MCH-TCA

Cascading Omnidirectional Digital Array Microphone

6 Microphone Array | Audio Algorithm | 6 level Cascade | PoE | Double Talk

Cascade digital array microphone, up to 3mters voice pickup, minimal configuration, plug and play, support max 6 microphones cascading over PoE, can cover the demand of large conference room.



Audio Parameters

Microphone Type	Digital Array Microphone
Microphone Array	6 omnidirectional microphones form a circular array for 360 degree omnidirectional pickup
Pickup Distance	3m
Sensitivity	-38 dBFS
Signal Noise Ratio	65 dB(A)
Frequency Response	50Hz - 16kHz
Sampling Rate	32K sampling, high-definition broadband audio
Automatic Echo Cancellation (AEC)	Support
Automatic Noise Suppression (ANS)	Support
Automatic Gain Control (AGC)	Support

Cascade Function

Cascade Mode	PoE network cable

Hardware I/O

Network Interface	RJ45 up and down cascade network interface
USB Interface	USB audio interface (Type-C), support UAC1.0 protocol, audio data communication, software upgrade and parameter configuration
Analog Audio	AUX1 , AUX2 line audio input and output

Generic Spec

Power Input	PoE cascade 48V power supply, support IEEE 802.3 at standard / USB 5V 500mA (single)
System	Windows / Mac / Linux
Installation Method	Desktop, lifting, wall mounted, ceiling mounted
Dimension	Φ 170mm × H 40mm
Net Weight	370 g

Features

Digital Array Microphone
High SNR ring microphone array design, clear pickup from long distance. Let the speaker move around more freely in the room and get rid of the constraints.

Blind Beamforming; Automatic Alignment to Speaker
With blind beamforming technology, precise positioning, adaptive sound field environment can achieve voice enhancement and better anti-interference ability.

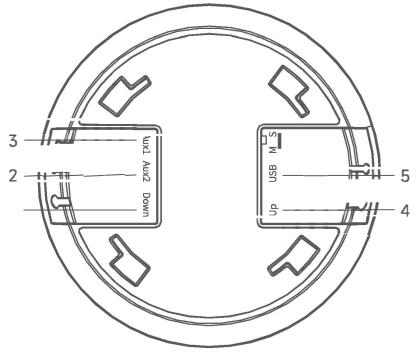
Smart Audio Algorithms; Clear Natural Sound
Built-in powerful audio processing unit, ultra-low signal processing delay; Adaptive fast convergence algorithm, advanced technologies such as voice intelligent tracking, intelligent noise reduction, echo cancellation, automatic gain, and de reverberation, dual talk without suppression, making it easy to listen in noisy environments.

PoE Cascading; Even Coverage of Conference Room Pickup
By cascading multiple PoE cables, distributed sound pickup and interaction can evenly cover the space of large and medium-sized conference rooms.

Standard Interface, Plug and Play
Adopting the hot adhesive fabric wrapping process, the product can flexibly change the appearance color and pattern, adapt to various classroom decoration styles, integrate with the environment, and have a soft and natural visual effect, easily achieving seamless application in the classroom.

Flexible Installation for Lifting/Ceiling/Wall Mounting
Support multiple installation methods such as desktop and lifting, flexible and fast deployment, and reduce operation and maintenance costs.

Interface Diagram



1 —— 3.5mm
2 —— 3.5mm
3 —— RJ45
4 —— PoE
5 —— Tpye-C