Ethereal Inside Audio Processor

B21M

USB 2.0 | Cascade Microphones | Tencent Ethereal Inside | Plug and Play

B21M is an audio processor designed for classrooms, conference rooms, courts, and churches. It supports up to 8 digital array microphone inputs, accurately capturing sounds from all directions. With Tencent Ethereal Inside intelligent audio algorithms and dual embedded chip co-processing technology, it delivers clear and natural sound quality.

Features

▼ Professional Audio Processing Technology
It adopts dual-embedded chips for collaborative processing. Its advanced architecture and strong computing power provide professional digital audio processing, and the system is safe, stable, and reliable.

▼ Tencent Ethereal Inside Audio Algorithm
The device provides an immersive user experience with built-in AI audio algorithms like Tencent Ethereal Inside Intelligent Noise Reduction, Auto Gain, and Echo Cancellation.

▼ Plug and Play
Featuring standard USB 2.0 and 3.5mm audio ports, along with a network digital audio DMIC, the device is plug-and-play, requiring no tuning.

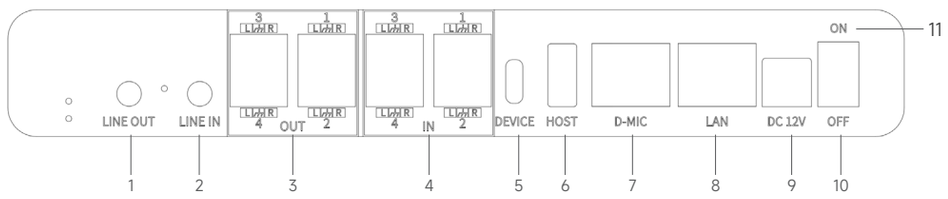
▼ Cascade Microphones
The processor supports 8 digital microphone cascade inputs and USB audio inputs and outputs. It also supports 5 linear inputs and outputs and can access wireless microphone (B21M wireless version).

Product Specification

▼ Hardware Interface

Network Interface	2* RJ45, 1 uplink LAN interface, 1 downlink cascade network digital audio DMIC interface, up to 8 cascade microphones
USB Interface	2*USB, 1 DEVICE interface, as a USB audio device connected to a USB host (such as a PC). 1 HOST interface, as a USB host connected to a USB device
Audio Interface	4 INPUT Phoenix terminal interfaces, 4 OUTPUT Phoenix terminal interfaces, 1 3.5mm analog audio input, 1 3.5mm analog audio output
Power Interface	DC 12V
Wireless	Optional, reserved for expansion (wireless version)

Interface Diagram



1 —— LINE OUT
2 —— LINE IN
3 —— IN
4 —— OUT
5 —— DEVICE
6 —— HOST
7 —— D-MIC
8 —— LAN
9 —— DC 12V
10 —— OFF
11 —— ON

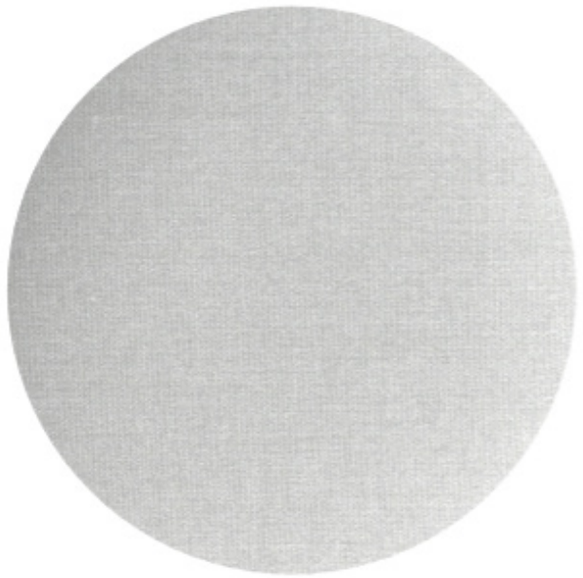
Microphone

Ethereal Inside Cascade Array Microphone

M710T

Microphone Arrays | Noise Suppression | Echo Cancellation | POE

M710T is a cascade array microphone designed for remote video conferencing. It features Tencent Ethereal Inside audio processing and cascade digital microphones for intelligent echo cancellation and noise suppression. The microphone enhances audio clarity, with adaptable layout options ensuring clear sound and a natural communication environment.



Features

▼ Digital Microphone Arrays
The circular microphone array design with a high signal-to-noise ratio accurately captures sounds from various directions, enhancing sound pickup clarity and quality.

▼ Noise Suppression
Based on the deep learning model, it efficiently removes various noises, significantly enhancing the voice signal-to-noise ratio. It can eliminate over 300 noises and deliver clear audio, making remote conversations more lifelike.

▼ Echo Cancellation
The microphone's echo cancellation technology eliminates echoes, ensuring low-latency communication with no echo leakage or near-end voice suppression and smooth interaction among all participants.

▼ PoE
It supports PoE cascade for up to 8 devices, achieving ultra-low latency and distributed pickup. Multiple microphones can be cascaded according to the conference room, ensuring a clear and balanced pickup effect.

▼ Simple Deployment
Support ceiling hanging and other installation methods, flexible and rapid deployment, reduce operation and maintenance costs.

Product Specification

▼ Basic Parameters

Microphone Types	Omnidirectional Microphone
Microphone Array	Built-in eight high SNR microphones in a circular array for 360-degree omnidirectional sound pickup
Signal-to-Noise Ratio	94 dB SPL @ 1 kHz, 68 dB(A)
Sensitivity	94 dB SPL @ 1 kHz , -35 dBFS
Echo Cancellation	Support
Noise Suppression	Support
Gain Control	Support

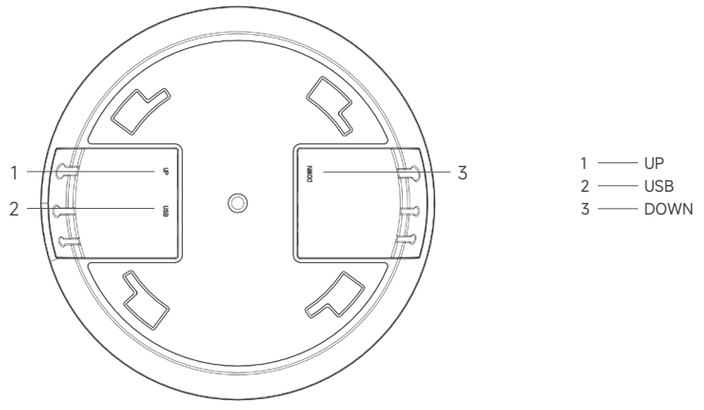
▼ Hardware Interface

Ethernet Port	RJ45 upstream and downstream level networking port
USB Interface	USB debugging port (Type-C)

▼ Cascade Function

Cascade Mode	PoE
Cascade Quantity	8 Cascade

▼ General Specification

Power Supply Mode	PoE Cascade
Installation Method	Ceiling Mount
Bare Machine Size	Φ 170 mm × H 40 mm

Interface Diagram