Specification

Product Name: All-Digital Desktop Conference Unit

Product Model：HY-6305C/HY-6305D

Document Version：A/1（2024.4.15）

Production Department: Product Department

Huain (Zhuhai) Digital Technology Co., Ltd.

Catalog

1、Product Overview

1.1　Product Image

1.2　Dimensions and Weight

Base Dimensions (WxDxH)	100×130×60mm (excluding microphone boom)
Packaging Dimensions (LxWxH)	545×220×95mm
Microphone Length	390mm
Weight	Net Weight: 0.75kg, Gross Weight: 1.4kg
Packaging Method	Foam + Carton Box

1.3　Packing List

Serial Number	Name	Number	Unit
1	Microphone	1	piece
2	T-Connector	1	piece
3	1.2m Male-to-Female Cable	1	piece
4	Foam Cover	1	piece
5	Warranty Card and Certificate	1	sheet

2、Product Specifications and Parameters

2.1　Product Description

　　Using DSP/DDOV digital processing and transmission technology, it complies with the IEC60065 international standard. Featuring a simple yet stable tabletop design with strong anti-static capabilities, it is ergonomically designed and has a modern technological feel. Equipped with a 128×32 high-brightness LCD display, it can show system ID, speaking time, sign-in, voting data, volume level, and speaking mode. The built-in high-fidelity 9.7mm gold-plated capacitive pickup head precisely calculates aperture and spacing, effectively improving human voice frequency response and pickup sensitivity. It incorporates strong anti-interference technology to ensure that the equipment in the conference room is not affected by signals from mobile phones, Bluetooth, radio, WiFi, etc. It supports multiple connection methods including one-line daisy chain connection, T-head daisy chain connection, and ring daisy chain connection.

2.2　Functional Parameters

1. Utilizes advanced and stable "IRIN" chips and DSP/DDOV digital conference technology for digital signal transmission and processing.

2. Features a zinc-aluminum alloy panel embedded with Mohs hardness level 6 touch glass or touch acrylic, providing waterproof and dustproof capabilities.

3. Built-in high-fidelity 9.7mm gold-plated capacitive pickup head, with precise aperture and spacing calculation, effectively improving human voice frequency response and pickup sensitivity.

4. Unique cavity and pickup design, combined with interference correction technology, precisely controls pickup details and angle to avoid acoustic feedback and howling.

5. High-sensitivity design with built-in automatic gain control (AGC), digital equalizer (EQ), and acoustic echo cancellation (AEC), with an effective pickup distance of 50-60cm.

6. Equipped with a 128×32 high-brightness LCD display, capable of showing system ID, speaking time, sign-in, voting data, volume level, and speaking mode.

7. Features speaking timer and timed speaking functions, supporting dynamic display of speaking time and allowing for the setting of a countdown speaking time.

8. Employs high-fidelity lossless audio transmission technology, supporting 48KHz audio sampling

rate, with sensitive pickup and clear speech, and a frequency response range of 30Hz-20KHz.

9. Provides three color indicator displays: red for normal speaking, green for VIP unit speaking, and yellow for numbering status.

10. Microphone rod connectors and all studs are made of pure copper, ensuring sound quality restoration, stability, and consistent pickup distance and sound quality.

11. Uses high-quality sponge covers with excellent elasticity, breathability, and anti-slip properties, preventing detachment and deformation during use.

12. Equipped with intelligent audio detection that automatically inversely attenuates audio when two adjacent units are close to each other, preventing howling.

13. Supports eight conference modes: number restriction, FIFO (First In, First Out), LIFO (Last In, First Out), chairman allows (request to speak), voice-activated start, timed speaking, queuing for speaking, and free discussion.

14. The number of speakers can be set from 1 to 20, with chairman and VIP units exempt from the limit. The free discussion mode allows for unlimited speaking.

15. With the aid of HD cameras, it can perform automatic tracking of speakers and automatic switching of images, supporting image freezing and multi-camera tracking of the same conference unit.

16. Supports connection of up to 240 chairman units, with chairman units having the ability to control meeting order and priority speaking rights, capable of shutting down other speaking delegate units.

17. Provides a chairman exclusive mode, supporting web application service screens for handling delegate unit speech requests, with the chairman able to approve or deny requests.

18. Features three identity permissions, supporting online application to modify unit identities, and allows reconfiguration and reassignment of chairman, VIP, and delegate unit identities.

19. Any chairman or delegate unit can be set as a VIP unit, with VIP units having unrestricted speaking rights, supporting up to 150 VIP units.

20. Supports multilingual display options, including Simplified Chinese, Traditional Chinese, and English menu displays, with customizable menu languages according to requirements.

21. Built-in high-power Class D speakers that mute automatically when the microphone is turned on,

preventing howling and ensuring clear sound quality, with adjustable volume.

22. Includes a 3.5mm headphone jack for conference monitoring or recording, with an initialization audio adjustment to prevent sound disturbances.
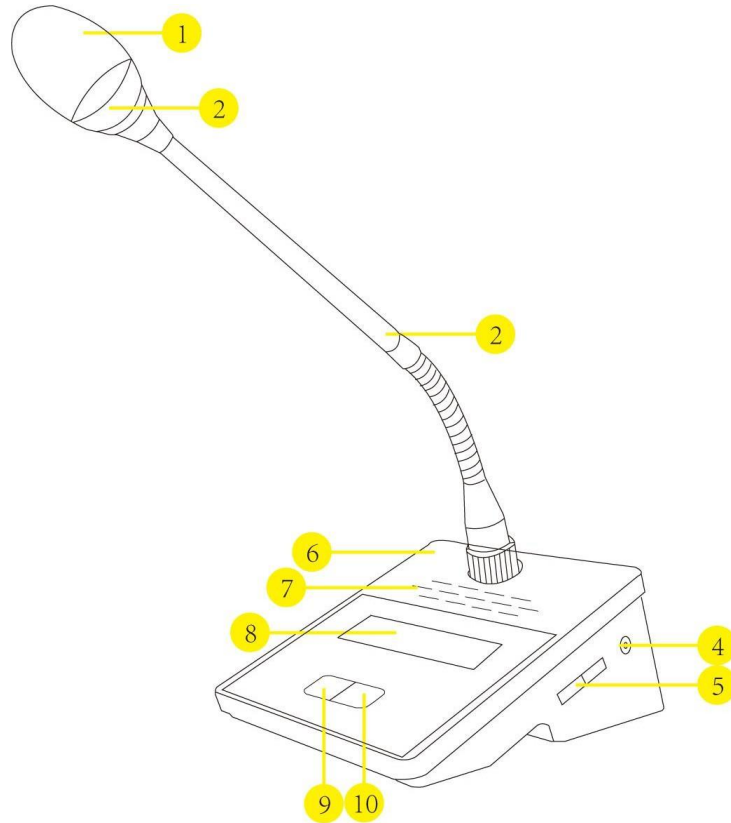
2.3　Technical Parameters

Standards Compliance	IEC 60065 International Standard
System Capacity	Single channel 20 units, expandable up to 76,800 units
Microphone Type	9.7mm gold-plated condenser microphone
Frequency Response	30Hz~20KHz
Signal-to-Noise Ratio (SNR)	>90dB
Dynamic Range	96dB
Total Harmonic Distortion (THD)	< 0.05%
Microphone Sensitivity	-37dB±2dB
Operating Voltage	24V DC±5％
Operating Current	80mA ±5％
Connection Method	Distribution box, T-type connector, Daisy chain connection
Connector Type	8-pin (or network port)
Number of Units Enabled	1/2/3/4/5/6/7/8/9 or all
Unit Numbering Function	Customizable ID numbers
Unit Power Consumption	2W
Equivalent Noise	20dBA （SPL)
Maximum Sound Pressure Level	125dB （THD<3%）
Headphone Output Interface	Φ3.5mm Stereo Jack

Headphone Load	>16Ω
Headphone Volume	10mW
Speaker	3Ω, 2W

3、Product Introduction

3.1 Product Interface Introduction

1、Microphone Head: Supercardioid microphone element（9.7mm gold-plated microphone capsule).

2、Red Indicator Light: Steady light when the unit is on; flashes when applying for speaking.

3、Microphone Stand: Interference-resistant microphone stand, customizable length.

4、Headphone Jack: 3.5mm stereo headphone jack.

5、Volume Adjustment Button: Adjusts the volume of the monitoring headphones.

6、Aluminum Panel: Aluminum panel with embedded acrylic touch panel.

7、Speaker: Built-in Class D high-power speaker.

8、Display: 128×32 graphical LCD display.

9、Chairperson Button: Priority function; can disable all delegate units (not available on delegate units).

10、Microphone Button: Turns the conference unit on and off; indicator light remains on when the unit is on.

3.2　System Connection Diagram