



Multimedia Teaching Central Control System for School

■ System Overview



Usage Problems in Traditional Classrooms

- Complicated operation, requiring students or teachers to spend more time and effort to learn and master the use method, affecting the efficiency of teaching.
- Imperfect function, unable to meet the teaching needs; for example, the chalk writing time is too long, which affects the teaching effect.
- Difficulty in maintenance, requiring specialized personnel to carry out repairs and maintenance, increasing the maintenance cost and time.
- Problems with interconnectivity, unable to realize seamless connection and collaborative work between devices, which affects the teaching effect.
- In the absence of personnel activities, people often forget to turn it off, resulting in the consumption of energy and resources.



Requirement Analysis

- User-friendly operation interface for a quick start by teachers and students.
- With a variety of functions, curtain switches, projection equipment, audio/video players, etc.
- High stability and reliability for long-term use.
- Intelligent control and management.
- Realize interconnection and facilitate information exchange and sharing between teachers and students.
- Easy maintenance and management, reducing maintenance costs and time.



Design Objectives

- Multiple device integration improves classroom management efficiency through centralized control. The central control system allows for easy control of lighting, curtains, and temperature, reducing manual operation time and workload.
- Simplify equipment operation, improve equipment function, facilitate maintenance, rationalize classroom layout and improve equipment interconnection, creating a convenient, efficient, comfortable teaching environment.



Function Advantages 1

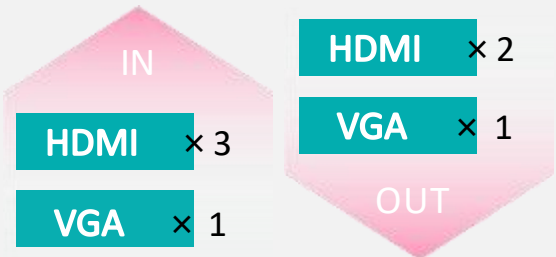
- The system centrally controls all kinds of devices in the classroom, switching between computers, laptops, displays, and line input sources for various audio and video.
- Electric screen, projector, device power control interface.
- Audio input port: can be connected to the wired microphone, PC player, etc.
- Audio line output port: can be connected with the extended power amplifier, with more power or more speakers.

DSP6468 (Multimedia Central Controller)



- Integrated RS232, RS485 and infrared interface: can control curtains, lighting, air conditioning and other equipment.
Note: Ordinary lighting requires intelligent lighting control module to be controlled with RS485. The air conditioner needs to use an infrared remote control to learn infrared control.
- Access to the MAG6000 Network PA System to achieve unified background control.
- Support Android APP, computer client, Web page access control. Timing can be set to turn on and off the device to save energy consumption.

Video Control



Control Interface



Communication Interface



System Integration

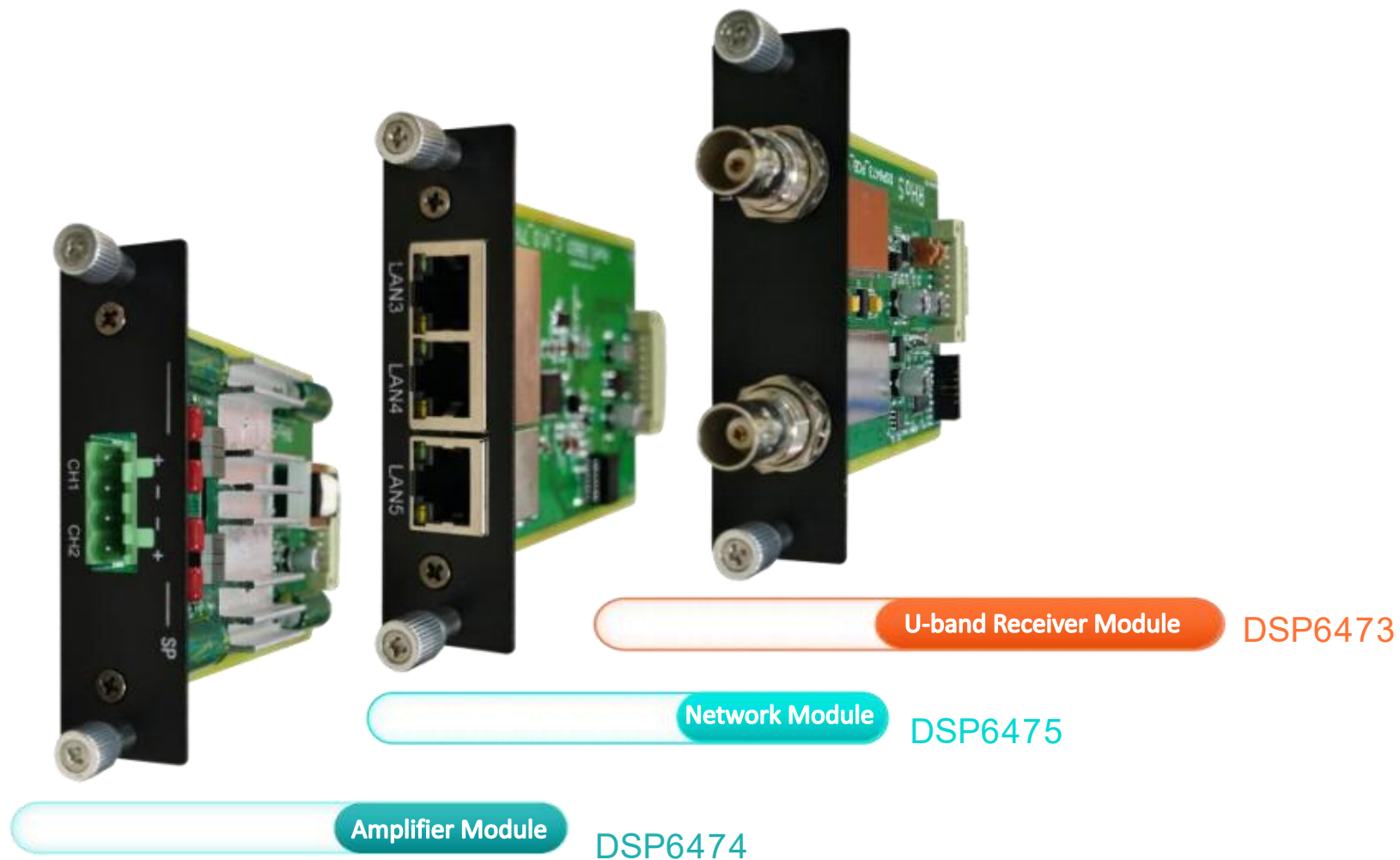
Integrate MAG6000 Network PA System to realize grouping, timing, paging, video on demand, intercom and other broadcast functions.

Function Advantages 2



Function Module

- U-band Receiver Module (DSP6473): With 2 632MHz-695.25MHz U-band antenna input jacks, the U-band wireless system can work with D58 series handheld, headset or lavalier microphones.
- Amplifier Module (DSP6474): With amplifier output CH1/CH2 and built-in $2 \times 25W$ (8Ω) amplifiers for direct connection to 20W passive speakers, can cover the $50m^2$ classroom.
- Network Module (DSP6475): With 3 RJ45 network interfaces, supporting intelligent network switch function, reducing the use of switches to save network resources.



Function Advantages 3



DSP6471 (Touch Control Panel)

- Enable the on and off of the central control system; control the on and off of the projector and computer; raise and lower the electric screen; control the volume of the microphone output and line 1 output; and allow synchronous switching of 4×2 audio and video sources of HDMI and VGA.
- Integrate simple panel to facilitate users to use the product.



- 1 Communication Interface: RJ45 Network Interface, RS485 serial communication.
- 2 The touch control panel is a passive device, powered by the system host with a supply voltage of DC+12V.
- 3 Control projector, computer, electric screen, volume, audio and video source switching.
- 4 Capacitive touch control.
- 5 The panel touch can be set to be in a locked or unlocked state via the software.

Function Advantages 4



DSP6472 (Interface Panel)

- Put the set IC card in the scanning area of the interface panel, and the touch panel will emit a beep sound and trigger the scene. To withdraw the card, please scan the card again to close the system.

Optional Item

- D7240 (Optional): Used for IC card reading and writing, working with the PC software of the multimedia teaching central control system.
- D7241 (Optional): Work with the PC software of the multimedia teaching central control system to read data, set permissions and whether to enable the scene.
- Use only by authorized personnel, not by ordinary students.



01

Communication Interface: RJ45 Network Interface, RS485 serial communication.

02

Allows connection to USB, network port, line audio, HDMI, VGA, and external microphone.

03

The interface panel can work with the U-band wireless microphone, enabling infrared frequency pairing, channel selection and volume adjustment functions.

04

With permission settings, the card reader is used for device permission management.

Classroom Layout



Intelligent Temperature Control

The air conditioner can be controlled by infrared and the temperature can be set with one button, reducing manual operation.

Intelligent Electric Screen

Control the rise and fall of the electric curtain in the classroom, and adjust the projection position without pausing many times

Intelligent Curtain

In the classroom, the control panel can be used to control the opening and closing of classroom electric curtains, which reduces manual operation.

Perfect Sound Quality

all-round 360 impeccable audio, impeccable aesthetics, aesthetic feeling and modern exquisiteness

Intelligent Lighting Control

The classroom lights can be individually controlled to turn on and off, and the classroom system lights can be set to turn on or off regularly in advance

Intelligent Board

4K HD display, eye protection without fatigue. Support USB disk file import, which is convenient for teachers to display PPT, play video and so on. Built-in camera for remote teaching.

Audio/Video Switching

In the classroom, users can control the audio/video signal switching through a control panel, and control the video allocation and management through a PC.

One-Tap Card Activation

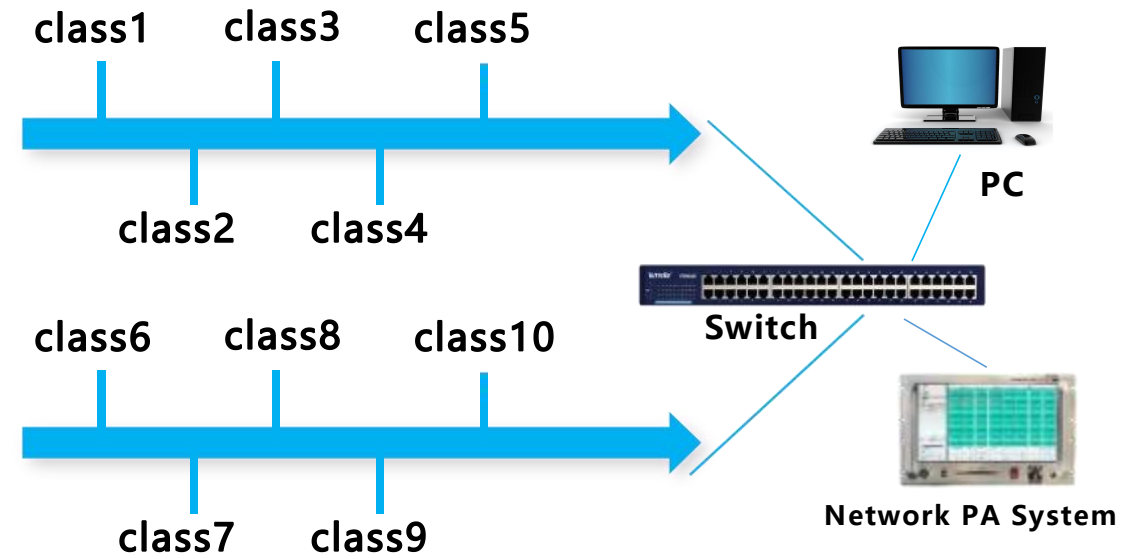
The PC software collaborates with the data setting, assigns the IC card permission, and binds the scene; Tap the card to start the IC card exclusive scene, turn on the device, open the curtains, set the temperature, etc.



Multiple Classroom Solution Application



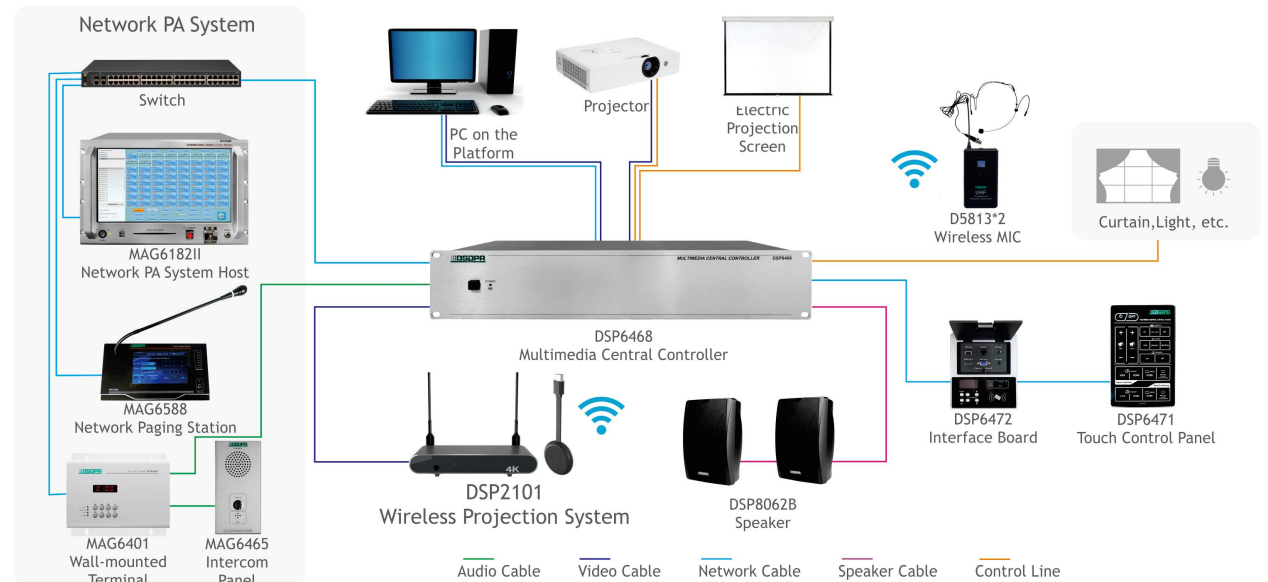
- Integrate MAG6000 Network PA System to realize grouping, timing, paging, video on demand, intercom and other broadcast functions; Realize audio/intercom interaction between multiple classrooms, unified management of multiple classrooms devices; Control classroom multimedia devices remotely.



General Configuration

DSP6468 Multimedia Teaching Central Control System

No.	Model	Product Name	Quantity
Main Control Equipment			
1	DSP6468	Multimedia Central Controller	1
2	DSP6472	Interface Board	1
3	DSP6471	Touch Control Panel	1
4	D5813	Wireless MC	2
Display Device			
1	DSP2101	Wireless Projection System	1
Speaker			
1	DSP8062B	Speaker	2
Network PA System			
1	MAG6182II	Network PA System Host	1
2	MAG6588	Network Paging Station	1
3	MAG6401	Wall-mounted Terminal	1
4	MAG6465	Intercom Panel	1



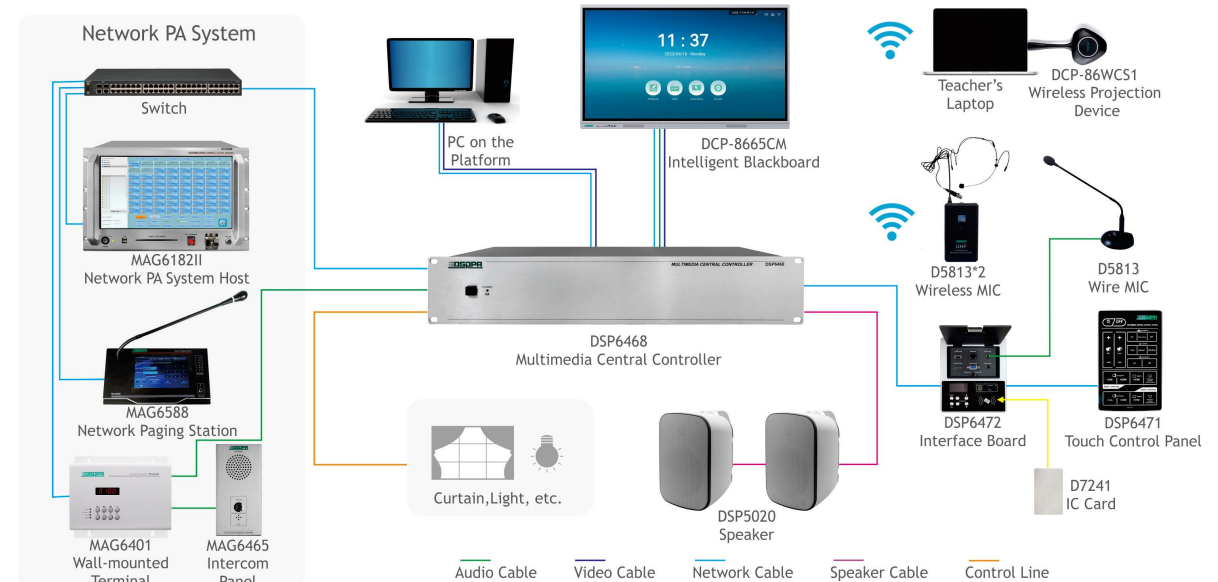
System Advantages

- Connect MAG6000 Network PA System for grouping, timing, paging, video on demand, intercom, and other broadcast functions; Enable audio /intercom interaction between multiple classrooms; Control classroom multimedia devices remotely.
- Intelligent adjustment of the classroom environment, such as lighting, curtains and air conditioning, improves the comfort and suitability of the learning environment.
- Centralized control of various equipment in the classroom, can switch various audio and video from computer, notebook, display desk and line input.

Advanced Configuration

DSP6468 Multimedia Teaching Central Control System

No.	Model	Product Name	Quantity
Main Control Equipment			
1	DSP6468	Multimedia Central Controller	1
2	DSP6472	Interface Board	1
3	DSP6471	Touch Control Panel	1
4	D7241	IC Card	1
5	D5813	Wireless MC	2
6	CM30	Wire MIC	1
Display Device			
1	DCP-8665CM	Intelligent Blackboard	1
2	DCP-86WCS1	Wireless Projection Device	1
Speaker			
1	D5P5020	Speaker	2
Network PA System			
1	MAG6182II	Network PA System Host	1
2	MAG6588	Network Paging Station	1
3	MAG6401	Wall-mounted Terminal	1
4	MAG6465	Intercom Panel	1



System Advantages

- Connect MAG6000 Network PA System for grouping, timing, paging, video on demand, intercom, and other broadcast functions; Enable audio /intercom interaction between multiple classrooms; Control classroom multimedia devices remotely.
- Intelligent adjustment of the classroom environment, such as lighting, curtains and air conditioning, improves the comfort and suitability of the learning environment.
- Centralized control of various equipment in the classroom, can switch various audio and video from computer, notebook, display desk and line input.
- With intelligent interactive flat panel, built-in HD camera, work with remote video conferencing software for remote teaching and remote supervision, etc.

■ Solution Configuration Instruction



- **DSP6468 Multimedia Central Controller:** Can integrate a variety of devices and functions; Can switch various audio and video from computer, notebook, display desk, etc; Control curtains, lights, projection curtains, reducing the time and workload of manual operation; Use Android APP, computer client and web access for remote control and management; Set the device's Turn-On time regularly, and improve the efficiency of classroom management.
- **DSP6472 Interface Panel:** Connect the teacher's laptop to transmit video and audio, and the teacher scans the IC card to enable the class scene.
- **DSP6471 Touch Control Panel:** Used to control the projector, computer, electric screen, volume, audio and video source switching.
- Equipped with **DSP6473 U-band Receiver Module** to receive wireless microphone signal, a wired condenser microphone can be connected to the **DSP6472 Interface panel** to realize local teacher's teaching amplification.
- **Intelligent Interactive Flat Panel:** Teaching documents can be imported by USB flash drive at one time, which is convenient for teachers to show PPT and play videos. The built-in high-definition camera can be used with remote video conferencing software for remote teaching and remote supervision.
- With **Wireless Screen Mirroring Device**, it is convenient for teachers to use their laptops to transfer audio and video to the display device by accessing the computer's USB port through a USB transmitter.
- Equipped with two **DSP5020 wall mount speakers**, 2-way constant resistance speaker that consists of 5-inch woofer unit and 1-inch tweeter unit; The most advanced bass radiator design with Anacord's exclusive optimization of bass enhancement (OBE) technology, all-round 360 impeccable audio, impeccable aesthetics, aesthetic feeling and modern exquisiteness.
- Connect **MAG6000 Network PA System** for grouping, timing, paging, video on demand, intercom, and other broadcast functions; Enable audio /intercom interaction between multiple classrooms, unified background management of multiple classrooms devices.

Application Scenarios





Guangzhou DSPPA Audio Co., Ltd

Address

NO.1 Xiahe Road, Jianggao, Baiyun,
Guangzhou, Guangdong, China

Tel

+86-20-37166520

Public Address
Division

export@dsppa.com
www.dsppatech.com

ProAV
Division

conference@dsppa.com
www.dsppacs.com