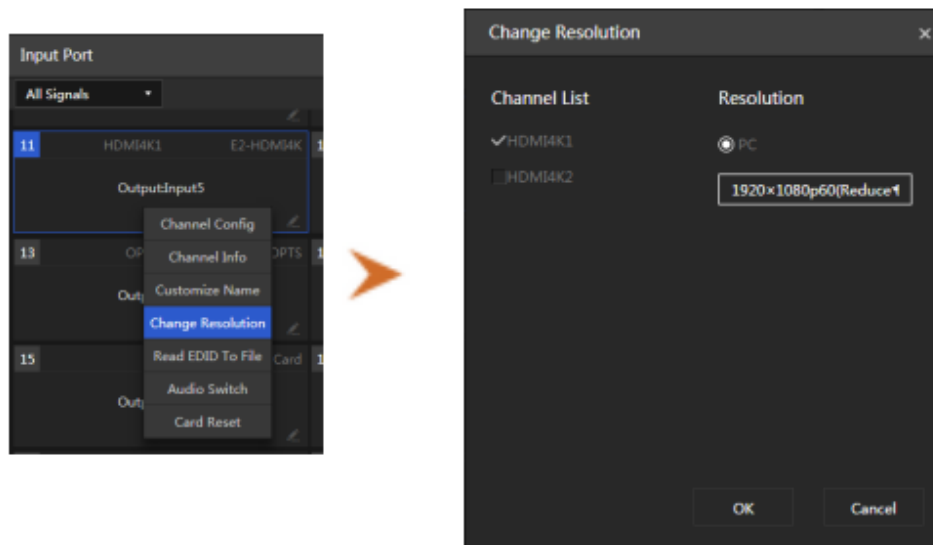
Audio Setting Mode

EDID management

Support read the EDID of the input/output cards, and update the EDID of input cards through import local EDID or the EDID of output cards.

Set the resolution of the output
Support to customize the resolution of the output ports.
Right click the output port > click "Change Resolution"
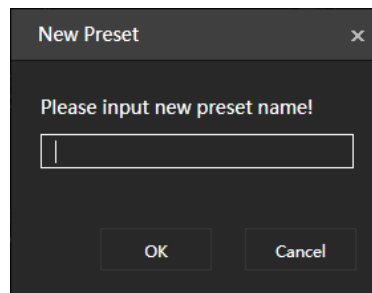
Preset and Polling

Preset Setting

We can save the switching relationship to a Preset.
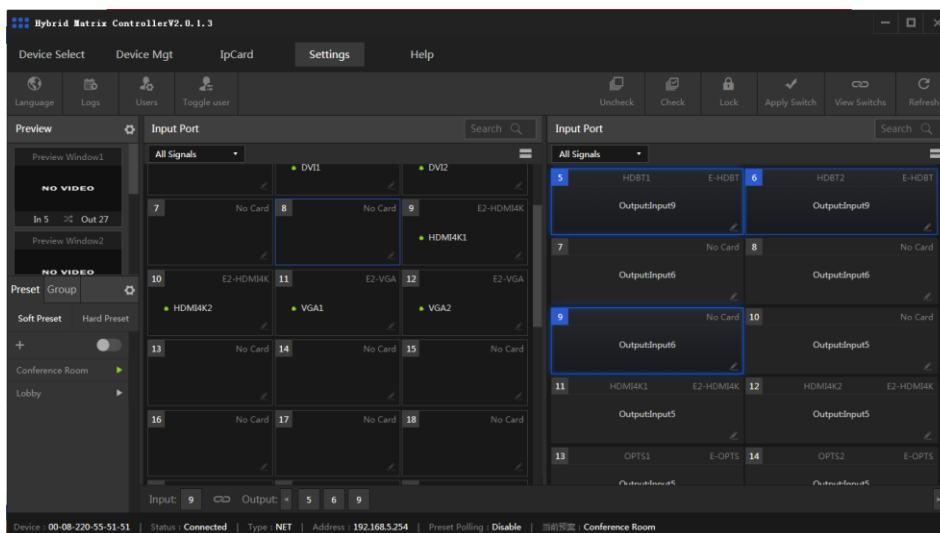Support two types of Preset: Soft Preset and Hard Preset.

Soft Preset

Soft Preset: Set the input and output switching relations of each port by yourself, save it to the control PC.

1) Click button to add Preset.

2) Enter the name of the Preset.


3) Set the switching relationship of the Preset.

- Click "Import Current Relations ,import all the switching relationship of all the ports to the Preset, and then do the operation.

- Click "Add" button to add a switching relationship.

- Select an input port, click "Import Current Outputs" button to import the output port switching relationship of the input port to the Preset.

4) After setting the switching relationships of all the input ports, click "Save" button.

5) The list of the Soft Preset shown as below figure, press < Ctrl > key and click the Preset name to switch.
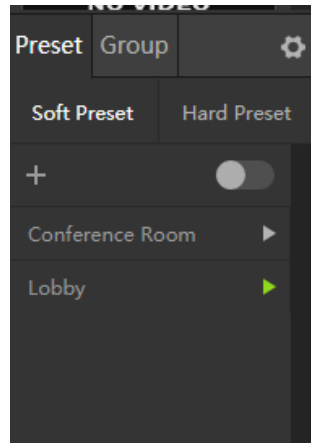
Right click the name of the Preset, we can do these operations:

Apply preset
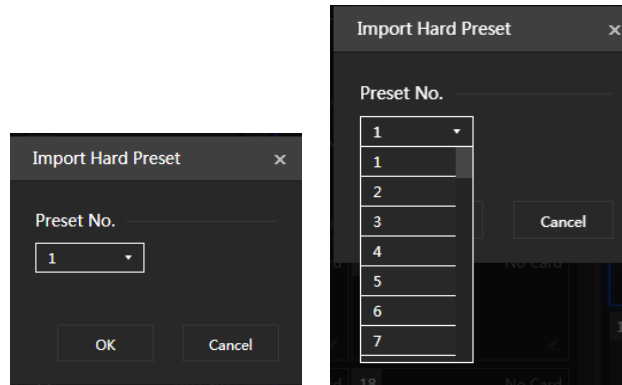View Switches
Save Current Switches
Rename
Delete
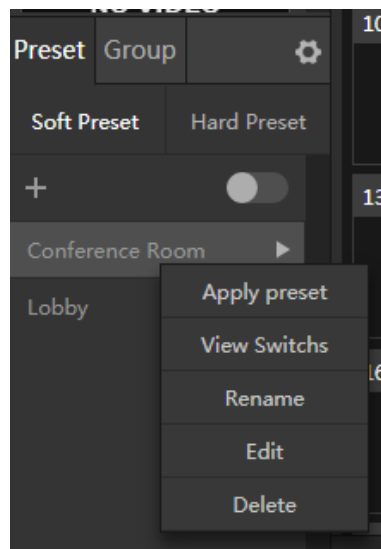
Hard Preset

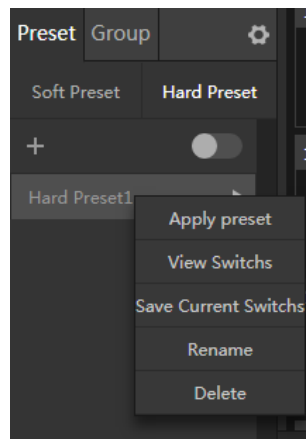Hard Preset: Preset stored in the HMX as the default (1 switch 1, 2 switch 2 …).

- Import Hard Preset

Click icon to add a Hard Preset, choose a number for the Hard Preset in the list, Click OK to import the preset to the Hard Preset list of the software.

- Switch Hard Preset

  The list of the Hard Preset shown as below figure, press < Ctrl > key and click the Preset name to switch.

- Right click the name of the Preset, we can do these operations:
  Apply preset
  View Switchs
  Save Current Switchs
  Rename
  Delete

Polling

Click icon，open the window of "Preset Polling Config".

Choose the preset to set the parameters, click OK button to save.

Click button at the left side on Preset, enable the carousel.
The Preset Polling and time are shown on the status bar.

26

Preview

The NPC (Network Previewing Card) is used to display the real-time preview image of all input signals on the software interface to manage the contents easily and precisely.
Setting IP address of NPC

Click [IpCard] –> [Output Cards] :

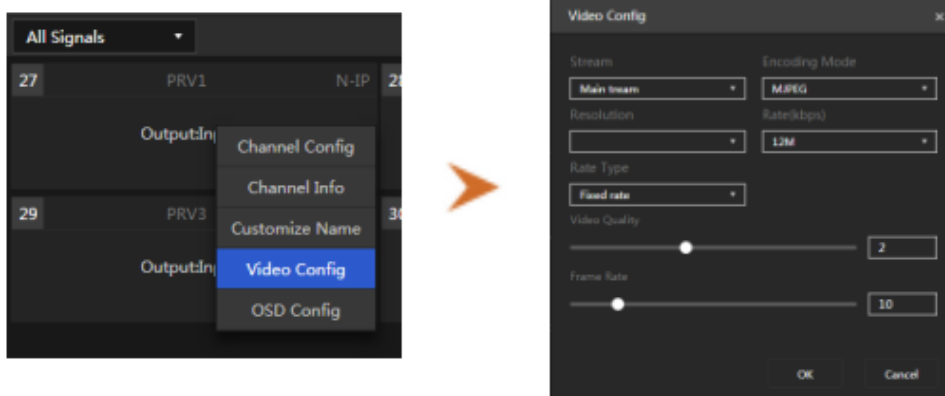Enter into the Output Cards settings, input the IP, Gateway and Sub Mask for the NPC and save to exit.
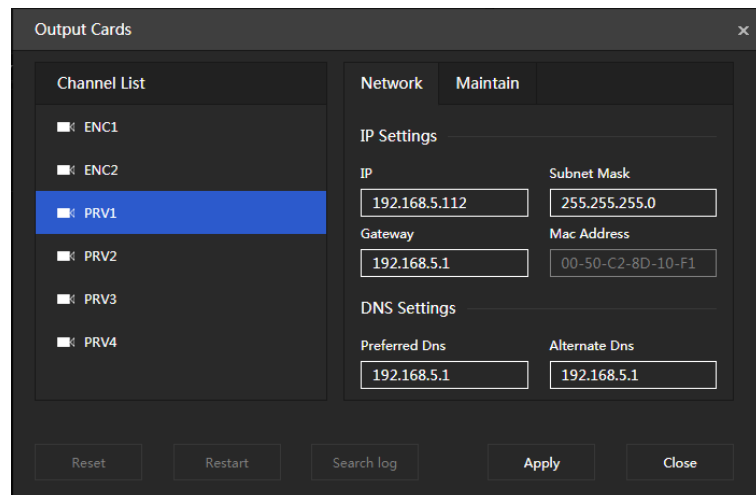
Set video format

There are two types of video format that we can choose：
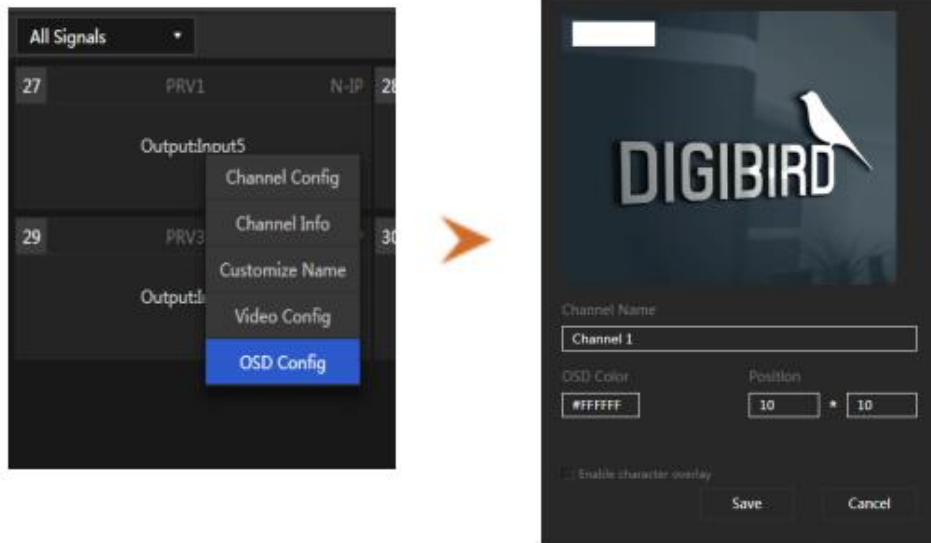
Main Stream (With audio)
Sub Stream (Without audio)
Click right button on PRV1 > Video Setting > Choose Main Stream/Sub Stream.

Set input label

Click right button on PRV1 > OSD Config

Preview playing

Enable preview function

Click right button on PRV1 > choose Video preview.