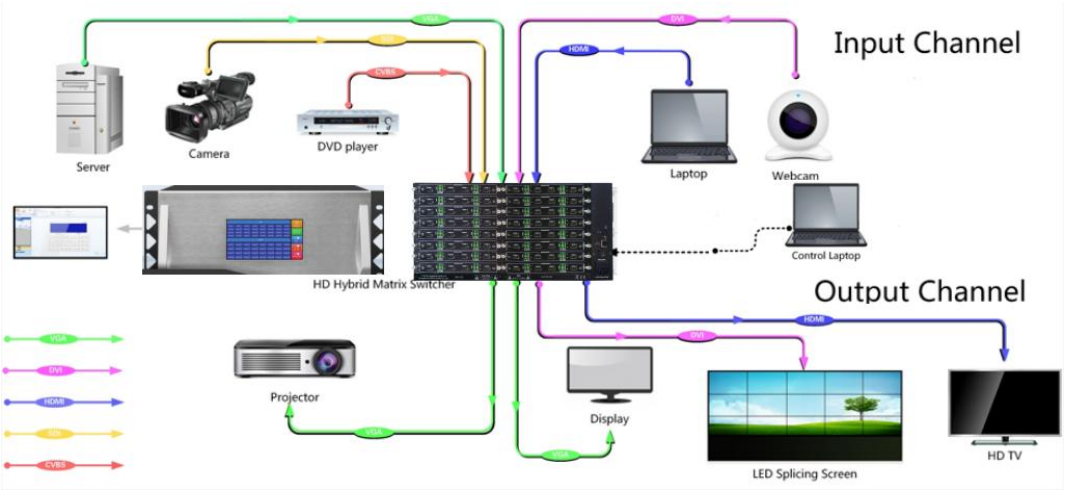
# 2K HD Video Matrix Switch System D6108 D6116 D6132 -Applied to Small, Medium and Large Meeting Rooms

## 1. Solution Description

As science and technology advance and the living standards of the people increase, there is also growing demand for electronic equipment, such as signal switching on stage, signal display and storage in security systems, video and audio signal processing in multimedia conference rooms, etc. The DSPPA 2K HD Hybrid Card-Plug Matrix Switcher is a high-performance smart matrix switcher designed for audio and video signal switch,and the video matrix is available to meet the need for the actual application of the signal distribution and switching at will. Audio and video signals, especially in engineering applications, have great advantages.

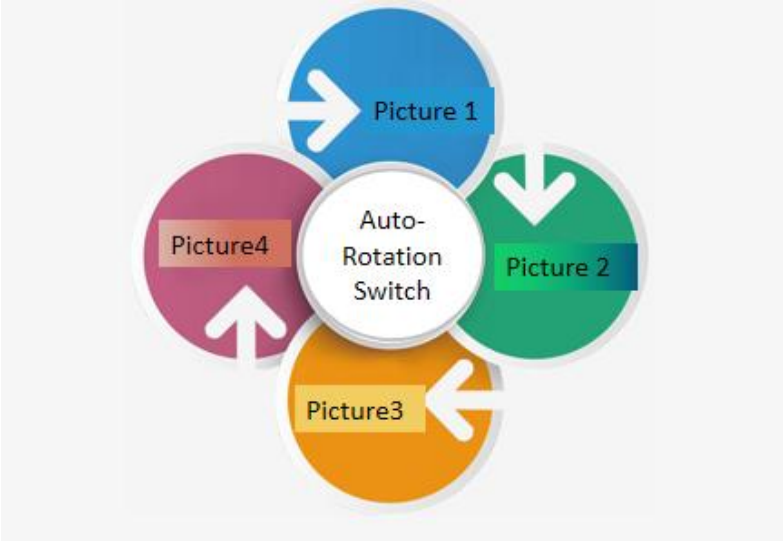

The DSPPA 2K HD Hybrid Card-Plug Matrix Switcher with EMI chassis structure, is compatible with different signal types input/output signal cards; Inserted with the signal cards such as HDMI, DVI, VGA, SDI, AV seamless input/output signal cards; Combined with different signal cards, it can solve the problem of integrated audiovisual. It supports multiple signal input and output cross-matrix switching, with each video signal and audio video signal transmitted separately and switched independently to minimize signal transmission attenuation. Fully seamless switching enables high fidelity output of the image and sound signals, which can be matched with input and output signal cards of any choice. Besides, it features power-off site protection, audio-video synchronization or individual switching. RS232 communication interface control makes it easy to use with a PC, central control system, or a variety of remote control devices.



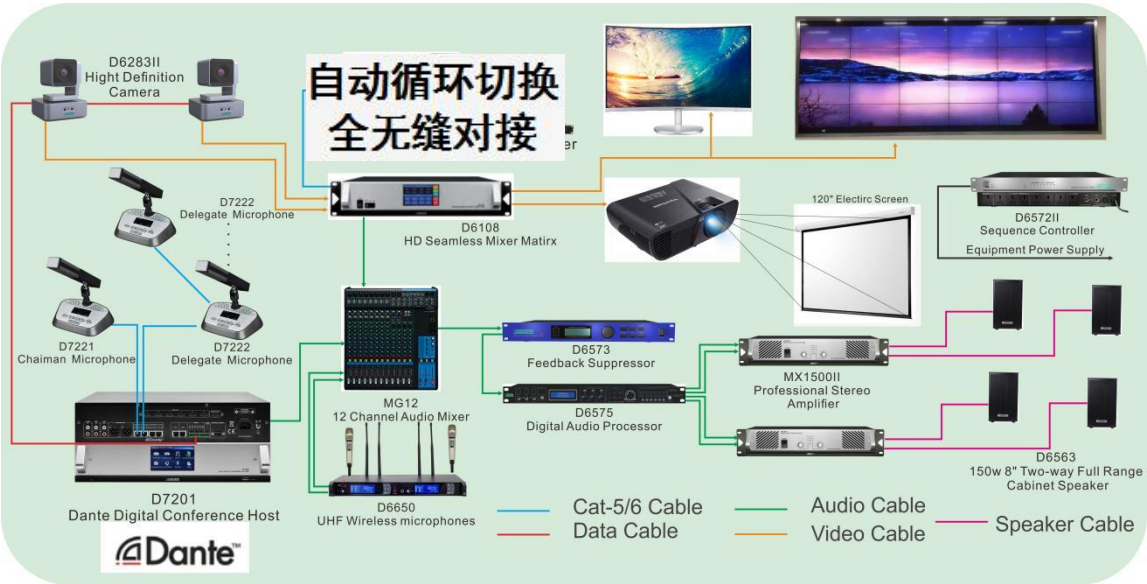

## 2. Solution Highlight Functions


**Free Rotation Switching:** For HD matrix,settings such as the rotation channel, time, and interval make it easy to achieve automatic signal interval switching.

**Seamless Switching:** Built-in seamless switching card, no black screen, no splash screen, and no special transition. Seamless output supports VGA/SDI/HDMI/DVI/AV signal formats, and HDMI perfectly supports interlaced and progressive scan outputs




## 3. The System Diagram




## 4. Attainable Functions

**1. EMI Chassis Structure:** The EMI chassis structure effectively protects against electromagnetic radiation and electromagnetic wave interference, and provides more stable performance.

**2. Long Range Power-on Operation:** The matrix can be continuously powered for 7*24 hours, the average time of failure is more than 10,000 hours.

3. **Multi-function Control Software:** HD matrix multi-function control software, which can be applied to many operating systems, can enable signal switching, rotation setting, and system setup. it is ready to use after installation without debugging.

**4. ESD Protection:** More highly integrated electronic components yet results in increasing risk of damage to sensitive and expensive chip due to abusive use of external interfaces, so ESD protection is particularly important.

**5. Automatic Rotation:** It comes with a rotation function, which can be switched according to user requirements. Users can set parameters such as rotation switch, rotation time and rotation channel to meet your

various display needs. It provides up to 32 user-defined output channel configuration schemes, and can store and recall them at any time, switching to the screen you saved with one click.

**6. Power-off Protection:** It means that in normal condition, switching equipment can store the last channel switching command, and when the power failure occurs unexpectedly, the device will save this command, and recover when there is power

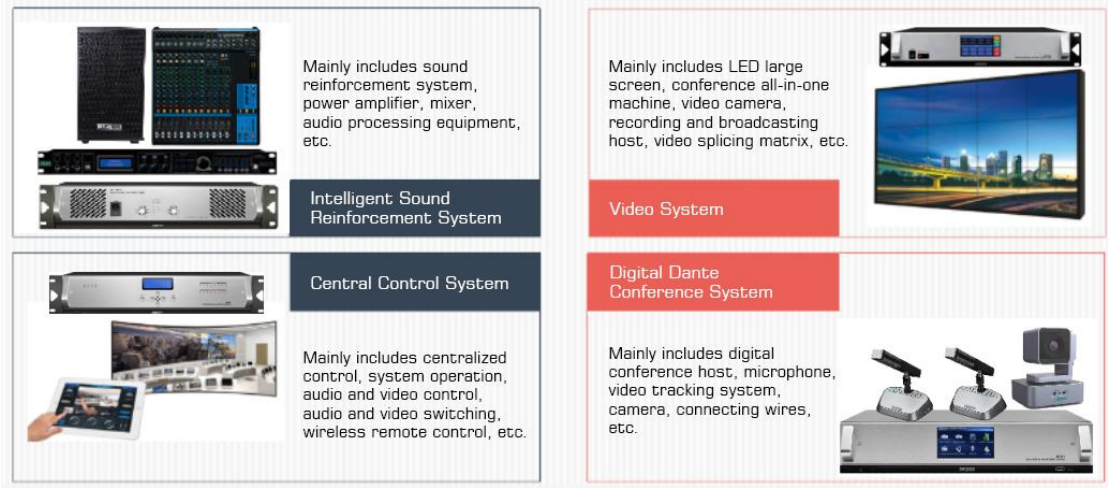
**7. Audio and Video Matrix Switching Control:** With video, HDMI, VGA image and audio signal switching control functions, it switches the video signals from satellite, cameras, remote controlConference System, HDMI, VGA signals, and audio signals from mixers, computers, conference microphones, remote terminals, etc. to audio and video terminals quickly

**8. Video Signal Processing Function (Seamless Switching):It features high-bandwidth professional switch chip,** and built-in seamless switch card, with no black screen, no flash screen.It has 120" main projection screen,a large splicing screen with 6500 brightness lumen engineering projector; With two cameras D6283II display system,it conducts coordination, processing, switching to each input and output signal. Besides, the input signal can be switched to any combination of functions to achieve a very flexible signal pivot processing function.

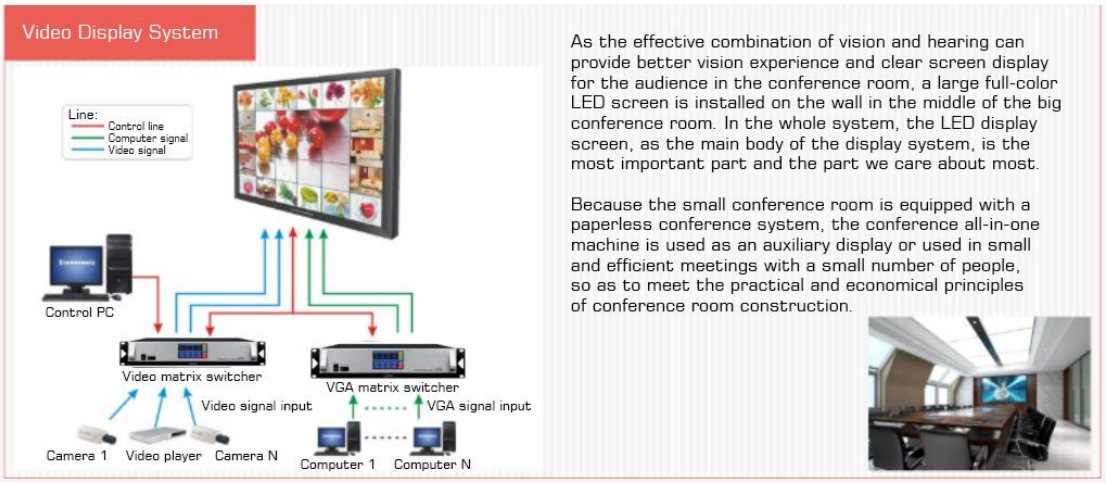
**9. Meeting Discussion and Speaking Function:**The chairman unit has the priority to speak. It supports 4 modes, namely, FIFO mode, ordinary mode, free mode, application to speak mode.

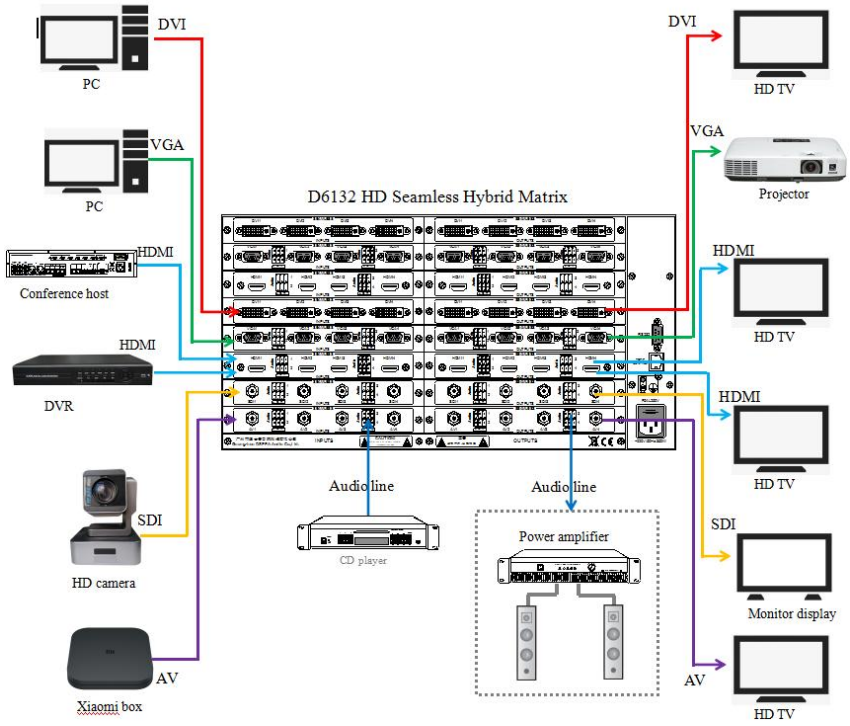
**10. PA System:**For sound reinforcement,emphasis is placed on the clarity of speech, acoustic gain, sound pressure level, uniformity of sound field. In addition, professional audio processing equipment enables the language to be clear, distortion-free, and silent.

## 5. Main Components of Conference Room




## Video Matrix Seamless Switching System Function: (Take D6108 and D6132 as examples)



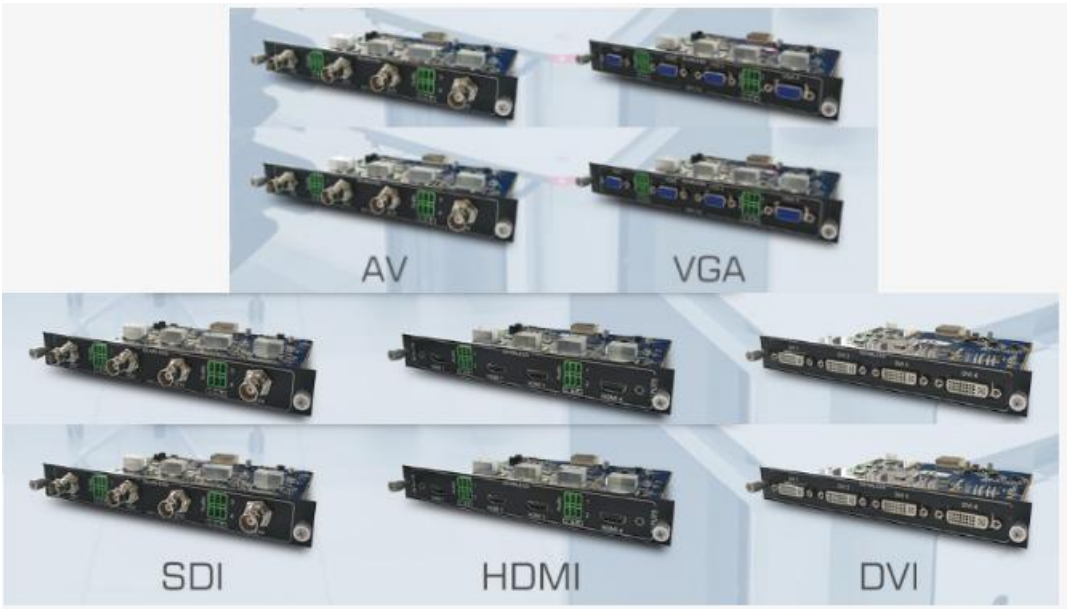

## 6. Essential Features:

**D6108/D6116/D6132**

**2K HD Seamless Hybrid Matrix**


## Hybrid Matrix Board Card

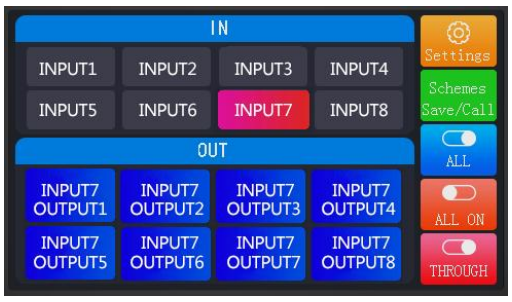
The DSPPA 2K HD Hybrid Card-Plug Matrix Switcher with EMI chassis structure, is compatible with different signal types input / output signal cards; Inserted with the signal cards such as HDMI, DVI, VGA, SDI, AV seamless input / output signal cards (Each board has 4 channels. Each audio/video signal is transmitted and switched separately); Combined with different signal cards, it can solve the problem of integrated audiovisual.



## Features:

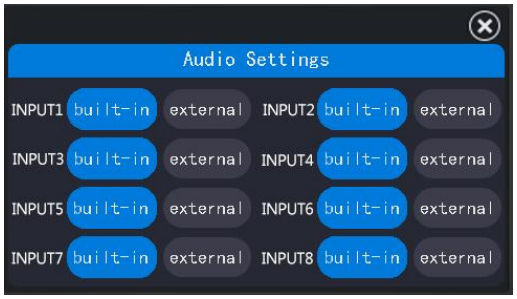
- Support 8-channel,16-channel, 32-channel signal inputs and outputs
- Intelligent matrix system for audio and video signal switching, compatible with different audio signal input/output signal cards
- Matched Signal Cards: HDML, DVI, VGA, SDI, AV seamless input/output signal cards
- Support multiple signal input and output cross matrix switching, providing independent video signal and audio input and output terminals
- Each audio/video signal is transmitted and switched separately to minimize the attenuation of signal transmission. The image and sound signals can be produced with high fidelity and can be matched with the input and output signal cards at will
- Support power-off protection, power-off memory, audio and video synchronization or separate switching; Can save and call 10 switching scenes
- With RS232 communication interface and TCP/IP(optional function) control, it can be easily used with personal computer, remote control system or various remote control devices
- Low power consumption, continuous 7*24 hours without failure

**Video Matrix Switching System Operation Interface: (Take D6108 as an example)**

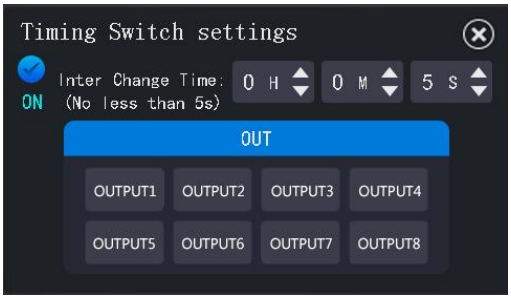



All Interface


System Settings Interface




Audio Settings Interface



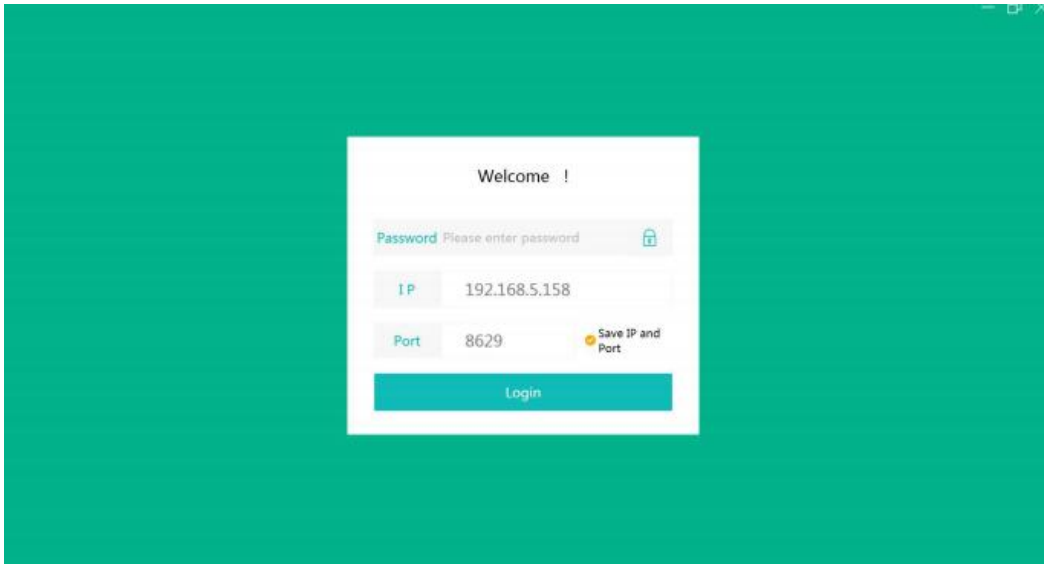

Timing Switch Setting Interface

**Operating Interface of the PC software:(Take D6108 as an example)**

Before supplying power to the matrix switching system, first connect the RS232 interface of the matrix to the RS232 communication port of the computer with the RS232 communication cable delivered randomly, then connect the power of the matrix and run the PC software to operate the matrix.

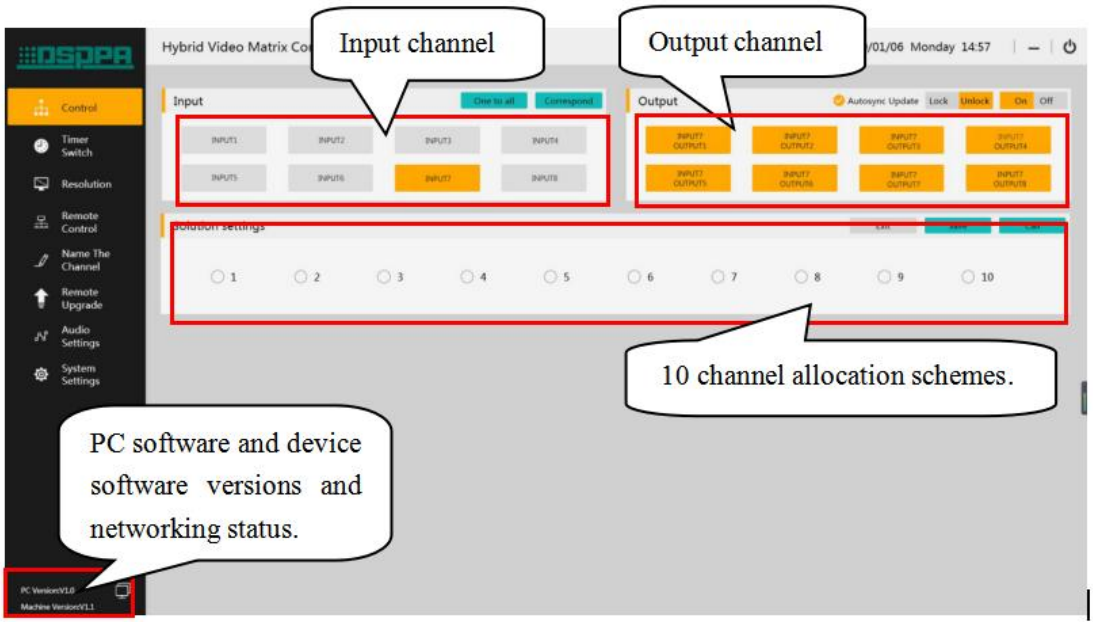
Operate the PC software, and enter the Login interface as shown below. The user can enter the factory IP address and port, then enter the original password 123, and click the “Login” button to enter the main interface. The“ ”icon can be lit to save the IP and port. Note: The factory IP address is 192.168.5.158, the gateway is 192.168.5.1, and the port is 8629. You can modify the parameters in the“System Settings” of the PC software. The network parameters of the PC must be synchronized with that of the device, otherwise the operation cannot be synchronized.

## PC Software Operation




## Main Interface:

The left side of the main interface is the input channel, and the right side is the output channel. Numbers 1-10 are 10 channel allocation schemes set by the user



## Resolution Interface:

In the resolution interface, you can view and set the resolution size of the external display device connected to each output channel, and click the OK button to take effect.


## Timing Switching Interface:

Timing switching means that one output channel can be switched to multiple signal source inputs. On the “Timing switching” interface, first select an output channel and then select multiple input channels, with the timing switching interval range of 5s-23:59:59 and the time no less than 5s, and then light up and enable the "" icon to prompt “Successful”

## 7. Application:

Mainly applied to radio and television engineering, multimedia conference halls, large-screen display engineering, television teaching, command and control centers and other occasions