MP9866 Digital Conference System Solution for Small and Medium-Sized Conference Rooms

I. Solution Overview

- To meet the demands of modern meeting rooms for efficient, organized, and high-fidelity audio conferencing, this solution recommends the MP9866 Digital Conference System. The system integrates digital control, high-fidelity audio transmission, and flexible meeting management, aiming to create a fully functional, stable, and user-friendly conference environment. It is suitable for various administrative meetings, academic seminars, business negotiations, and multi-purpose hall events.

Design Objectives

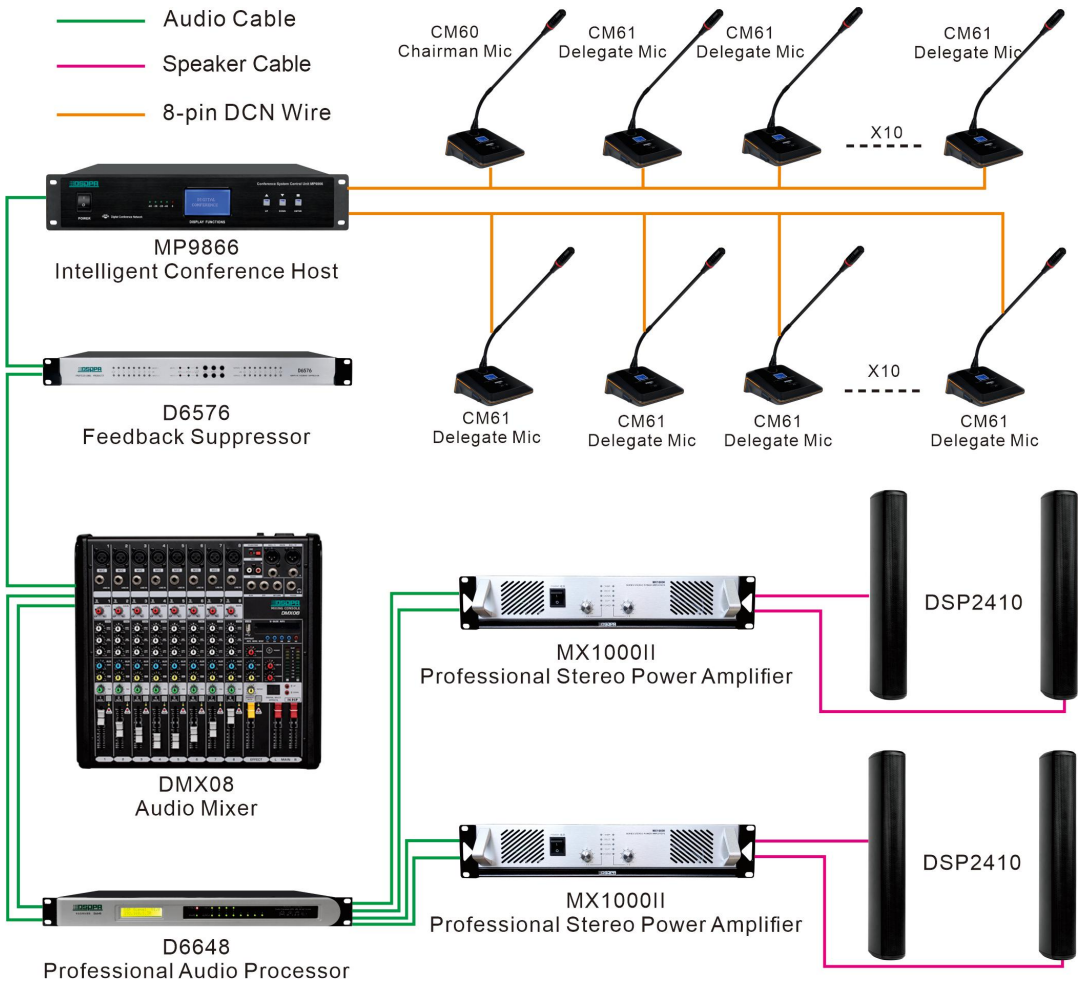
High-Fidelity Voice Transmission and Clear Sound Reinforcement: Employs full digital audio processing and DSPPA column speaker with racetrack-shaped driver units to ensure accurate voice reproduction and excellent mid-to-high frequency performance.

Flexible Conference Speech Management: Offers three speaking mode options: Automatic, Free, and Chairman Priority. The system supports 1–6 simultaneous speakers, with the chairman unit having priority control.

Simple and Reliable Integrated System: Utilizes a “daisy-chain” wiring method with dual backup via 8-core cable interfaces and RJ45 network interfaces, facilitating installation, maintenance, and expansion.

High Compatibility and Multi-Scenario Applicability: Features multiple audio input/output interfaces, supporting connections to mixers, amplifiers, and other devices, to adapt to various acoustic environments and meeting sizes.

II. Application Solution for Small and Medium-Sized Conference Rooms (120 ㎡)



No.	Model	Product Name	Quantity
1	MP9866	Digital Conference System Host	1 pc
2	CM60	Digital Conference System Chairman Microphone	1 pc
3	CM61	Digital Conference System Delegate Microphone	20 pcs
4	D6576	Professional Feedback Suppressor	1 pc
5	DMX08	8-Channel Audio Mixing Console	1 pc
6	D6648	4×8 Professional Audio Processor	1 pc
7	MX1000II	Professional Stereo Power Amplifier (8Ω; 2×150W)	2 pcs
8	DSP2410	100W Professional Conference Column Speaker with Racetrack Driver Design	4 pcs

Note: This solution is provided for reference only. For specific requirements, please feel free to contact us.

III. Solution Configuration Overview

Reference Layout for a 120㎡ Application Scenario

Conference System: MP9866 Digital Conference System

- Full Digital Audio Transmission for Superior Sound Quality: The system uses 8-core professional cables for full digital signal transmission, delivering strong anti-interference performance.
- “Daisy-Chain” Connection for Simplified Wiring: All conference units (chairman and delegate units) are connected in series through a single cable, greatly simplifying the cabling process.
- Intelligent Conference Management: Multiple Conference Modes: Supports FIFO (First-In-First-Out), Free Mode, and Chairman Priority Mode to adapt to different meeting formats.
- Speaking Unit Limitation: Allows configuration of 1–6 simultaneous speaking units, effectively controlling meeting flow and preventing disorderly discussion.
- Chairman Priority: The chairman unit holds the highest priority and can mute all delegate microphones at any time to maintain meeting order.

Sound Reinforcement System: DSP2410 Series Professional Conference Column Speakers

- Emphasizes high sensitivity, low distortion, and strong directivity for optimized speech clarity.
- DMX08 8-Channel Mixer: Provides audio input access for the meeting room.
- D6675 Professional Audio Processor: Ensures clear speech with no distortion and eliminates acoustic feedback.
- 4×DSP2410 Professional Column Speakers: Deliver uniform sound coverage throughout the room.
- 2×DX1500 Dual-Channel Constant-Impedance Amplifiers: Provide ample sound pressure levels, even sound distribution, and accurate sound imaging.

IV. MP9866 Digital Conference System

Key Highlights

- Built-in RISC high-performance CPU
- 8-core all-digital high-fidelity circuit
- High-fidelity audio processing circuit
- Time limit for speaking function
- Maximum of 120 conference units
- 3 conference modes
- Conference recording
- Chairman unit priority
- Liquid crystal display

Features

Automatic unit detection and conference recording function

3 conference management modes

Innovative speaking mode and speech time-limit function

Dual-backup conference output combining 8-core conference cable interface and RJ45 network interface

CM60 Chairman Mic

CM61 Delegate Mic

MP9866 System Host

High-speed CPU for program control

High-fidelity sound quality

Intuitive LCD interface and menu operation

2×8-core conference cable interfaces supporting up to 80 conference units; 4×RJ45 network interfaces supporting up to 80 conference units

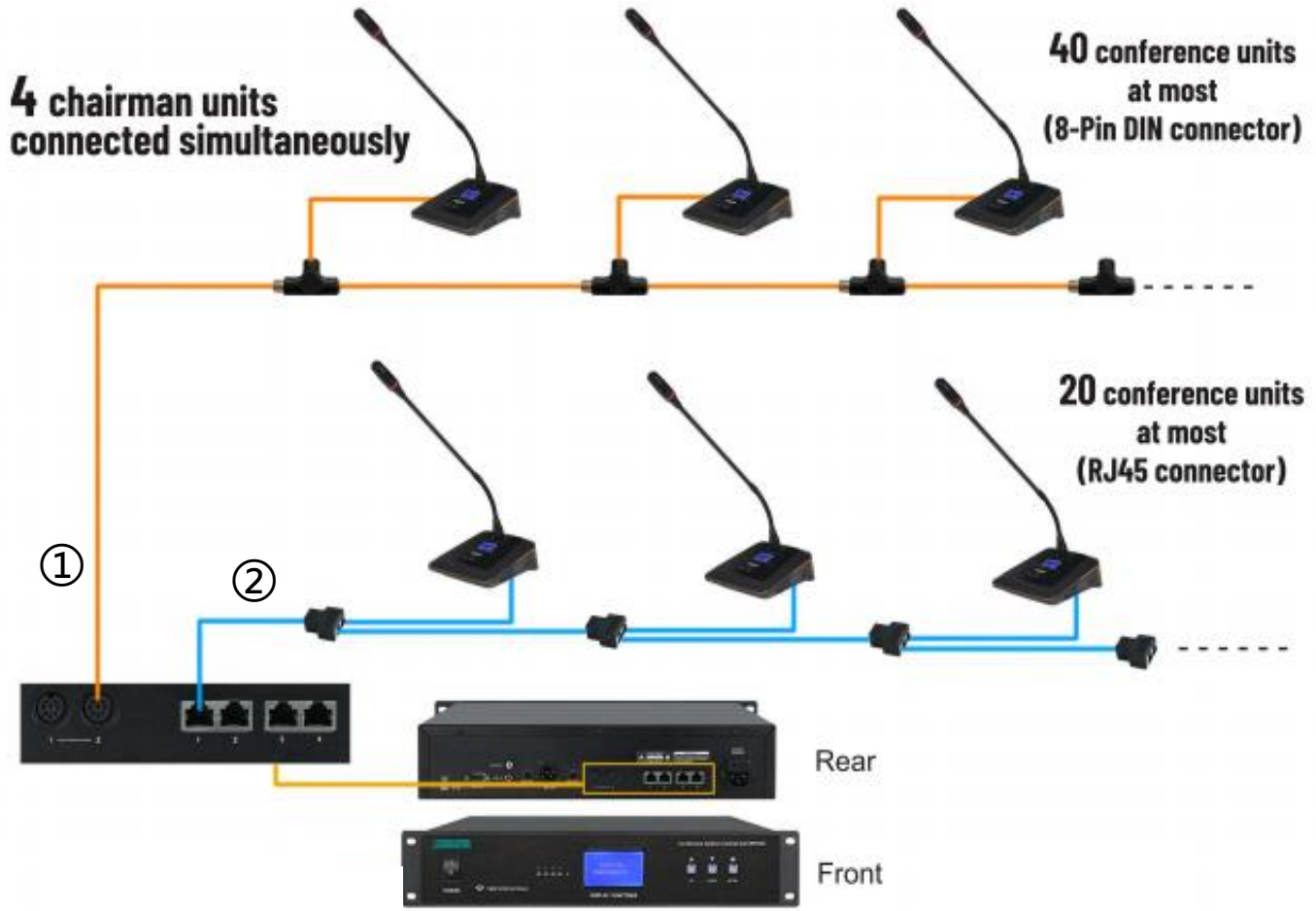
Connection Methods

Support a maximum of 120 conference units

Two Connection Options:

① Expandable via 8-pin DIN connector

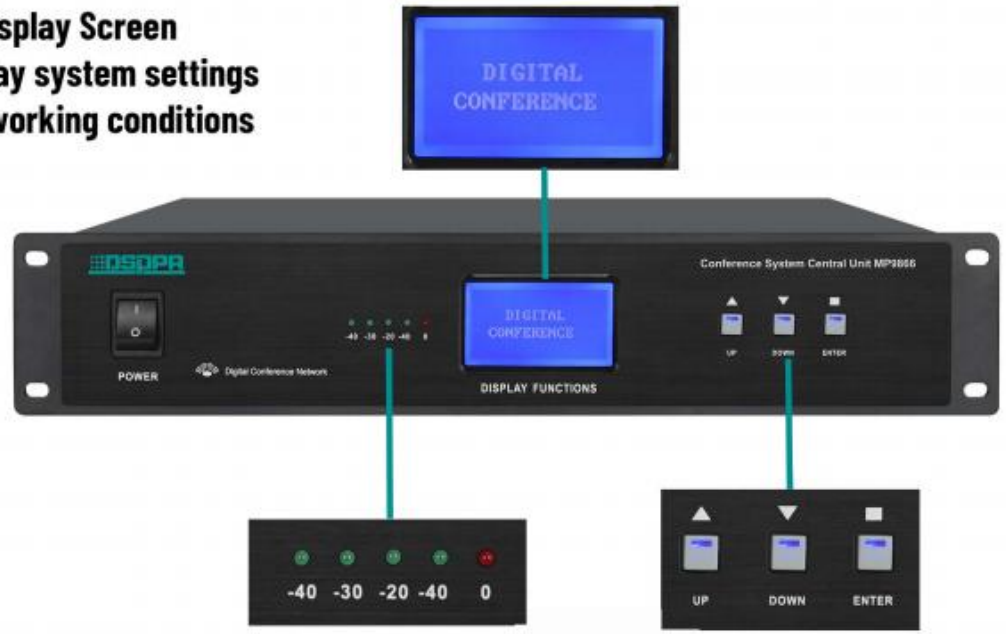
② Expandable via RJ45 connector



MP9866 Panel Description

Front Panel

Display Screen
display system settings
and working conditions

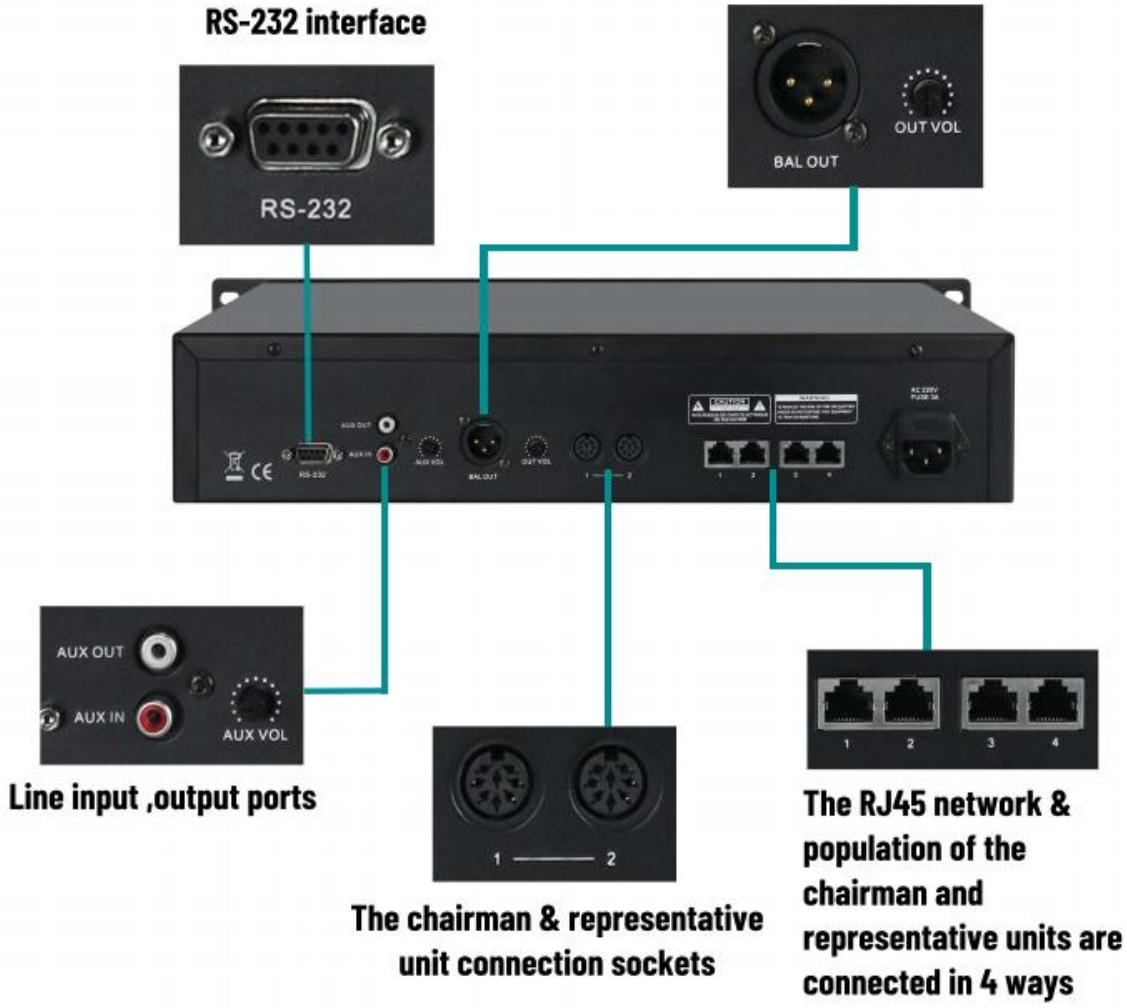


Buttons for setting and
modifying system functions

Rear Panel

System audio output interface
Output volume adjustment knob

RS-232 interface



Line input ,output ports

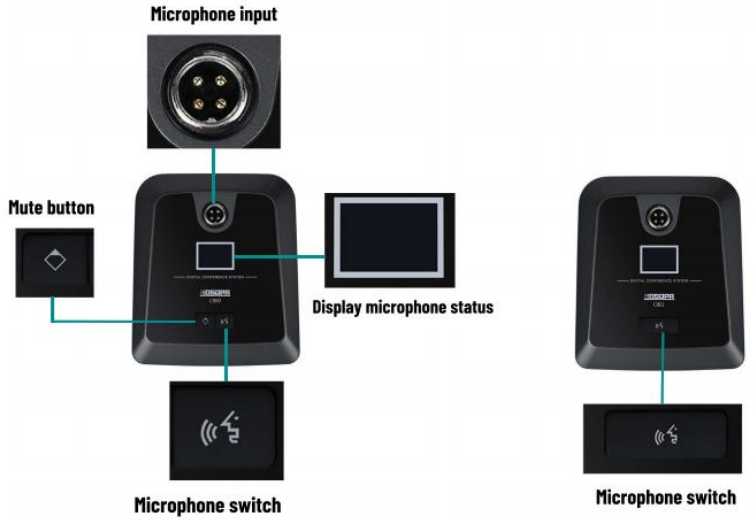
The chairman & representative
unit connection sockets

The RJ45 network &
population of the
chairman and
representative units are
connected in 4 ways

CM60/CM61 Digital Conference System Microphone

CM60
Chairman Microphone

CM61
Delegate Microphone



Rear Panel

Two Conection Options:

① Expandable via 8-Pin DIN Connector

② Expandable via RJ45 Connector

V. DSP2405 Series Professional Column Speaker

Model		DSP2405	DSP2410	DSP2415	DSP2420	DSP2430
Driver Unit	FR	2.5”×2	2.5”×4	2.5”×6	2.5”×8	2.5”×12
	HF	1”×1	1”×1	1”×1	1”×2	1”×3
Rated Power (RMS)		50W	100W	150W	200W	300W
Power Adjustment	100V	25W/50W	50W/100W	75W/150W	100W/200W	150W/300W
	8Ω	50W	100W	150W	200W	300W
Freq. Response		120-20KHz	120-20KHz	120-20KHz	120-20KHz	120-20KHz
Sensitivity		88dB	90dB	91dB	91dB	91dB
Maximum SPL		105dB	110dB	112.7dB	114dB	115.7dB
Coverage Angle		140° (H)×20° (V)	140° (H)X×20° (V)	140° (H)×20° (V)	140° (H)×20° (V)	140° (H)×20° (V)
Dimension (L×W×H)		332×75×110mm	528×75×110mm	775×75×110mm	984×75×110mm	1440×75×110mm
Net Weight		1.92kg	3.2kg	4.8kg	6.3kg	9.4kg

Driver Unit Design

- Racetrack-shaped bass driver: Equipped with a 50×90mm (equivalent to 2.5") paper-cone bass driver paired with a 1" tweeter.
- High Sensitivity & Low Distortion: The unique design offers high sensitivity and low distortion, delivering natural, smooth, and well-balanced sound quality.

Acoustic Performance

- Linear acoustic structure: Enhances mid-to-high frequency reproduction with improved directivity, providing more focused sound energy and clearer, more balanced audio output.
- Frequency response: 120Hz–20kHz across the entire series, covering key vocal and music frequency bands.
- Maximum SPL: Ranges from 105dB (DSP2405) to 115.7dB (DSP2430), suitable for medium to long-distance sound reinforcement.

Structure and Appearance

- Aluminum alloy enclosure: Sealed design for durability and reduced interference noise.
- Streamlined metal grille: Integrated with the enclosure for a modern and elegant appearance.

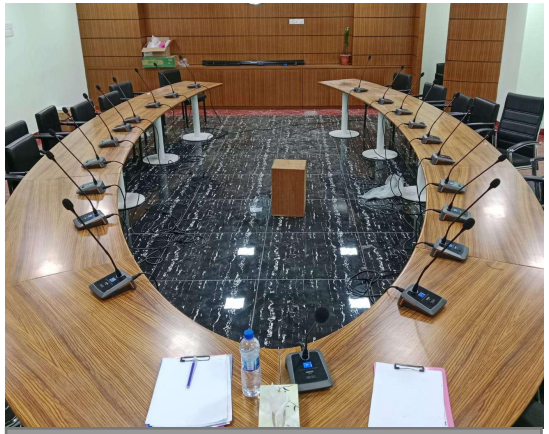
Power & Model Range

- Power options range from 50W to 300W, with a total of five models available to suit different room sizes and installation needs.

Installation & Application Scenarios

- Flexible installation: Supports multi-power level adjustments (e.g., optional 100V/8Ω configuration).
- Applicable venues: Ideal for small and medium-sized venues such as restaurants, tea houses, stations, schools, plazas, office buildings, medium-sized conference rooms, home theaters, and churches

VI. Case Studies



Prime Hospital Limited Unit-2, Bangladesh

Arab Center for Educational Research for the Gulf States, Kuwait

The Ministry of Power Branch in Tikrit, Iraq

The Ministry of Agriculture, Dodoma, Tanzania

The MP9866 Digital Conference System is a comprehensive solution that integrates advanced technology, practical functionality, and reliable performance. It not only meets the core requirements of modern meeting rooms for superior audio quality and efficient management, but also adapts to evolving meeting needs through its flexible configuration and powerful features, making it an ideal choice for enhancing meeting efficiency and overall quality.

CREATING THE BEST

SOUNDING THE WORLD

Guangzhou DSPPA Audio Co., Ltd.
Tel: +86-20-37166520
Email: export@dsppa.com
conference@dsppa.com
Address: NO.1 Xiahe Road, Jianggao,
Baiyun, Guangzhou, Guangdong, China

PA / VA Website: www.dsppatech.com
Conference & ProAV Website: www.dsppacs.com

The brochures will be subject to change without prior notice.
Copyright © Guangzhou DSPPA Audio Co., Ltd. All rights reserved.