

D7401

AI Digital Conference System Host



Description

The D74 Series Intelligent Digital Conference System is built on a professional ARM platform and integrates advanced DSP audio processing with high-fidelity circuit design. Offering high-quality audio transmission and reliable digital control, it provides an all-in-one solution for modern conference applications. The system includes the D74 Series Conference Host—comprising the digital conference system host and conference units—and supports features such as speech discussion, conference cascading, and seamless AI speech-to-text integration. With hand-in-hand connection via 8-core cables and cross-shaped adapters, the system ensures easy installation, stable performance, and strong anti-interference capability.

The D7401 Digital Conference System Host serves as the central component of the D74 Series, offering robust control and power distribution for up to 32 conference units. It supports multiple conference modes—including FIFO, Normal, Free, and Apply modes—as well as real-time AI transcription and remote control via TCP/IP. With features such as unit detection, configurable speaker limits, and audio input/output interfaces, the host delivers a streamlined, highly integrated solution ideal for high-end on-site sound reinforcement and intelligent meeting management.

Features

- The digital conference host can connect up to 32 conference units.
- Equipped with 0.96-inch OLED display, showing model, IP, menu, and other information, with function buttons for comprehensive control.
- Allows setting the maximum number of speakers allowed to speak concurrently (1–6).
- Offers four conference modes: FIFO mode, free mode, normal mode, and apply mode.
- Includes volume adjustment for controlling output signal levels.
- Two RCA (unbalanced) audio input ports for receiving audio signals from amplifiers or mixers.
- One XLR (3-pin balanced) audio output for connection to professional amplifiers, mixers, or audio processors.
- Supports seamless integration with AI voice transcription systems (D7601, D7604) via network connection, enabling real-time speech-to-text functionality.

- Equipped with one RJ45 network port, supporting TCP/IP protocol and full remote system control via built-in web interface.
- Includes data management functions such as speaker limit control.
- Supports screen standby mode for energy-saving operation.
- Features unit detection with both automatic and manual modes.
- Two 8-pin DIN aviation connectors for "daisy-chain" connection of conference units.
- All-metal enclosure with enhanced grounding connections; provides electrostatic discharge protection of 10kV (contact) and 15kV (air).

Front / Rear Panel



1. Power Button

Controls the power of the device.

2. OLED Display Screen

Displays information such as model number, IP address, and menu options; works in conjunction with the buttons to perform various functions.

3. Left Button

Used for menu navigation and option selection.

4. Right Button

Used for menu navigation and option selection.

5. HOME Button

Confirms menu selections and returns to the previous screen.



1. 485 Interface

- RS485 serial port for connecting camera control cables to enable camera control.

2. Ethernet Port

- Allows remote control of the conference system via TCP/IP protocol.
- Supports cascading between conference hosts.

3. RST (Network Reset) Button

- Press and hold to reset the network parameters to default (172.16.0.210).

4. Line Input

- Connects to audio source devices or mixers to provide line-level feedback audio signals to the host.

5. Audio Input Selection Switch

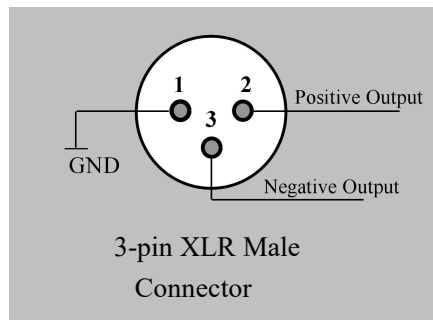
- Selects between feedback input and through signal.

6. Feedback Input Gain Adjustment

- Adjusts the volume level of the feedback input signal.

7. Mixed Audio Output (Balanced XLR Connector)

- The signal of the three pins is shown in the diagram below:



8. Conference Unit Output Interfaces (DELEGATES1–3, Two Channels Total)

- Two output interfaces support connection of up to 32 conference units in total.

9. Power Input Interface

- AC 220V power input interface.