D7405

Multimedia Conference Host

Description

The Multimedia Conference Host is a highly integrated intelligent device based on an ALL-IN-ONE design concept. It integrates multiple functions, including conference audio reinforcement and audio/video processing, providing a one-stop solution for small conference rooms.

Features

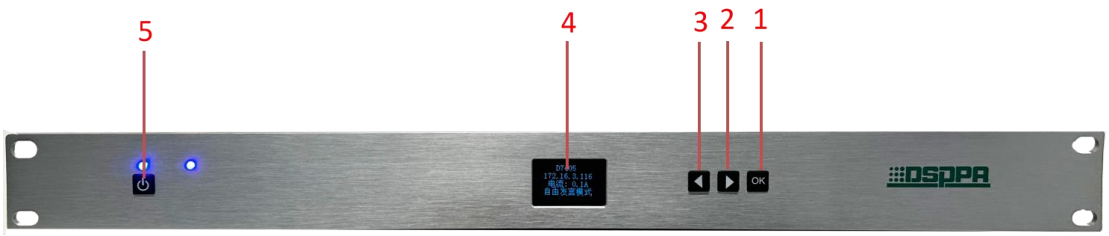
- Conference Tracking: Supports integration with a central control system to enable camera tracking. When the active speaker changes, the camera can automatically locate and focus on the speaker, ensuring that the conference image remains focused on the speaker without manual intervention.
- Audio and Video Matrix: Supports flexible combination and separation of the HDMI matrix and digital audio matrix. With built-in DSP processing and professional power amplification, the system provides high-quality conference audio reinforcement. Supports video inputs from computers, conference cameras, network IPCs, and other sources. The video matrix enables flexible source switching and display output.
- Programmable Central Control: Features an open programmable central control system supporting multiple interfaces, including RS232, RS485, IR, and I/O.
- Video Composition and Operation: Supports 4K video composition with up to six sources composited simultaneously. Users can operate the system directly through a tablet APP to easily control video switching, audio adjustment, conference recording, and other functions without complicated physical button operations.
- Video Formats: All video inputs and outputs use HDMI interfaces, supporting resolutions up to 4K with backward compatibility. The built-in video matrix supports seamless switching between inputs and outputs and provides EDID management.
- System Architecture: Adopts an advanced embedded dedicated hardware architecture, eliminating traditional hard disk drives and memory modules for enhanced security and reliability.
- Supports remote viewing of audio/video live streams, device control, maintenance, and system status monitoring.

Specifications

Model		D7405
System Architecture	Embedded System	Linux 5.10, 4 × Cortex-A76 + 4 × Cortex-A55
	Chassis	1U height
Video Interfaces	Video Input	6 HDMI inputs
	Video Output	2 HDMI outputs
Audio Interfaces	Line Input	2 RCA connectors (unbalanced inputs)
	MIC Input	2 inputs
	Line Output	1 XLR connector (3-pin balanced output)
Control Interfaces	Network	1 Gigabit Ethernet port
	Central Control	2 RS232 ports, 2 RS232/RS485 ports (selectable), 1 IR input, 2 IR outputs, 2 relay ports
	Type-C	1 Type-C port
USB Interface	USB 3.0	1 port
Video Composition	Multi-View	1 video composition channel
Network Protocols	Network Protocol	TCP/UDP
	Streaming Protocols	RTSP/RTP/RTMP
Panel Display	Front Panel	0.96-inch OLED display
Dimensions	Chassis Dimensions	483 × 274 × 45 mm
Operating Environment	Power Supply	150W (AC 220V)
	Power Consumption at Full Load	Less than 15W
	Operating Temperature	5°C to +45°C
	Storage Temperature	5°C to +45°C
	Operating Humidity	80% RH, non-condensing

Front / Rear Panel

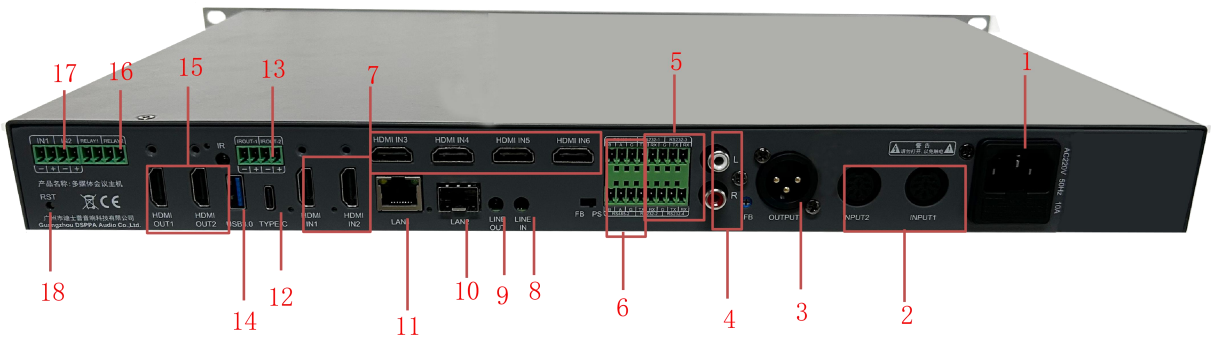
Front Panel



The front panel is shown in the figure below. It consists of an LED display, Left and Right buttons, a Home button, and a Power button.

1. Confirm Button: Used to confirm menu functions and return to the previous menu.
2. Left Button: Used to select menu functions.
3. Right Button: Used to select menu functions.
4. LED Display: Displays information such as the model, IP address, and menu options. Works with the buttons to access various functions.
5. Power Button: Used to turn the device on or off and control its power supply.

Rear Panel



1. Power Input: Supports 220V AC power supply.
2. Conference Unit Input: Two interfaces, each supporting connection of up to 40 AI microphones in total. A power expansion unit can be used for further expansion.
3. Mixed Audio Signal Output: XLR balanced output connector.
4. LINE IN: Connects to an audio source or mixer to provide line-level audio input to the device.
5. RS232 Interface: A programmable serial communication interface that can be programmed to transmit and receive data in RS232 communication format. The interface supports baud rates from 2400 to 115200 and can be connected to devices supporting the RS232 communication protocol, such as various matrix devices, projectors, and other RS232-compatible equipment.
6. RS485 Interface: A programmable RS485 serial communication interface used to connect peripheral devices for external device control.
7. HDMI 1–6 IN Interfaces: Mainly used for HDMI signal input. HDMI 3–6 support 4-to-2 selection.
8. LINE IN: Audio input interface with a 3.5 mm analog audio connector.
9. LINE OUT: Used for local audio output or monitoring, with a 3.5 mm analog audio connector.
10. LAN2 Network Interface: Optical fiber interface.
11. LAN1 Network Interface: Network interface of the device.
12. Type-C Interface: Can be connected to a computer.
13. IR Interface: Infrared interface, providing 1 IR input and 2 IR outputs.
14. USB 3.0 Interface: Used to connect the device to a computer via USB.
15. HDMI 1–2 OUT Interfaces: Mainly used for HDMI signal output.
16. RELAY Control: Provides 2 relay interfaces. The relay connections can be controlled via software.
17. I/O Interface: Supports 2 TTL interfaces. The connections can be controlled via software.
18. Reset Button: Press and hold the Reset button to restore the device to factory default settings.