

DSP6468

Multimedia Central Controller



Description

The multimedia teaching central control system centrally controls all kinds of equipment in the classroom. It can switch a variety of videos from computers, laptops and video presenters; switch a variety of audios from computers, laptops, video presenters and line inputs; integrate our network public address system to achieve broadcasting functions such as grouping, timing, paging, on-demand and intercom; support remote control of multimedia equipment for the classroom and provide timing management, remote monitoring and synchronous control of multiple central control hosts. The 2-channel U-band receiver module and amplifier module are designed in a modular way to meet different customer needs. The system is mainly used in schools.

Features

- The host holds a video matrix function and provides 3 HDMI inputs and 1 VGA input, 2 HDMI matrix outputs and 1 VGA loop output, of which the HDMI resolution supports a maximum of 1920*1080P.
- Integrate 2 100M network ports, and allow the addition of a 100M network module for 3 more 100M network ports.
- With 1 standard electric screen control interface, positive and negative power output, controllable projection screen lifting, supporting time-delay switch power-off.
- With 1 standard projector control interface, supporting time-delay power-off function to effectively protect the projector.
- With 2 AC 220V power supply outputs, supporting peripherals and projector power supply and time-delay switch power-off.
- With 4 programmable RS232 interfaces to control the projector on/off and signal selection or to control other RS232 controlled devices.
- Integrate 2 RS485 communication interfaces to control RS485 controlled devices.
- Integrate 4 short-circuit interfaces to control computer on/off and facilitate one-key on/off for multimedia computer equipment.
- Integrate 2 IR learning and transmitting interfaces to control external IR devices.
- Integrate 2 programmable I/O ports for triggering scenes or configuration.

- Integrate 1 IC card, first swipe to trigger a scene, second swipe to trigger another scene (off system).
- Integrate 1 communication interface to connect the touch control panel.
- Integrate 1 MIC interface for a wired microphone.
- It can be integrated with our network public address system, and the audio from the MAG6401 audio playback terminal is input into the machine, enabling broadcasting functions such as grouping, timing, paging, on-demand and intercom, together with the intercom terminal and paging station.
- It provides 2 line outputs, with line 1 output from microphone, U-band, network audio, line input, and HDMI 1 output (i.e. one of VGA, HDMI 1, HDMI 2, and HDMI 3 inputs; audio priority: network audio - other sources), and line 2 output from HDMI 2 audio output.
- The plug-in control function provides 5 slots for inserting a 2-channel U-band receiver module, an amplifier module and a network module, plug-and-play, with each module inserted in a fixed position and not interchangeable, and 2 slots left free (reserved).
- Support network control through the touch control panel (single unit control), Android client (single unit control), WEB client (single unit control), and PC client (centralized control and management), communication with the central control host through the network, and remote control of multimedia equipment for the classroom, with timing management and remote monitoring functions.
- Audio source priority: Network Audio - MIC/U-Band/PC VGA/LINE/HDMI 1 (Network Audio has the highest priority, followed by the rest.)

Specifications

Model	DSP6468	
MIC	Input Sensitivity	10mV
	Frequency Response	50Hz-20kHz
	THD	≤0.3 %
	S/N Ratio	≥70dB
	Output Voltage	1V
Network Audio, PC Audio & Line Input	Input Sensitivity	300mV
	Frequency Response	20Hz-20kHz
	THD	≤0.3 %
	S/N Ratio	≥80dB
Amplifier Module	Output Voltage	1V
	Frequency Response	20Hz-20KHz(±3dB)
	THD	≤1 %
	Output Power	2×25W
2-Channel U-Band Receiver Module	S/N Ratio	≥80dB
	Receiver Sensitivity	-100dBm
	Frequency Response	130Hz-15KHz(±3dB)
	THD	≤1 %
S/N Ratio		≥70dB
Video Frame Rate		Support 1920*1080P/60Hz, 50Hz, 30Hz
Connection between the Module and the Host		Plug-in type
Total Output of Three Power Supplies		MAX. 400W
Number of Slots		5 slots (2 slots reserved)
Network Interface		5 network interfaces

Software	PC software / Android APP / WEB software
Power Supply	AC110V-240V/50-60Hz
Package Dimensions (L×W×H mm)	530×430×145mm
Machine Dimensions (L×W×H mm)	483×430×88mm
Gross Weight	7.5kg
Net Weight of the Host	5.4kg
Net Weight of the Module	0.12kg

Front / Rear Panel

Front Panel



Front Panel

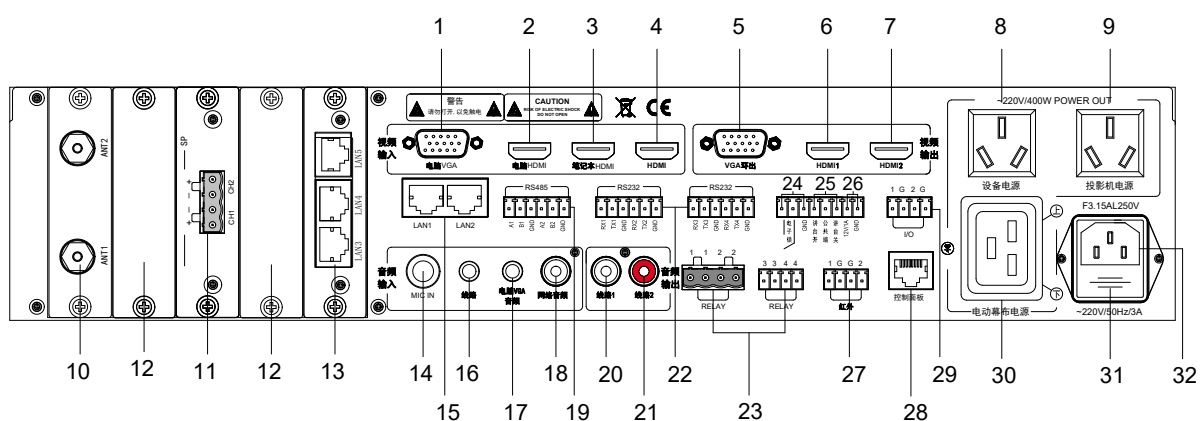
1. Power Switch

Press the button once turn the machine on, and press again to turn it off.

2. Power Indicator

The indicator light is normally on in blue when the power switch is turned on, and is off when the power switch is turned off.

Rear Panel



Rear Panel

1. PC VGA Video Input Connector
2. PC HDMI Video Input Connector
3. Laptop HDMI Video Input Connector
4. HDMI Video Input Connector
5. VGA Loop-Out Video Output Connector

Fixed output of PC VGA video signals.

6. HDMI 1 Video Matrix Output Connector

The video signal is output to this connector from one of the four inputs: "PC VGA", "PC HDMI", "Laptop HDMI" and "HDMI".

7. HDMI 2 Video Matrix Output Connector

The video signal is output to this connector from one of the four inputs: "PC VGA", "PC HDMI", "Laptop HDMI" and "HDMI".

8. Machine Power Output Socket

It can be switched on and off manually or regularly via the PC/WEB/Android terminal of the software, or manually via the touch panel.

9. Projector Power Output Socket

It can be switched on and off manually or regularly via the PC/WEB/Android side of the software, or manually via the touch panel.

10. 2-Channel U-Band Receiver Module

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 to fulfill the needs for local sound reinforcement.

11. Amplifier Module

With amplifier output CH1/CH2 and built-in 2x25W (8Ω) amplifiers for direct connection to external passive speakers.

12. Reserved Slots

13. Network Module

With 3 RJ45 network interfaces, supporting intelligent network switch function, with optional 100M network ports to save network port resources.

14. Wired Microphone Input Port

15. Network Interface (LAN1/LAN2)

The machine is designed with dual network ports to connect to a network switch.

16. Line Input Port

17. PC VGA Audio Input Connector

18. Network Audio Input Connector

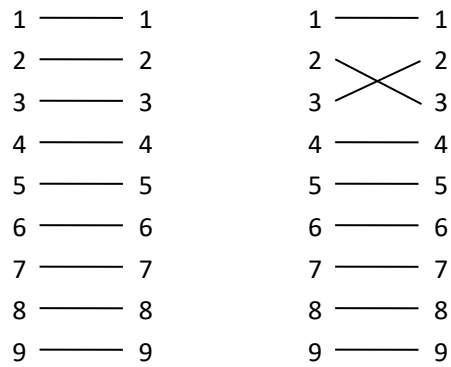
Network Audio - MIC/U-Band/PC VGA/LINE/HDMI 1 (Network Audio has the highest priority, followed by the rest.).

19. 2 RS485 Communication Interfaces

The wiring method for the RS485 communication protocol is shown in the table below:

Connectors	RS485 Connection
A1	A
B1	B
A2	A
B2	B
GND	GND

Note: The straight-through wiring method works, not the crossover type!



Straight-Through

Crossover

20. Audio Line 1 Output Interface

The audio input from the network audio/MIC/U-band/PC VGA/LINE/HDMI 1 connector is output at this interface and the volume can be adjusted on the WEB side/Android side/touch panel.

21. Audio Line 2 Output Interface

The audio input from the HDMI 2 connector is output at this interface and the volume can be adjusted on the PC/WEB/Android side of the software.

22. 4 RS232 Communication Interfaces

The wiring method for the RS232 communication protocol is shown in the table below:

Connectors	RS232 Connection
RX1	RX
TX1	TX
RX2	RX
TX2	TX
RX3	RX
TX3	TX
RX4	RX
TX4	TX
GND	GND

Note: The straight-through wiring method works, not the crossover type!

23. 4 Weak Relay Interfaces

4-way relay short-circuit output, with the 1st and 2nd ways carrying a maximum current of 5A, and the 3rd and 4th ways carrying a maximum current of 1A. **(Note: The 3rd way is a short-circuit trigger signal to control the on/off of the PC!)**

24. Electronic Lock Switch Control Interface

25. Podium Switch Control Interface

26. DC12V/1A DC Power Output

27. 2 IR Control Interfaces

- 2 IR emitter heads can be connected, with 1/2 for positive and G for negative.
- The IR learning commands are carried out via the IR

receiver port on the interface panel, generating a list of control commands that can be configured on the PC or WEB console.

- Each transmitting twisted pair can be extended by 50-80 meters with either a CAT 5 shielded cable or a two-core shielded twisted pair. Note: It is essential to use shielded wire and high-quality copper wire for the IR transmitter extension cable to enhance anti-interference capability and minimize signal attenuation for more stable control.

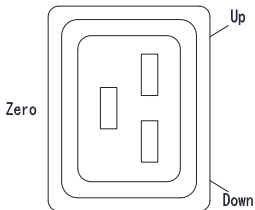
28. RS485 Communication Connection Port for the touch panel or interface panel of the system

29. I/O Control Input Interface

Trigger a scene or configuration.

30. Electric Screen Power Output Socket

The left outlet is “zero” and the right outlets are “up” and “down” respectively.



Note: “Zero” is the zero line (common terminal of the motor), “up” and “down” are the live lines, the mark “up” is for the forward connection of the motor, controlling the motor up, and the mark “down” is for the reverse connection of the motor, controlling the motor down.

31. Power Input Socket for this Machine

This machine is powered by AC220V. Please ensure that the voltage value of the power supply input to the machine matches the voltage value of the power supply of the machine.

32. Power Fuse Holder for this Machine

- F3AL250V power fuse holder.
- If the fuse is blown, please replace it with a fuse of the same type.
- If it is blown continuously, it indicates a malfunction of the equipment. Please remove the fault before replacing the fuse.