

Specification

Product Name: Digital Array Conference Microphone

Product Model: HY-8000CS1/HY-8000DS1

Document Version: A/1 (2024.4.15)

Production Department: Product Department

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1、Product Overview

1.1 Product Image



1.2 Dimensions and Weight

Microphone dimensions (LxWxH)	284×63×50mm
Packaging dimensions (LxWxH)	310×100×90mm
Weight	Net weight 0.9 kg, Gross weight 1.78 kg
Packaging	Foam + Carton

2、Product Specifications and Parameters

2.1 Product Description

It utilizes advanced and stable "IRIN" chips and DSP/DDOV digital conference technology for digital signal transmission and processing, conforming to the IEC60065 international standard. The gooseneck-free, streamlined desktop design enhances unobstructed communication among participants and provides better visual effects. It establishes a personal pickup channel and range, ensuring consistent sound pressure levels during discussions or speeches. The hidden adjustable gain knob allows for an optimal pickup distance of 80-100 cm. The unit is equipped with 17 gold-plated 9.7 mm condenser pickup heads, which utilize lateral sound source and angle array technology to capture every detail of the sound, with a frequency response of 30Hz-20KHz. It supports three types

of identity permissions and allows online application for modifying unit identities, enabling the reassignment and configuration of chairman, VIP, and delegate units. The full aluminum alloy body is embedded with a Mohs hardness level 6 touch glass panel, offering waterproof and dustproof capabilities to prevent any disruptions from accidental spills during meetings.

2.2 Functional Parameters

1. Utilizes advanced and stable "IRIN" chips and DSP/DDOV digital conference technology for digital signal transmission and processing.
2. Built-in 17 gold-plated 9.7 mm condenser pickup heads with lateral sound source and angle array technology to effectively capture every sound detail.
3. Gooseneck-free and streamlined desktop design enhances unobstructed communication among participants and provides better visual effects.
4. Unique cavity and integrated pickup steel mesh design, combined with pickup correction technology, accurately controls pickup quality and angle, avoiding acoustic feedback and howling.
5. High-sensitivity pickup design with built-in automatic gain control (AGC) function, offering an effective pickup distance of 60-100 cm.
6. Equipped with the FTC334C professional capacitive touch sensing chip, featuring virtual touch buttons that operate silently without mechanical noise and offer a long lifespan.
7. Full aluminum alloy body embedded with a Mohs hardness level 6 touch glass panel, offering waterproof and dustproof capabilities, protecting the equipment from spills during meetings.
8. Built-in digital circuit excitation chip ensures stable unit voltage, allowing all pickup heads to operate optimally.
9. Utilizes a 150° pickup angle, providing a broader pickup range, ensuring sound quality whether seated or standing.
10. The unit's base is equipped with two large, thickened foam pads to effectively reduce tabletop knocking sounds, preventing non-vocal sounds from being transmitted.
11. Establishes a personal pickup channel and range, ensuring consistent sound pressure levels during discussions or speeches.
12. Hidden adjustable gain knob allows for an optimal pickup distance of 80-100 cm, with no restrictions on unit placement.

13. Equipped with a 160×32 graphic OLED display, capable of showing system ID, speaking time, and other information.
14. Features speech timing and timed speech functions, supporting dynamic display of speaking time and the ability to set countdown speaking time.
15. Adopts high-fidelity lossless audio transmission technology with a 48KHz audio sampling rate, ensuring sensitive pickup, clear speech, and a frequency response of 30Hz-20KHz.
16. Features three indicator colors: red for normal speaking, green for VIP unit speaking, and yellow for ID state.
17. Intelligent audio detection function automatically inversely attenuates audio when two adjacent units are close to each other, preventing howling.
18. Supports "ring hand-in-hand" connections with built-in professional 8-core or CAT5 cables, with cables featuring full aluminum foil and waterline shielding to effectively prevent electromagnetic interference.
19. Supports eight conference modes: number limitation, FIFO (first-in, first-out), LIFO (last-in, first-out), chairman permission (request to speak), voice activation, time-limited speech, queue speaking, and free discussion.
20. The number of speakers can be set to 1/2/3/4/5/6/7/8/9, with no limit for the chairman and VIP units, and all units can be opened in free discussion mode.
21. Supports multiple internal communication and conference service functions, allowing conference units to send requests for tea, paper, pens, and other services.
22. When paired with high-definition cameras, it enables automatic tracking of speakers and automatic switching of camera angles, supporting screen freezing and tracking of the same conference unit by multiple cameras.
23. Supports the connection of up to 150 chairman units, with chairman units having the ability to control conference order and priority speaking rights, including the ability to mute other delegate units currently speaking.
24. Features a chairman-specific mode, supporting Web application service screen processing for delegate unit speaking requests, allowing the chairman to approve or deny delegate unit speaking requests.

25. Features three types of identity permissions and supports online application for modifying unit identities, allowing the reassignment and configuration of chairman, VIP, and delegate units.
26. Any chairman or delegate unit can be designated as a VIP unit, with VIP units having no speech restrictions, and up to 150 VIP units can be configured.
27. The system has an automatic detection function that can detect the number of online chairman units, VIP units, and delegate units, providing clear visibility of the system's operating status.
28. Supports hot-swapping with live wires, automatic repair, and quick system fault location without affecting the operation of other equipment.
29. Supports multi-language menu display, including Simplified Chinese, Traditional Chinese, and English, with customizable menu language options based on requirements.
30. Has strong anti-interference capabilities, effectively isolating interference from mobile phones, radio waves, Bluetooth, WiFi, etc., ensuring no noise is generated during incoming calls.
31. Equipped with a 3.5 mm headphone jack for conference participants to monitor the meeting, with adjustable listening volume.

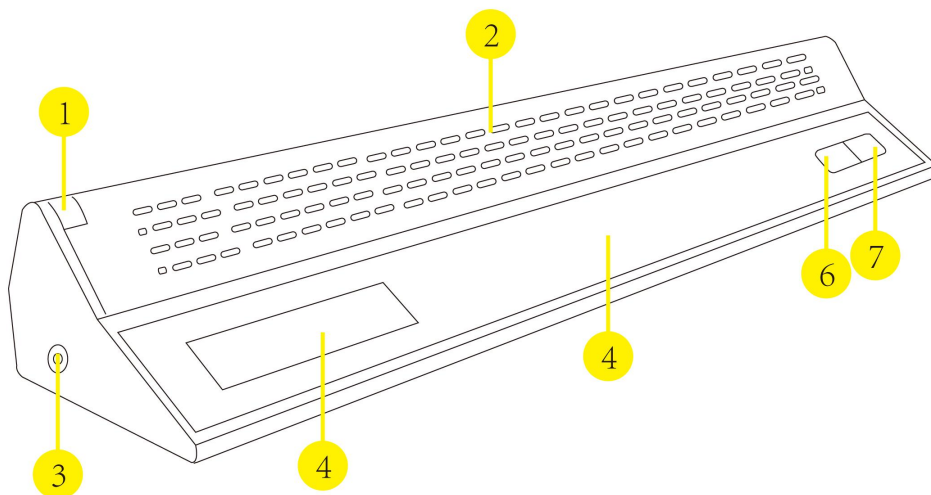
2.3 Technical Parameters

Compliance Standard	IEC60065 International Standard
System Capacity	Single channel supports 20 units, expandable up to 76,800 units
Microphone Type	Array type, 14mm gold-plated microphone capsule
Frequency Response	30Hz~20KHz
Signal-to-Noise Ratio (SNR)	>90dB
Dynamic Range	96dB
Total Harmonic Distortion (THD)	< 0.05%
Microphone Sensitivity	-37dB ± 2dB
Power Supply	24V DC ± 5%
Operating Current	80mA ± 5%

Connection Method	Splitter, T-connector, Daisy Chain
Connector Type	8-pin (or RJ45)
Number of Units Activated	1/2/3/4/5/6/7/8/9 or all
ID Numbering Function	Customizable ID numbering
Unit Power Consumption	2W
Equivalent Noise	20dBA (SPL)
Maximum Sound Pressure Level	125dB (THD<3%)
Headphone Output Jack	Φ3.5mm stereo socket
Headphone Load	>16 Ω
Headphone Volume	10mW
Color	Black, Dark Blue
Compliance Standard	IEC60065 International Standard

3、Product Introduction

3.1 Product Interface Introduction



- 1、Indicator Light: Displays red when speaking
- 2、Microphone Window: Used for picking up the speaker's voice

- 3、Headphone Jack: 3.5mm stereo headphone jack
- 4、Display Screen: 160×32 high-brightness LCD display
- 5、Touch Panel: Touch panel embedded in an aluminum alloy panel
- 6、Chairman Button: Has priority function, can turn off all conference units (not available on delegate units)
- 7、Power Button: Can turn the conference unit on and off; the indicator light stays on when powered on

3.2 System Connection Diagram

