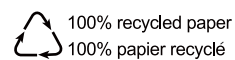




CS-102

Wired professional
conference
discussion system

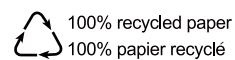


Installation and Operation



CS-102

Wired professional
conference
discussion system



Installation and Operation

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System Performance Feature P4

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CS-102BC chairman unit / CS-102BD Delegate unit

| Power supply voltage: DC24V (host power supply) |
| Power consumption: 0.5 W |
| Polar Pattern: Cardioid condenser |
| Frequency response: 65 Hz ~ 18 KHz |
| Unit interface: Anti-shedding 9-core aviation plug |
| Microphone type: Condenser cardioid hyper directional |
| Distortion: <0.7% |
| Sensitivity: -20 dBv at 1V to 1Pa |
| Dimension of the base (mm): 132(W) x 52 (H) x 90 (D) |
| Dimension of the stem (mm) : 455(L) |
| Weight: Embedded base: about 343g |
| Embedded microphone stem: about 163g |

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CS-102C chairman unit / CS-102D Delegate unit

- Power supply voltage: DC24V (host power supply)
- Power consumption: 0.5 W
- Polar pattern: Cardioid condenser
- Frequency response: 80 Hz ~18 KHz
- Unit interface: Anti-shedding 9-core aviation plug
- Microphone type: Condenser cardioid hyper directional
- Distortion: <0.7%
- Sensitivity: -30 dBv at 1V to 1Pa
- Dimension of the base(mm) : 105 (W) x 368 (H) x 150 (D)
- Weight: about 785g

Thank you for choosing a RELACART wired professional conference discussion system. You have joined thousands of other satisfied customers. Our years of professional experience of design and manufacturing to ensure our products' quality, performance and reliability.

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01 System Overview

CS-102 is a simple and affordable discussion audio conferencing system. CS-102M central controller is the control center of the whole system, Include the function of choosing the Mode, connecting the level output and line-level input. Include the function of choosing the Mode, connecting the level output and line-level input. Control for up to 45 speaking units. With automatic gain input, FBK, FIFO and Voice-active mode. Can connect the external loudspeaker to voice amplification. Can set in a EIA Standard 1U rack directly. Enclose 10m cable with auxiliary audio signal input function, can connect the other equipments conveniently.

P3

10 Technical specification

CS-102M Conference system host

Chassis specifications: EIA standard 1U

Power supply voltage: AC 100-240V 50/60Hz

Maximum power consumption: 60 W

Frequency response: 65 Hz ~ 15 KHz

S/N: >85 dB

T.H.D: <0.7%

Audio input: LINE IN: 0 dBV (f=1 KHz, THD <0.3%)

Audio output: XLR: -10 dBV

6.3mm: -15 dBV

RCA: 0 dBV

Chairman/representative unit interface: Anti-shedding 9-core aviation plug

RS-232 control interface: Can be connected to intelligent central control and camera tracking system

Dimensions (mm): 410 (W) x 43 (H) x 206 (D)

Weight: about 2.3 kg

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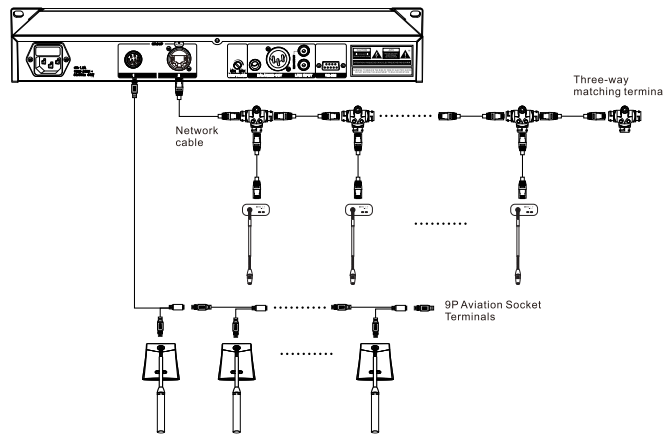
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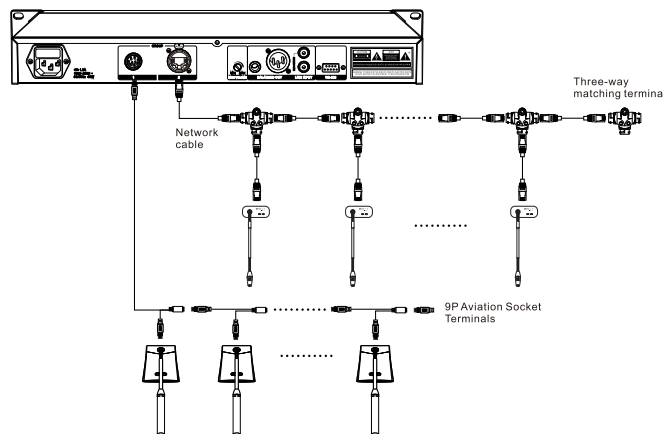
CS-102M Conference System Microphone Unit Connection Guide



Note: After the main unit of the CS-102 conference system and the microphone are all connected, please connect the 9P aviation female terminal or three-way network matching terminal on the extension line connecting the CS-102 system to the last microphone. Otherwise the individual microphones of the system may fail to communicate and cause the work indicator to flash continuously.

- Gooseneck design can adjust the direction on the basis of your need, easy installation. Gooseneck microphone's light indicates and status of speaking unit.
- With automatic gain audio processing circuit, prevent the feedback effectively and improve the clarity of the whole system.
- It is easier for expansion and changing configuration. One main controller can connect up to 45 speaking units.
- The central controller can choose the number of speeches, and has a first-in, first-out function.
- Two operating modes: FIFO mode: 1/3/6/∞ microphones can be selected to speak at the same time, or voice activated mode. (Using sound pressure to turn on the microphone unit automatically)
- CS-102C Chairman unit can use the Priority button to control the speaking order, controlling atmosphere of the meeting.
- With recording output to connect the recorder, all the meetings recording can save completely. And also can connect the external amplification equipment.
- Can connect VTS-2000 video tracking system to achieve video conference.
- Connect to the telephone coupler can be applied to long-distance telephone meeting directly.
- Gooseneck microphone design, can adjust the direction flexibly. The indicator on the microphone shows the speech status.
- Adopt anti-drop aviation cable hand in hand connection mode, simple connection, reliable, which can cut down the project of whole installation and cost.

CS-102M Conference System Microphone Unit Connection Guide

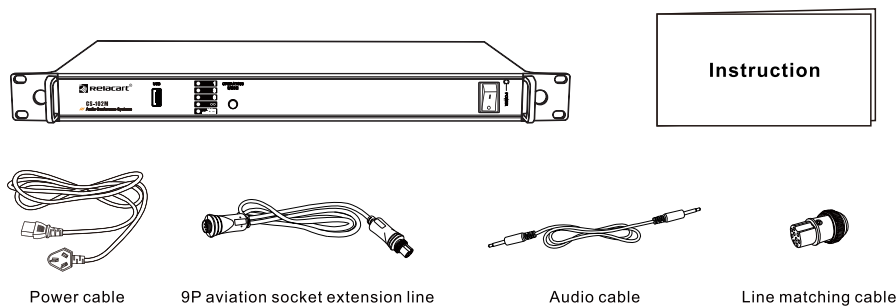


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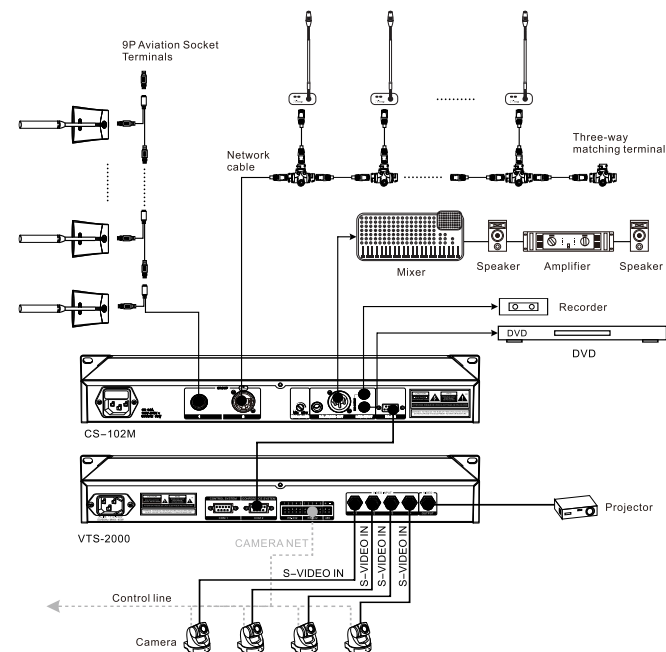
03 Packing List

- ◆ Wired conference system controller * 1
- ◆ Power cable * 1
- ◆ Audio cable * 1
- ◆ Line matching cable * 1
- ◆ 9P aviation socket extension line * 1
- ◆ Rack mount kit (including screws) * 1 set
- ◆ Simple operation manual * 1



P5

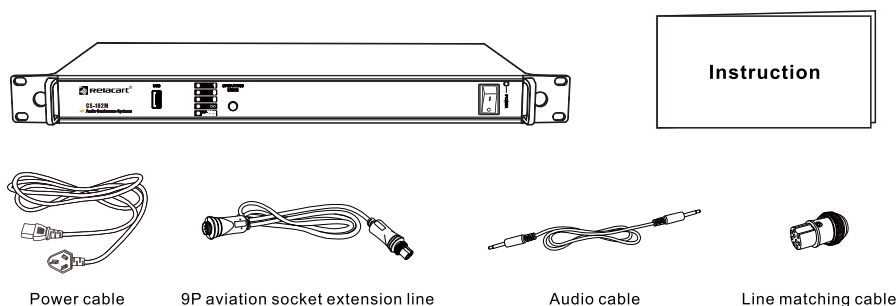
09 System application connection diagram



P14

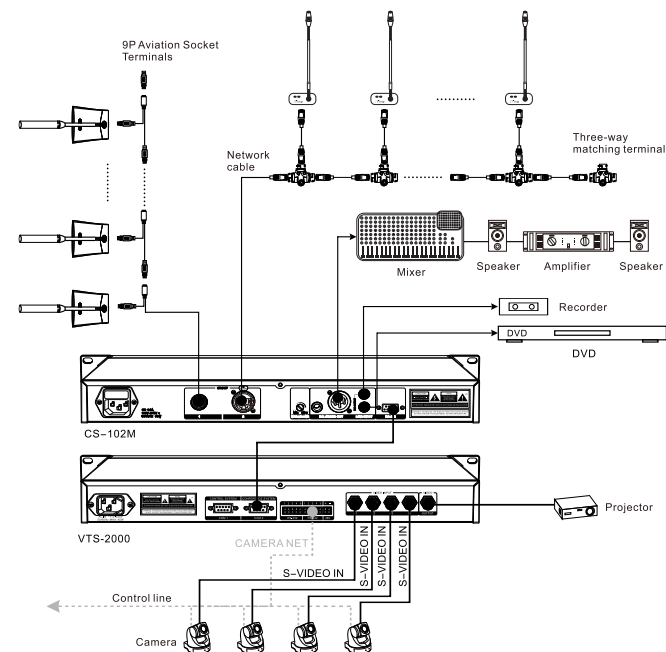
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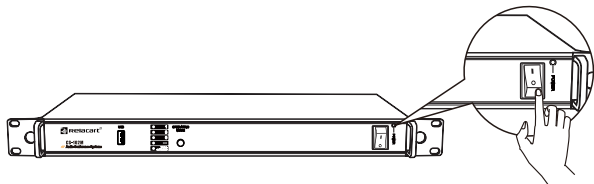
09 System application connection diagram



P14

08 User simple steps

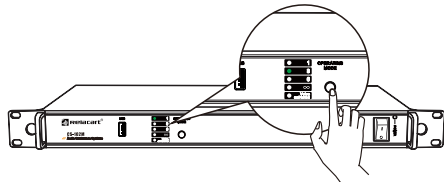
1. After connecting the power adapter, dial up the power button ("I" symbol) to turn on the central controller.



2. Short press the "Operation Mode" button, when the selected mode is selected, the indicator light will light up green.

FIFO mode: 1, 3, 6 or 8 microphone units can be selected to be turned on at the same time. When the speaking microphone exceeds the number of speakers limited by the central controller, the microphone that speaks first will be turned off first.

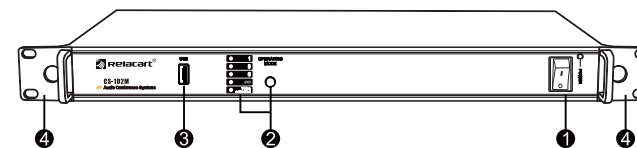
Voice activated mode: The microphone is turned on automatically by sound pressure, and 4 microphone units can be turned on at the same time. when the maximum number of speakers is reach, subsequent microphone speaks.



P13

04 Function Introduction

Front panel

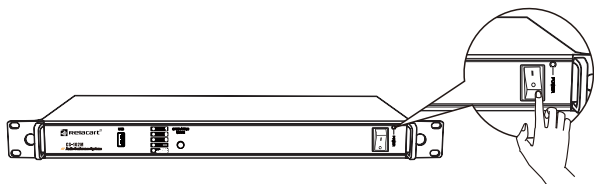


- ① POWER switch (with indicator light).
- ② Conference mode selection button: FIFO mode, you can choose to open 1, 3, 6 or 8 microphone units at the same time, when the speaking microphone exceeds the limit of the number of speakers on the central controller, the microphone that speaks first will be turned off first. In the voice activated mode, the microphone is turned on automatically by sound pressure, and 4 microphone units can be turned on at the same time. when the maximum number of speakers is reach, subsequent microphone speaks.
- ③ Recording port: Connects to the USB disk for recording.
- ④ Rack mount kit: fixed installation.

P6

08 User simple steps

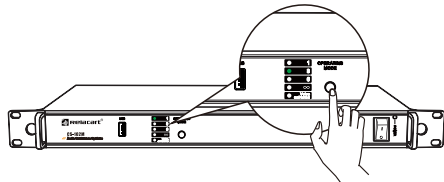
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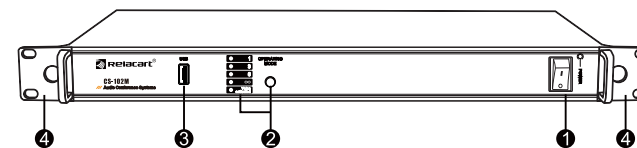
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P13

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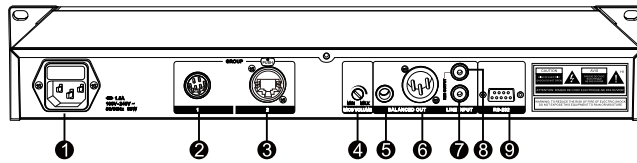


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P6

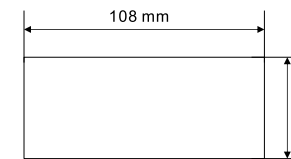
07 Installation of the embedded speech mould

Rear panel

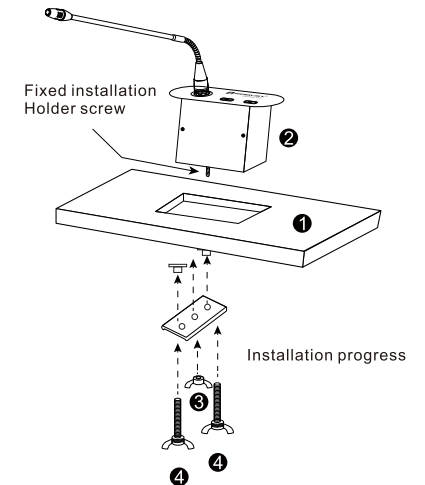


- ❶ Power input: standard IEC socket, can work in 110V/240V 50/60Hz AC power supply.
- ❷ 9-pin aviation male connection port: It can be connected to the CS-102C/D conference unit through the 9P aviation cable, and used with the auxiliary power supply EXP-124. A total of 110 conference units can be connected.
- ❸ Female ethernet port connection port: It can be connected to the CS-102BC/CS-102BD embedded conference unit through a network cable. A total of 45 conference units can be connected.
- ❹ Knob of volume adjustment: Can control the volume level of the audio output.
- ❺ Balanced audio output port: $\phi 6.3\text{mm}$ port can be connected to an balanced input of a mixer or amplifier using standard balanced audio port.
- ❻ Balanced XLR audio output port: XLR port can be connected to the mixer using a standard two-conductor shielded cable.
- ❼ RCA audio line input port: can be directly connected to MP3/DVD and other external audio signal input.
- ❽ RCA audio line output port: Connects directly to the mixer or recorder.
- ❾ RS-232 port: It can be connected to the automatic video tracking system VTS-2000 or other central control systems to realize video tracking.

- ❶ According to the size of the hole paper shown as below, dig the hole on the desktop 108 x 43 mm (Length x Width), the depth of the hole at least 88 mm (the high of the speech mould)
- ❷ Embed the speech mould to the hole, adjust the speech mould and make it at the same level of the desktop.
- ❸ Fix the installation holder to the speech mould.
- ❹ Fix the screw into the fixed holder, then put the screw cap, make sure the screw is upwards, then tighten the screw until they reach the surface of the desktop, guarantee the speech mould could be fixed on the desktop.



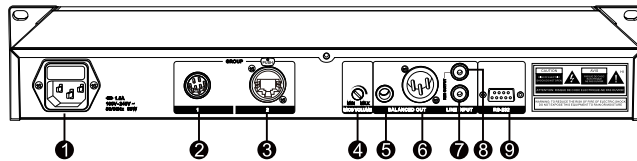
Hole paper for installation



Installation progress

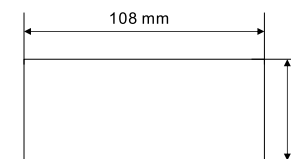
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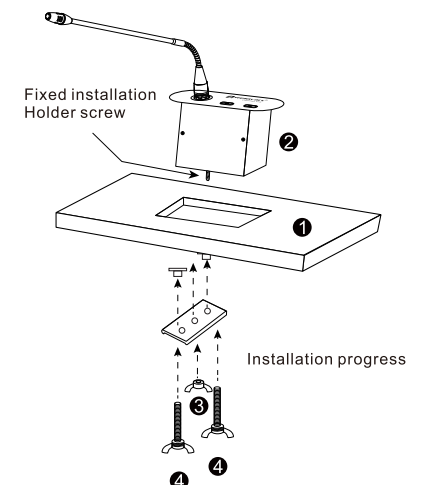


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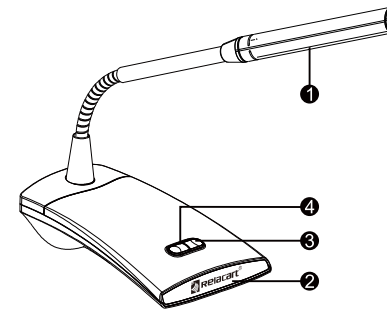
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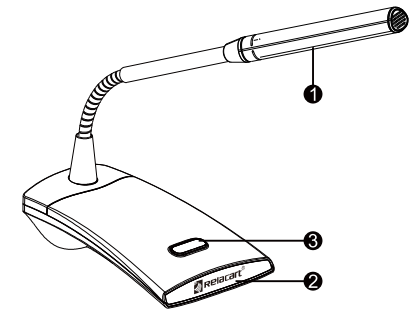
Installation progress

05 Gooseneck base function introduction

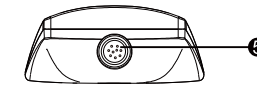
- ❶ Power Indicator: When the microphone unit opens the indicator is on.
- ❷ Microphone Stem: Double gooseneck design, can adjust the microphone head flexibly.
- ❸ Talk key: When the unit is static, the talk key shows red. When press talk key, the microphone will be open, the working indicator light and the talk key turns green.
- ❹ Priority talk key: When the microphone unit shut down, the priority button lights red, when the microphone unit is in use, the talk key lights green.
In the process of speech, only keep pressing this key, the microphone will keep in-use status and keep priority, other unit could not open for use.
- ❺ Fixed screw: Fix the installation holder to the gooseneck microphone module.
- ❻ Connection port of microphone: For communication between the main controller and the microphone.



(CS-102C Chairman Unit)



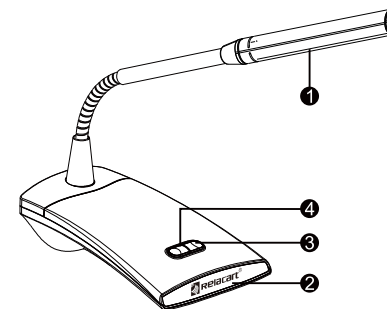
(CS-102D Delegate unit)



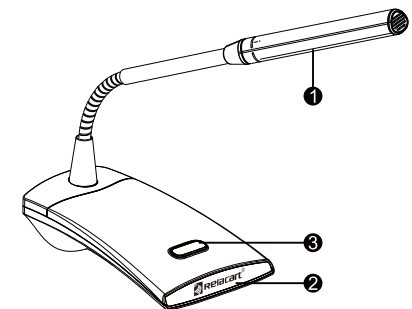
Rearview

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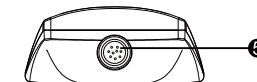
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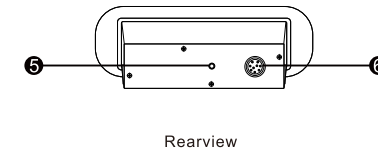
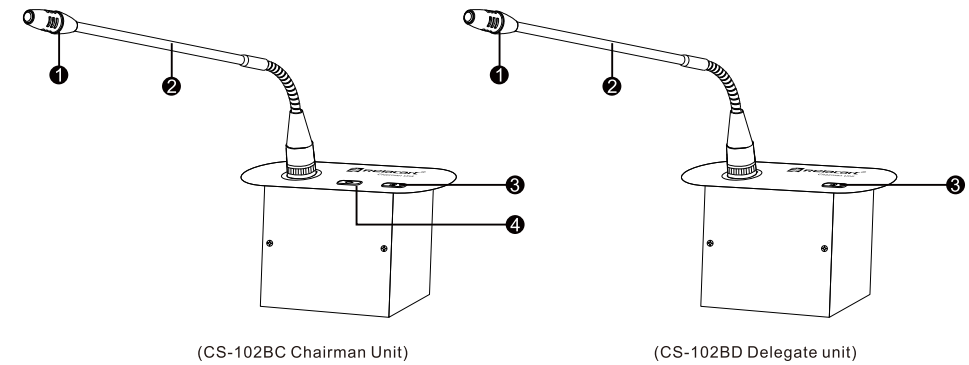
(CS-102D Delegate unit)



Rearview

06 Embedded base function introduction

- ❶ Conjoined capsule: High-quality condenser microphone provides clear and full sound quality, high sensitivity, and good long-distance pickup effect.
- ❷ Microphone works indicate: When the microphone unit connects the main controller and the power on, the Relacart Logo light is on.
- ❸ Talk key: When microphone unit haven't speak, the spoken key is green. When you press the spoken button, the microphone is turned on and the microphone in-use indicator remains lit, the spoken key is red.
- ❹ Priority spoken key: When microphone unit is turned off, Priority spoken key is red. When microphone unit is turned on, Priority spoken key is green. The microphone turns on and the microphone in-use indicator remains lit as long as the key is held down. Allowing the voice input from the unit to take precedence over other units. During this interval, other delegate units cannot be used.
- ❺ Connection port of microphone: For communication between the main controller and the microphone.



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