



AI Ceiling Array Microphone DMC500

The DMC500 ceiling microphone integrates IP voice technology with PoE power supply, offering seamless cascading through IP for a streamlined, cost-effective, and adaptable solution. Unlike traditional systems that rely on mixers or DSPs, the DMC500 allows multiple units to connect effortlessly, simplifying both setup and operation while enhancing system flexibility.

This microphone features advanced AI distributed cascading technology, which enables multiple units to work together as a single, cohesive ceiling microphone system without external mixers or DSPs. Through intelligent internal communication, the system accurately identifies the speaker's location and dynamically selects the optimal microphone, ensuring clear voice capture even from a distance. This sophisticated approach maintains superior sound quality, avoiding the increased reverberation and diminished audio clarity often associated with traditional cascading methods.

The DMC500's AI noise reduction technology further enhances audio quality by eliminating a wide range of common background noises typically found in conference settings. This ensures that voices remain clear and free from distractions, creating an environment conducive to effective communication.

With 20 built-in microphones, the DMC500 excels at voice pickup within an impressive range of up to 8 meters. Its AI-enhanced features, including voice pickup optimization, de-reverberation, and full-duplex echo cancellation, contribute to its exceptional performance.

Designed for versatility, the DMC500 is ideal for small to medium-sized business and government conference rooms, as well as educational environments such as primary and secondary school classrooms. Its IP-based cascading capability supports unlimited scalability, making it suitable for large venues without compromising audio quality.

The DMC500 redefines what a ceiling microphone can achieve, delivering intelligent, scalable, and high-performance audio solutions that surpass traditional systems in both sound quality and ease of use.



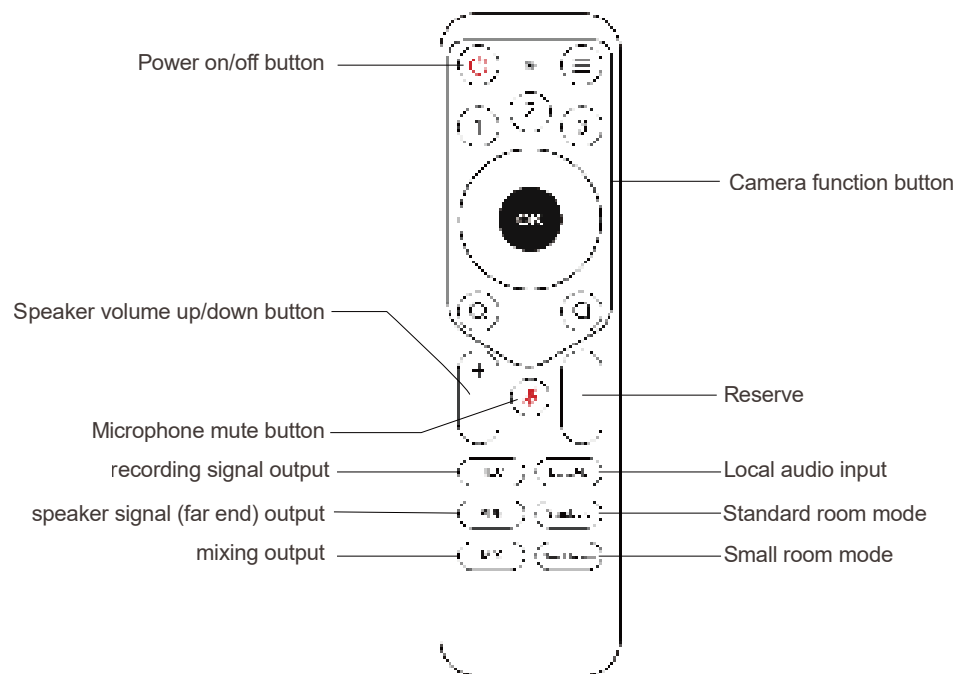
Product Features

- **IP Voice Technology:** Supports IP-based voice communication for seamless integration into modern networked environments.
 - **Distributed Cascading:** Easily link multiple DMC500 units without the need for an external mixer or DSP, offering a cost-effective solution for small to medium-sized rooms (≥40sqm).
 - **Omnidirectional Microphone Array:** Built-in 20 digital microphones with a 360-degree pickup range and a best pickup radius of 8 meters for full room coverage.
 - **AI Voice Positioning:** Uses AI to detect and track the speaker's position, ensuring the best microphone is selected for optimal voice pickup, even from a distance.
 - **AI-Powered Voice Control:** AI technology enhances or suppresses speaker voices in specific areas, ensuring clarity and minimizing distractions.
 - **AI Noise Cancellation:** Effectively suppresses more than 300 environmental noises such as air conditioning, keyboard tapping, and background chatter, providing clear audio.
 - **AI De-Reverberation Technology:** Reduces echo and reverberation in large or acoustically challenging spaces, ensuring high-quality voice clarity in any environment.
 - **Full-Duplex Echo Cancellation:** Eliminates echo during two-way conversations, enhancing audio clarity during calls or conferences.
 - **Automatic Gain Control:** Adjusts microphone sensitivity in real-time to maintain consistent audio levels, ensuring clarity for all participants.
 - **Customizable Room Mode:** Offers different room modes for optimizing microphone performance depending on the room size and acoustics.
- **Power over Ethernet (POE):** Enables both power supply and data transmission through a single network cable, simplifying setup and reducing clutter.
 - **IP cascading:** Support unlimited quantity of cascades.
 - **PC Software Management:** Provides easy-to-use software for remote configuration and management, allowing users to adjust settings and monitor the system.
 - **Camera Integration:** Supports RS232 interface to control external cameras, with sound localization providing automated camera tracking for enhanced video conferencing.
 - **Sound Source Localization (DOA):** Provides accurate sound source tracking, improving overall conference experience by ensuring precise microphone allocation based on speaker position.
 - **Infrared Remote Control:** Users can easily control microphone on/off, volume adjustments, and other settings with an intuitive remote control.
 - **LED Status Indicators:** Clearly shows working status, mute settings, and pickup radius modes through visible LED indicators.
 - **Multiple Audio Interface Support:** Compatible with USB and Line in&out for simple audio communication with PCs and other devices, making it versatile for various setups.
 - **Flexible Mounting Options:** Designed for ceiling grid or suspension mounting, offering versatile installation options to suit different room layouts.
 - **Optional External Power Adapter:** For flexible installation and connection, users can choose an optional power adapter for different power supply needs.
 - **Firmware upgrade:** Device firmware can be updated through online.

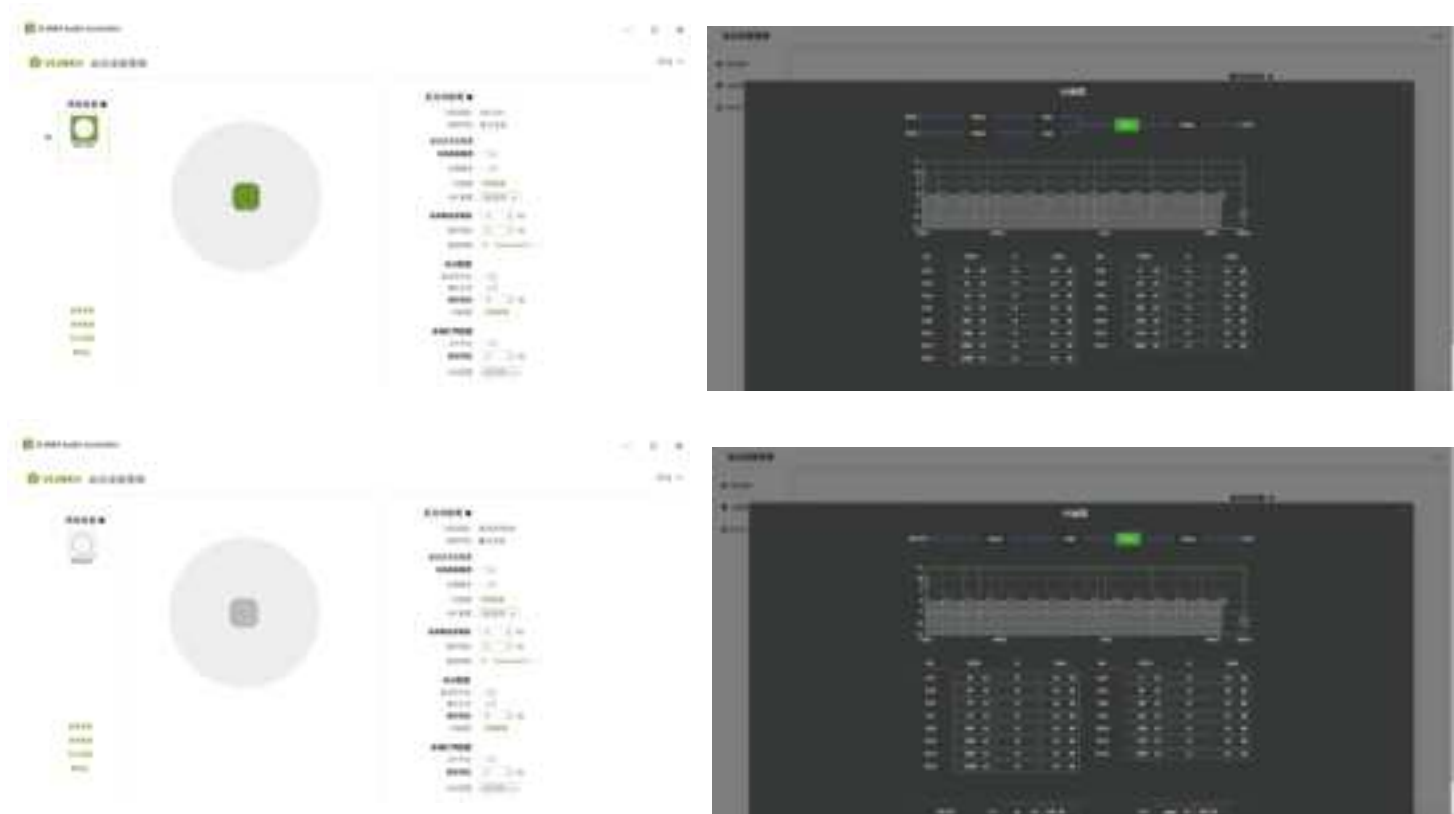
Technical Specification

	DMC500
Microphone Type	Omnidirectional Microphone
Built-in Mic	20
Pickup Distance	8 Meters Radius
Pickup Direction	360°
Sensitivity	-26 dBFS
Signal to Noise Ratio	>95 dB (A)
USB Protocol	Support UAC
DSP	✓
AI Noise Reduction	✓
AI de-reverberation	✓
AI Voice Pickup	✓
Technical Parameters	Bidirectional Noise Compression (NC), Noise Compression Reaches 18dB Automatic Direction finding Technology of Intelligent Microphone (EMI) Automatic Gain Control (AGC)

Remote Controller Instruction



UI Interface Description



DMC500

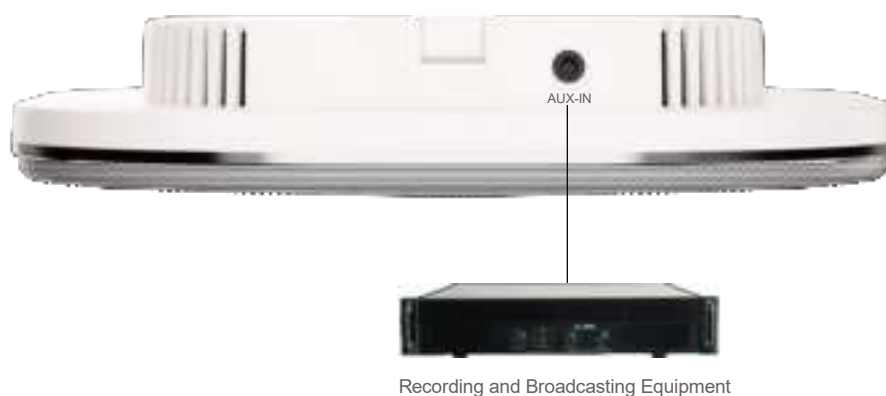
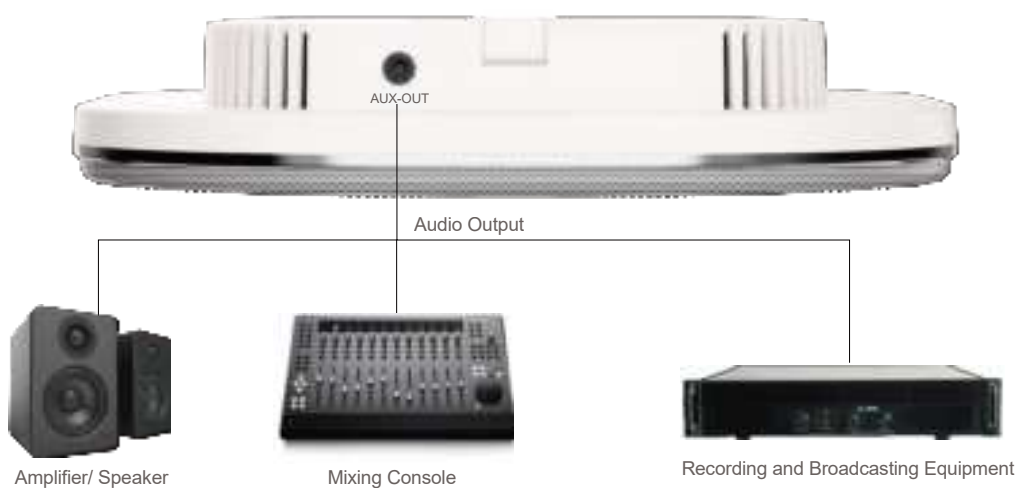
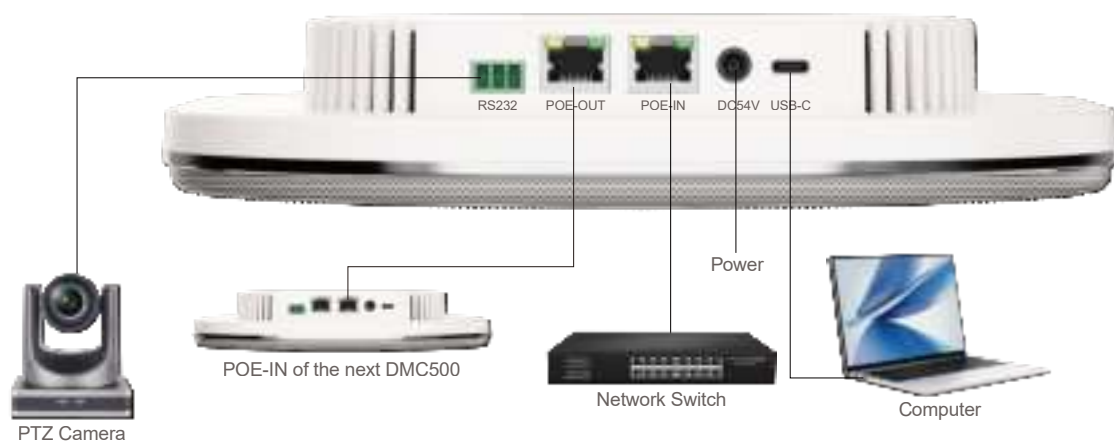
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DSP imbedded for sound reinforcement

| Collaboration

| Directional coverage

Interface Description



DMC500

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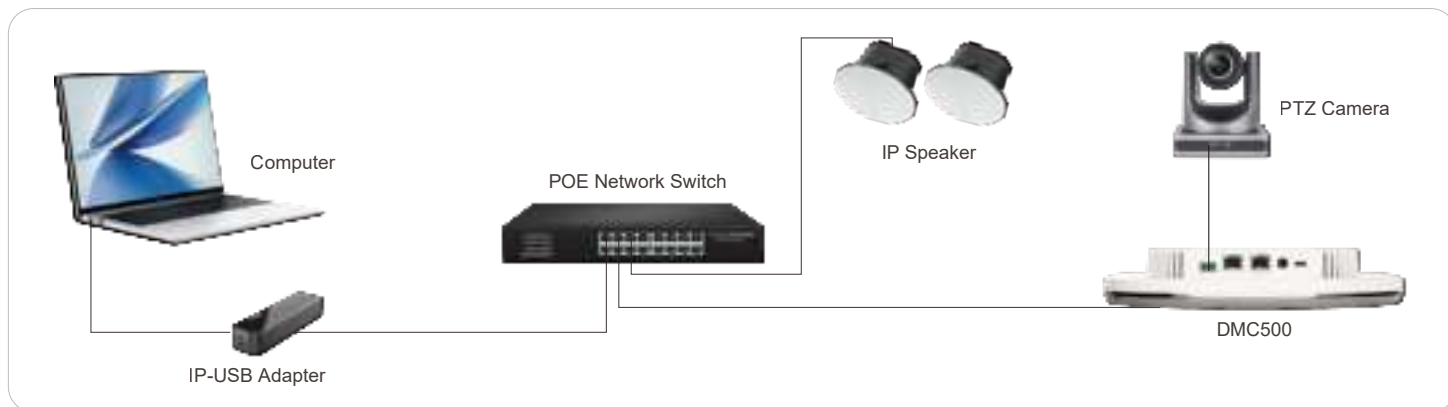
DSP imbedded for sound reinforcement

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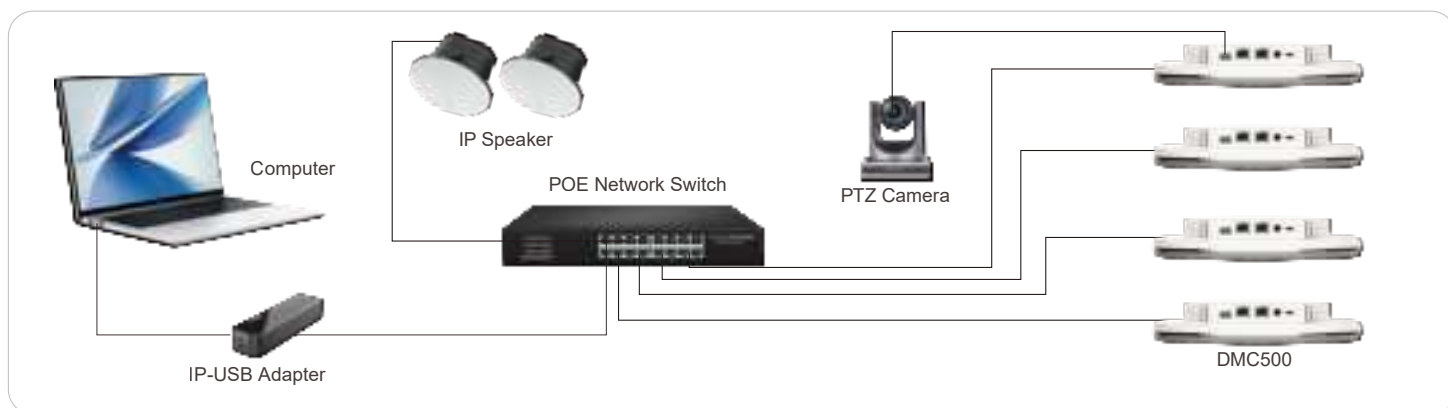
| Directional coverage

Application Solution

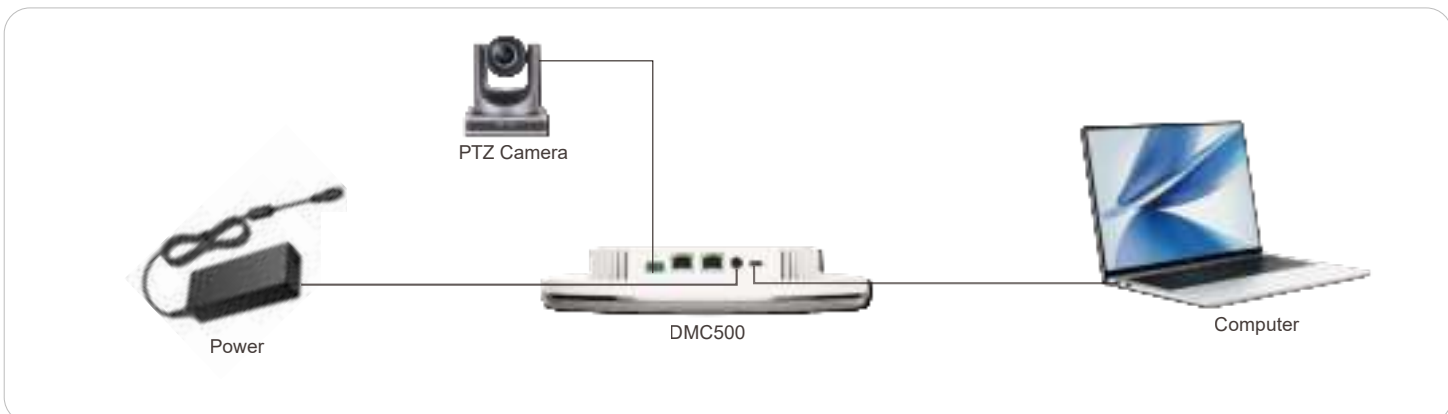
● One Unit-Application in POE network



● Multiple DMC500s can be cascaded and used in parallel in POE network



● One Unit- DMC500 application with power adapter



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- Multiple DMC500s concatenation uses a power adapter and is applied in series

