# Microphones

## Smart Conferencing Speaker phone
### HDA10

6 Microphone array  
AI Reduce noise  
Speaker  
USB  
One Drag Two Cascade
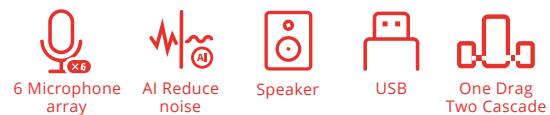
New generation speakerphone,equipped with four high S/N beam forming microphones and two extension microphones, built-in advanced audio algorithms can support AI echo cancellation and noise reduction,impressive sound performance, large voice pickup range can cover the demand of a large conferencing room.

## Features

### Fashionable Business Appearance
All aluminum alloy box, metallic silver color scheme, highly textured, suitable for various business scenarios such as meeting rooms and offices.

### 4+2 Digital Array Microphone
The host is equipped with four high SNR omnidirectional Microphone array, which can locate the speaker's direction and position. Through beamforming algorithm combined with AI technology, high-quality audio can be obtained to ensure smooth remote meetings. At the same time, there are two extended microphones as standard, enabling remote pickup to support large conference rooms.

### New Generation AI Echo Cancellation System
Equipped with a new generation of traditional signal processing and deep learning echo cancellation system, using highly robust traditional signal processing algorithms and integrating the latest deep learning network (CrossNet), it achieves the effects of both echo cancellation, noise reduction, and ensuring speech quality.

### New Generation AI Audio Noise Reduction Technology
Adopting multi microphone extraction technology with self positioning target speakers, it can shield common conference noise such as keyboard, mouse or table tapping, fan sound, air conditioning sound, etc. During full duplex calls, it can achieve dual talk without pressure and clear calls, allowing attendees to focus more on the conference content discussion.

### Professional Design of Sound Chamber
High fidelity acoustics is used to design the sound chamber, and the tweeter and bass speaker units are matched, and professional sound effects are used to tune. When playing music as a desktop audio, the bass is thick, the tweeter is thorough, the voice is clear and natural, and the voice is more exquisite.

### USB Plug and Play, Hidden Cables, Clean Desktop
Equipped with standard USB2.0 interface, compatible with Type-A/C connection, device plug and play, and compatible with various mainstream conference software.

## Product Specification

### Microphone

| | |
|---|---|
| Microphone Type | High signal-to-noise ratio digital silicon microphone |
| Microphone Array | Built in six (4+2) MEMS microphones |
| Microphone Range | 360 ° omnidirectional pickup |
| Polar Distance | Main microphone: 3m  Extended microphone: 2m |
| Sampling Rate | 32 KHz high-definition broadband audio |
| Effective Frequency Range | 50Hz ~ 16kHz |
| Signal to Noise Ratio | 94 dB SPL @ 1 kHz ， 68 dB(A) |
| Sensitivity | 94 dB SPL @ 1 kHz ， -35 dBFS |

### Speaker

| | |
|---|---|
| Speaker Type | High frequency × 1+Low frequency × 1 |
| Rated Output Power | 15W |
| Effective Frequency Range | 50Hz ~ 20kHz |
| Volume | 89 dBA @ 1m |
| THD | < 3% |

### Audio

| | |
|---|---|
| Noise suppression | AI noise reduction, eliminating various stationary and non-stationary disturbances  Noise, maximum background noise suppression: 90 Db |
| Full-duplex | Full duplex voice |
| Echo Cancellation | AI algorithm for echo cancellation |
| Gain Control | Intelligent gain adjustment control within 10m, clear pickup |
| Reverberation Suppression | Using AI algorithm to reduce reverberation |

### Hardware interface

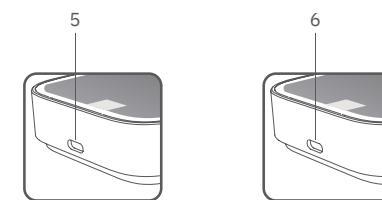| | |
|---|---|
| Power Supply Mode | Power：DC12V/2A，External power supply to power the microphone  Operating Frequency：50Hz / 60Hz |
| Supportive System | Windows / Mac / Android / Linux |
| USB Interface | USB Type-C 2.0×3 (PC×1, external mic×2 ) |
| Pilot Lamp | Circular indicator strip with multiple color combinations, allowing users to easily identify the current working status of the microphone in the product, making operation convenient and concise |
| Key | Tap the buttons (volume+, volume -, mute, hang up, dial) |

### Generic Spec

| | |
|---|---|
| Product Dimension | Main microphone：150mm (L) × 150mm (W) ×89mm (H)；Extended microphone：80mm (L) × 80mm (W) × 25mm (H) |
| Package Dimension | 297mm × 248mm × 125mm |
| Weight | Main microphone：1.23 kg  Extended microphone：0.13 kg × 2 |
| Environmental Requirements | •Temperature：0℃ ~ 40℃ (operating state), -40℃ ~ 60℃ (non-operating state)  •Relative humidity：45% ~ 90% (operating state), 30% ~ 90% (non-operating state) |

## Interface Diagram
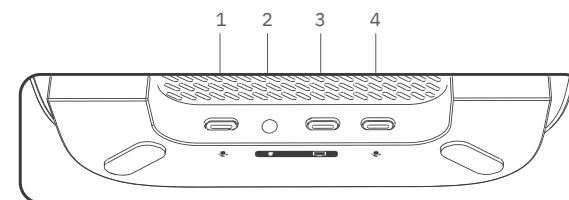


1 —— Extended Microphone  
2 —— Power Supply  
3 —— USB  
4 —— Extended Microphone  
5 —— Extended Microphone  
6 —— Extended Microphone