

iSpeaker A20

USB Omnidirectional Speakerphone

Datasheet V1.0



Introduction

The iSpeaker A20 is a high-fidelity speakerphone consists of one host speakerphone and two satellite mics, with minimal configuration and setting, plug and play. The host speakerphone is equipped with four high SNR(Signal to Noise Ratio) microphone array, with the built-in AI beam-forming algorithm, it can easily and precisely locate the source of the sound. Two satellite microphones can enhance the the voice pickup range for larger room use. A20 adopts the advanced AI audio algorithm, can effectively eliminate the background noise (cough, typing, clicking and etc.), otherwise, it supports full duplex call, echo cancellation, ensure a clear communication and bring extraordinary experience for conferencing users.Other than a



microphone, A20 is also remarkable being a speaker, with the well-designed speaker bar, it can deliver a high fidelity sound.

Features

4+2 Digital microphone array

A20 host speakerphone is equipped with four high SNR(Signal to Noise Ratio) microphone array, with the built-in AI beam forming algorithm, can precisely locate the source of the sound. Two satellite microphones can enhance the the voice pickup range for larger room use, the max voice pickup range could be 100 m².

Exquisite design

Aluminum body with silvery painting, delicate and fit the conferencing scenario.

Next generation AI noise reduction

In the video conferencing scenario, there are various background noise when we are speaking, like the mouse clicking, knocking, fan, typing and etc.). A20 adopts the advanced AI audio algorithm, can effectively eliminate the background noise and ensure a clear communication.

Plug and play, tidy cable management

With the minimal configuration, plug and play, allow user to quick deploy the conferencing system. Tidy cable management, away from the messy desk.

New generation AI Echo cancellation

The A20 is equipped with an echo cancellation system that combines traditional signal processing as well as the latest deep learning network (CrossNet). In order to improve the generalization ability of the system and ensure the subjective hearing and speech recognition, the R&D team uses a large amount of voice data to take into account the subjective hearing and speech recognition accuracy to ensure A20 audio performance. Now the near end single talk sound quality, far end single talk echo cancellation, double talk sound quality and Echo cancellation, speech recognition accuracy and other indicators have reached the industry-leading level.

Professional acoustic design

A20 is equipped with a professional high-fidelity acoustic design sound box, with well-tuned tweeter and woofer units, can deliver clear, natural sound.

Spec

Model number	iSpeaker A20
Product name	USB Omnidirectional Speakerphone
Cover area	20-100 m ²
Attendance	6-20 attendees
Connection type	USB2.0
Microphone	
Microphone type	Omnidirectional digital microphone
Microphone array	6*Built-in microphone (Host Mic:4*MEMS mic, Ext Mic:2*MEMS mic)
Pickup distance	Effective pickup radius 10m (Ext microphones work mode)
Frequency response	50Hz~16kHz
SNR	68dB
Sensitivity	-35dBFS 94dB SPL @1KHz
Speaker	
Speaker type	Full frequency speaker
Consumption	15W
Frequency range	50Hz ~ 20kHz
Volume	89dBA @1m
THD total harmonic distortion	<3%
Audio	
Audio feature	32K sampling rate, HD broadband audio, full duplex voice
USB protocol	UAC2.0
AEC	Support, AI-driven
ANS	Support, AI-driven, Maximum noise suppression: 90dB
AGC	Support, Intelligent gain adjustment within 10 meters, clear sound pickup
Reverberation suppression	Support, AI-driven
Interface	
USB Type C port	1*Type C, for PC connection, 1.0m cable 2*Type C, for external mic connection, 2.0m cables
Power supply	DC12V/3A, external PSU for power supply
Button	Touch-button (Volume+/-, Call On/off, Mute, with indicator light)
General spec	



Size	150m*150mm* 89mm (host mic), 80m*80mm*25mm (Ext mic)
Weight	Host mic: 1.23kg, Ext mic: 0.13kg
Environment	Temp. : 0°C ~ 40°C (Operation), -40°C ~ 60°C (None-operation) Humidy : 45% ~ 90% (Operation), 30% ~ 90% (None-operation)
Certification	CE, RoHS, FCC
Packing list	1*Host speakerphone 2*Ext microphones 1*USB cable for host microphone 2*USB cables for ext microphone 1*AC adapter 1*Manual