



Fully Digital Conference System

User Manual

TS-0336

TS-0336A

Before using this system, please read this manual carefully

Notification



WARNING

To ensure the reliability of the equipment and the safety of personnel, please observe the following when installing, using and maintaining:

- If any of the following conditions are found, please immediately turn off the power, plug out and quickly contact your nearest dealer. Do not continue using this unit, which may cause a fire or electric shock.
 - If you find smoke or have a strange taste from the machine.
 - If water or metal falls into the machine.
 - If the unit is dropped or the case is damaged.
 - If the wire is damaged (wire core exposure, broken wire, etc.).
- If the machine contains high-pressure parts, in order to avoid the fire or electric shock, absolutely don't open the case, if any questions please inform your nearest dealer.
- Do not place cups, bowls, vases or metal and other water-filled substances on the unit. Serious spilled liquid may cause a fire or electric shock.
- Never expose the unit to rain and any moisture or water, which may cause electric shock or fire.
- Do not place metal objects or flammable materials from the vents on the machine cover, nor place coins, which may cause fire or electric shock.
- Do not place heavy objects on the unit to avoid personal injury or property damage when the unit is slipping.
- Make sure that the volume is turned on at the beginning of the boot, and the high volume of the boot may cause hearing problems.
- Make sure that the volume is turned on at the beginning of the boot, and the high volume of the boot may cause hearing problems.
- For long-term accumulation of dust to be cleaned, please inform your dealer to regularly clean the machine, so as to avoid damage to the machine or cause a fire.
- The battery must be replaced with the same type of product and the correct installation should be made in order to avoid electrical damage and explosion hazard.
- The product is a Class III device. The device must be well connected to ground. The power plug must be connected to a power outlet with a grounding device to ensure that the equipment is fully grounded.

- This product uses a power plug or appliance input socket as a disconnecting device with the power supply, and must be disconnected if necessary for safety reasons.



- This equipment is only suitable for safe use at altitudes under 2000 meters.

Precautions

1. The installation environment

When installing the unit, in order to ensure the normal cooling of the host, should avoid the poor ventilation of the place or high temperature environment, to avoid direct sunlight.

Recommend to install cabinet or other well-ventilated place indoor. If you use the machine in the outdoors, please pay attention to waterproof, moisture, lightning protection measures.

Avoid installing in a violent place of vibration; do not place other equipment on the machine.

2. To avoid electric shock and fire

Do not touch the hands and the source with wet hands

Do not spill liquid on the machine, so as to avoid short-circuit or fire inside the machine.

Do not place other equipment directly on the top of the unit.

Non-professional service personnel Do not disassemble the unit yourself to avoid damage and electric shock.

3. Transport and handling

The packaging of the machine is designed and tested to ensure that the host will not be accidentally damaged during transport. It is best to use the original packaging when handling the unit.

Do not move the host device between the place or cold or over hot to avoid condensation inside the machine, affecting equipment life.

4. Please follow the warning instructions on this product, the warning signs on behalf of:

	Applicable to 2000 meters above sea level and below safe use
	Safe use only in non-tropical climates

5. Agreement

Please strictly follow the instructions in this manual. The software, hardware and appearance of this product will be upgraded and updated continually. The above changes will be made without notice.

Non-professional maintenance personnel, do not remove the product, to avoid damage and electric shock.

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1.Product description

It is a third-generation digital conference unit with a new solution architecture. It adopts embedded design and hand-in-hand connection, so the on-site wiring is simple and the overall appearance is neat. Based on the design of pure microphones, it also integrates conference voting and simultaneous interpretation functions to meet the needs of regular conferences.

2.Product Description

2.1.Embedded Conference Speech Unit



2.2.Features

- 1.Using 48KHz sampling rate, the sound is clear and bright, higher than the CD quality; with DSP audio processing inside, there is no "popping" low-frequency impact sound.
- 2.Designed with touch buttons, there is no knocking noise in the venue during operation.
- 3.Using 100M network transmission, network cables are cascaded hand in hand, long-distance transmission will not have any impact on sound quality.
- 4.With voice control function, it can adjust the sensitivity of voice control, intelligently open the microphone and set the closing time.
- 5.With internal feedback suppression function, it can effectively prevent howling.
- 6.With 5-band EQ adjustment function, the sound effects can be adjusted according to different speaker's voice characteristics to achieve the perfect effect.
- 7.The chairman unit has a priority function to turn off all delegate microphones that are speaking.
- 8.Designed with the functions of speech timekeeping and speech countdown.

9. Designed with voting, election, evaluation functions. The chairman unit can initiate voting and sign-in. Data statistics can also be realized without a PC.

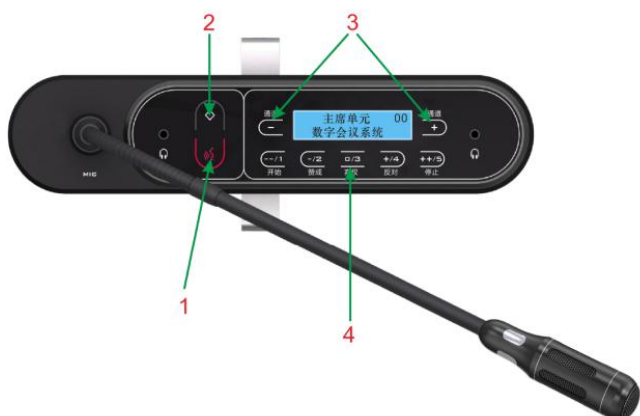
10. The receiving language channel can be selected, and the factory default is 63+1.

11. With SMS prompt function.

12. Support web page firmware upgrade function.

2.3. Interface function

TS-0336(Chairman unit):



TS-0336A(Delegate unit):



1. MIC power switch.

2. Microphone priority button. The chairman unit (TS-0336) has a priority function; press this button to turn off all the delegate units that are speaking, and turn on the MIC of the chairman unit.

3. Channel selection button, used to select the channel of the current interpreter unit.

4. Multi-function voting buttons and status indicators

——Conference voting. Numbers 2, 3, and 4 respectively denote Yes, Abstain, No.

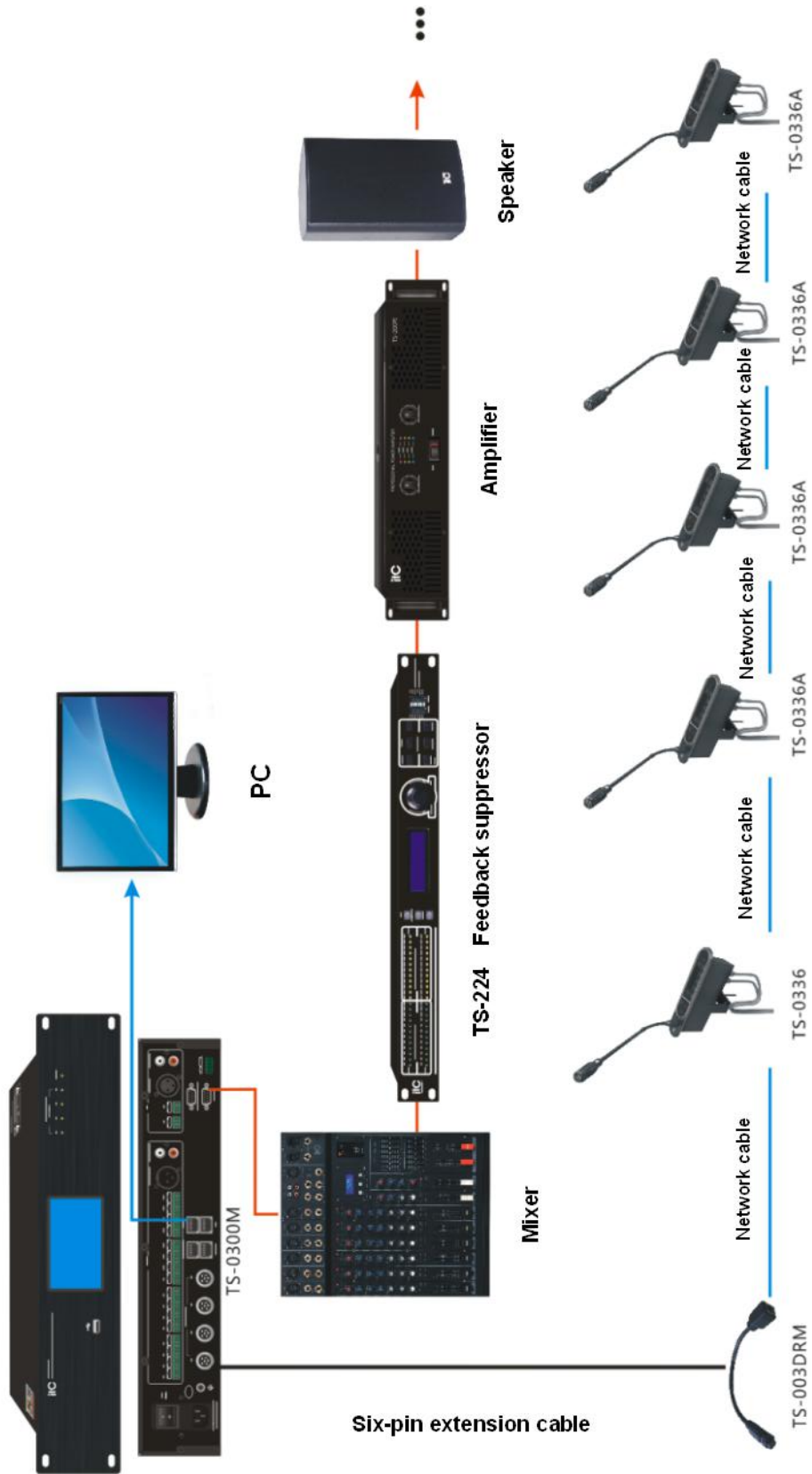
——Conference election, numbers 1-5 represent different candidates.

——Conference evaluation, numbers 1-5 respectively represent grades --, -, 0, +, ++.

2.4.Specification

Model	TS-0336/TS-0336A
Microphone type	Cardioid directional electret microphone
Frequency response	80Hz~16KHz
Input impedance	1K Ω
Sensitivity	-46dBV/Pa
Max SPL	125dB(THD>3%)
SNR	>80dB(A)
Crosstalk	>70dB
Dynamic range	>80dB
THD	< 0.2 %
Max power consumption	2W
Headphone load	>16 Ω
Headphone volume	40mW max
Headphone jack	3.5mm dual channel jack
Connection method	Network cable connection
Hand in hand extension port	Support
Power supply	Host power supply DC 36V
Color	Black
Voting function	Five-key election, three-key voting, five-key evaluation
Simultaneous interpretation	63+1 channels
Sign-in function	Touch button to sign in
Display	OLED full viewing angle low power display
Weight	0.55Kg
Dimension (L×W×H)	250×55×85mm
Installation method	Embedded
Opening size	206×48mm

3. System connection diagram

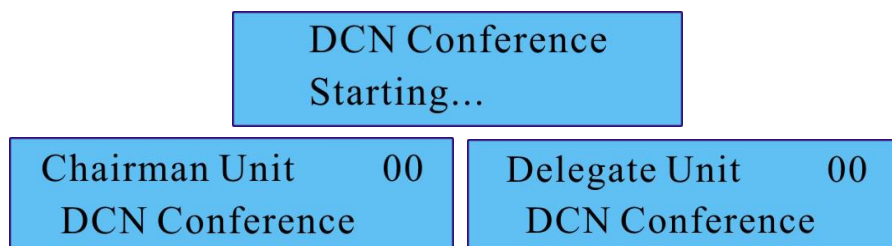


4.TS-0336/TS-0336A Operation instructions

4.1.Display operating instructions

4.1.1.Boot

Turn on the power of the host to start the conference system, the unit screen displays "Digital conference system booting...", and after the booting is completed, the screen displays the LOGO interface "Delegate Unit" or "Chairman Unit" and the corresponding listening channel. If the unit is abnormal, it cannot automatically switch to the LOGO interface.

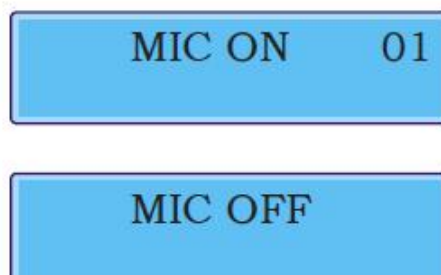


4.1.2.Unit type

The chairman unit includes a microphone button and a priority button. In addition, among the buttons 1/2/3/4/5 (-- 0 + ++), long press button 1 to activate the hardware three-key voting function, and long press button 2 to activate the hardware sign-in function. In hardware voting, long press button 5 to suspend voting to check the results, and continue to long press button 5 to exit voting. In APPLY mode, press button 3 to allow the delegate unit to apply for the microphone opening function. In addition, it can switch to the audio channel through the CH-/CH+ button. The delegate unit has no priority button, and the buttons 1/2/3/4/5 are only used for voting; other functions are the same as those of the chairman unit.

4.1.3.Conference management

The microphone on/off is controlled by conference management, and its authority is configured by the host. Refer to the conference mode description of the host for the logic of use. Press the MIC switch to turn on and off the microphone.



In APPLY mode, when a delegate unit applies to turn on the microphone, press the button 3 of the chairman unit, and the applying delegate units will be turned on according to the FIFO (first in first out) mode.



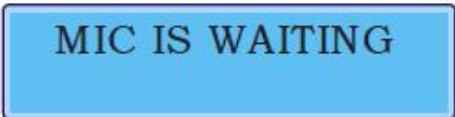
MIC IS APPLYING

At this time, the chairman unit displays as follows:



MIC IS APPLYING
AGREE

In NORMAL mode, the delegate units exceeding the number enter the waiting state; when the waiting number is full, the user is prompted that the waiting number is full.



MIC IS WAITING

Press the priority button of the chairman unit to turn off the microphones of all delegate units, and the chairman unit turns on its own microphone.

4.1.4. Sign-in

Press button 2 of the chairman unit, and the corresponding light is on, indicating that the hardware sign-in function of the chairman unit is enabled. Press and hold button 2 to activate the hardware sign-in. At this time, you can view the number of total sign-ins and have signed displayed on the unit screen. You can press the unit MIC switch to sign in. And then long press button 5 to exit the sign-in.



Total sign: 0999
Have signed: 0000

If the sign-in function of the chairman unit is disabled, long press button 2 and the display will indicate that sign-in has been disabled. At this time, the sign-in function needs to be enabled through the PC.

4.1.5. Voting

Press button 1 of the chairman unit, the corresponding light is on, indicating that the hardware voting function of the chairman unit is enabled. Press and hold button 1 to activate the hardware three-key voting, and check the options of “Yes, Abstain, No” on the display, which can be selected

by buttons 2/3/4 on the unit. Whether the unit is prohibited from voting can be viewed through the PC.

Voted: Yes
Yes Abstain No

Press and hold button 5 to view the voting results.

Yes Abstain No
0001 0000 0000

Continue to long press button 5 to exit the hardware voting function and return to the LOGO interface.

The PC initiates a 5-key election as shown below. And press the corresponding button to select.

Seelected: 4
1 2 3 4 5

The PC initiates a 5-key evaluation as shown below. And press the corresponding button to select.

Evaluated: 0
-- - 0 + ++

4.1.6.Channel selection

Switch the CH+/CH- buttons to select the current audio listening channel; 0 is the original audio channel, and 1~63 are the interpreter unit channels.

Chairman Unit 00 DCN Conference	Chairman Unit 21 DCN Conference
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4.1.7.Fire alarm

When the host sends out a fire alarm message, the unit screen will display a "Warning" prompt, and the red light on the microphone pole will flash until the host cancels the fire alarm and then the unit returns to the previous state.

Alarm !!

4.1.8. Other functions

1) Chinese and English interface switching

This function needs to be controlled and switched by the conference PC software. For details, please refer to the PC user manual. And then it can be viewed on the display.

2) Speech countdown and Speech countdown

This function needs to be controlled and switched by the conference PC software. For details, please refer to the PC user manual. This function is for the microphone on/off. In Speech countdown, the PC will issue the preset speech time and the unit will count down to display the remaining time, and then the microphone will be automatically turned off when the time is up. In Speech countdown, the PC designates the unit to count the speech time and display the elapsed time.

3) Audio adjustment

This function needs to be controlled and switched by the conference PC software. For details, please refer to the PC user manual.

4) SMS

This function needs to be controlled and switched by the conference PC software. For details, please refer to the PC user manual. This function refers to that the PC can singly send/broadcast messages to the unit screens to remind the users.

4.2. Web page operation instructions

4.2.1. Unit ID number and related IP address description

(1) The current unit ID number is used as the IP address of the unit. The first two bytes of the IP address are fixed 172.16; the next two bytes will be the upper and lower 8 bits of the ID number.

(2) For example: if the ID number is 1, the IP address is 172.16.0.1; if the ID number is 100, the IP address is 172.16.0.100; if the ID number is 300, the IP address is 172.16.1.44; if the ID number is 4090, the IP address is 172.16.15.250;

(3) If you forget the ID number, you can find the ID number and IP address of the current microphone through the provided PC view IP address widget.

4.2.2. The unit supports the ICMP protocol and the related operations such as PING packets

The PC calls out the CMD and can ping the IP address of the corresponding unit.

4.2.3. Unit web page login

- (1) Set the PC to the same network segment as the unit;
- (2) For the unit IP address, please refer to 4.2.1. Unit ID number and related IP address description;
- (3) The subnet mask is 255.255.0.0;
- (4) All settings on the web page are valid after "Submit information".

The screenshot displays the web interface for configuring a unit. It is divided into three main sections, each with a blue header and a dropdown arrow:

- UNIT BASIC SETTING**:
 - ID number: A numeric input field with a value of 11 and minus/plus buttons.
 - Voice mode sensitivity: A numeric input field with a value of 60 and minus/plus buttons.
 - Voice mode mute interval: A numeric input field with a value of 30 and minus/plus buttons.
 - Language: A selection menu with options: 中文, English (selected), Русский, and Français.
 - Sign: A toggle switch with 'Disable' and 'Enable' buttons, currently set to 'Enable'.
 - Buttons: 'Submit' and 'Reset'.
- UNIT AUDIO SETTING**:
 - Mic sensitivity: A dropdown menu set to '0dB'.
 - Buttons: 'Submit' and 'Reset'.
- UNIT EQUALIZER SETTING**:
 - Five frequency bands, each with a center frequency dropdown and a gain dropdown:
 - 80 ~ 175 HZ: 105 HZ, 0 dB
 - 230 ~ 500 HZ: 385 HZ, 2 dB
 - 650 ~ 1400 HZ: 850 HZ, 1 dB
 - 1.8 ~ 4.1 KHZ: 2400 HZ, 0 dB
 - 5.3 ~ 11.7 KHZ: 6900 HZ, 0 dB
 - Buttons: 'Submit' and 'Reset'.

4.2.4. Set the unit ID number on the web page

- (1) Set the unit ID, the IP address of the unit will change after setting.
- (2) After setting, if you want to set parameters on the web page, you need to perform login settings based on the IP address bound to the new ID.

4.2.5. Set the voice control mode on the web page

- (1) Set the microphone sensitivity of the voice control mode;
- (2) Set the no-signal off time of the voice control mode (the chairman unit is not affected).

4.2.6. Set the language switching function on the web page

It supports Chinese and English switching.

4.2.7. Enable sign-in and voting function on the web page

This function needs to be set in non-sign-in mode and non-voting mode, and is usually set before the meeting.

UNIT BASIC SETTING

ID number

Voice mode sensitivity

Voice mode mute interval

Language

Sign

4.2.8. Set the unit audio parameters on the web page

- (1) Microphone volume (not supported by this model);
- (2) Microphone sensitivity;
- (3) Microphone EQ.

UNIT AUDIO SETTING

Mic sensitivity

UNIT EQUALIZER SETTING

80 ~ 175 HZ	<input type="text" value="105 HZ"/>	<input type="text" value="0 dB"/>
230 ~ 500 HZ	<input type="text" value="385 HZ"/>	<input type="text" value="2 dB"/>
650 ~ 1400 HZ	<input type="text" value="850 HZ"/>	<input type="text" value="1 dB"/>
1.8 ~ 4.1 KHZ	<input type="text" value="2400 HZ"/>	<input type="text" value="0 dB"/>
5.3 ~ 11.7 KHZ	<input type="text" value="6900 HZ"/>	<input type="text" value="0 dB"/>

4.2.9. View the unit basic information on the web page

- (1) Version number;
- (2) MAC address;
- (3) Unit type.

UNIT BASIC INFORMATION	
Kernel version	V1.1.0 H1110BA03
Application version	V1.4 M0908BAH3
MAC address	9C:9C:1F:1E:CC:DF
Unit type	Delegate

5.Precautions for use

Note: When using the unit search and scan tool to search for the IP address of the device and log in to the WEB management interface, pay attention to: **Network port of the TS-0336 unit cannot be directly connected to the PC network port**, otherwise it will cause the computer to burn.

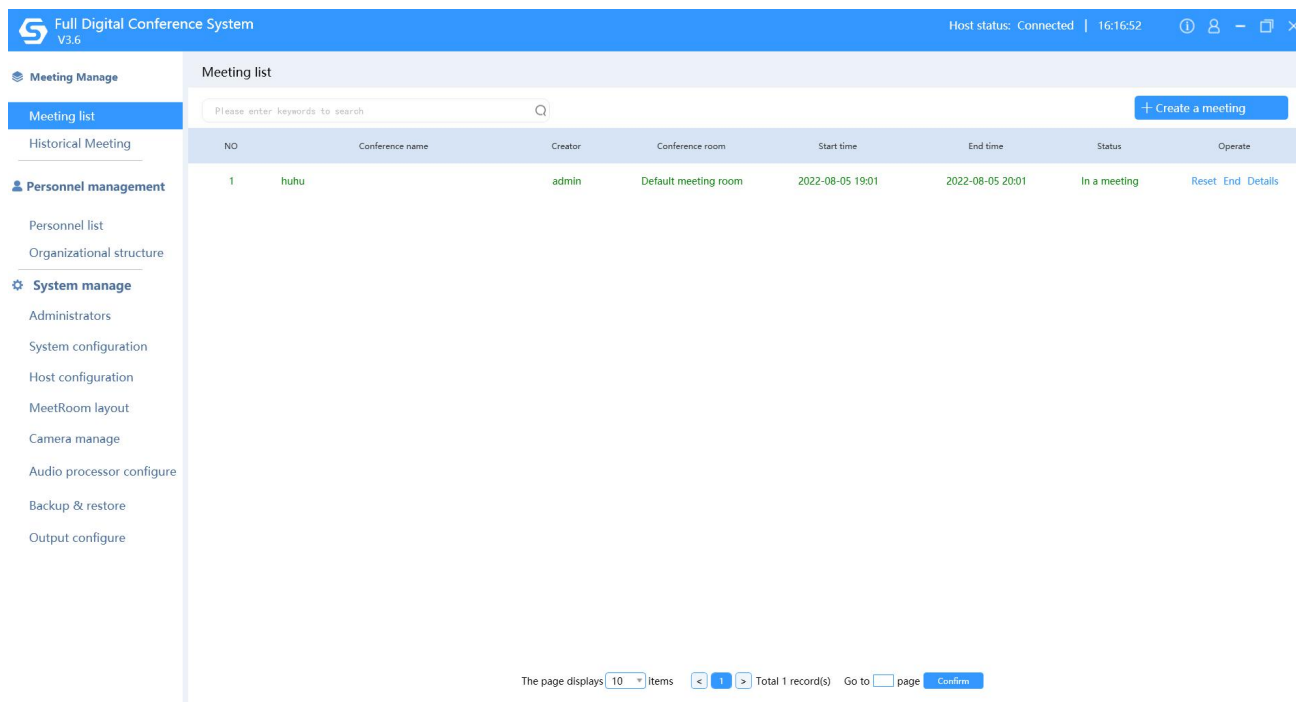
Correct steps: You need to connect the TS-0336 to the TS-0300M conference host through the six-pin to network port adapter first, connect the PC to the EXTENSION port of the conference host, and then open on the PC side to scan the ID number, IP address and other information of the current device.

Disclaimer:

- 1. The connection between the TS-0336 and TS-0336A microphones must use our factory-supported network cable, otherwise all the consequences will be borne by yourself.**
- 2. The network port is prohibited from connecting to other devices, otherwise all the consequences will be borne by yourself.**

6.Conference PC software

The PC control software supporting the new conference system is powerful and easy to operate. It includes most of the functions required for a meeting, and is designed according to the sequence of the meeting procedure. Users only need to follow the usage order from top to bottom on the left sidebar.



Introduction to the system management interface: The left side of the system management interface displays the three functional modules of the system: Conference management, Personnel management, and System management.

Each of these modules contains several sub-modules.

Conference management includes sub-modules: conference list and historical conference; Personnel management includes sub-modules: personnel list and organizational structure; System management includes sub-modules: administrator, system configuration, host configuration, conference room layout, backup and recovery, and output configuration, etc.

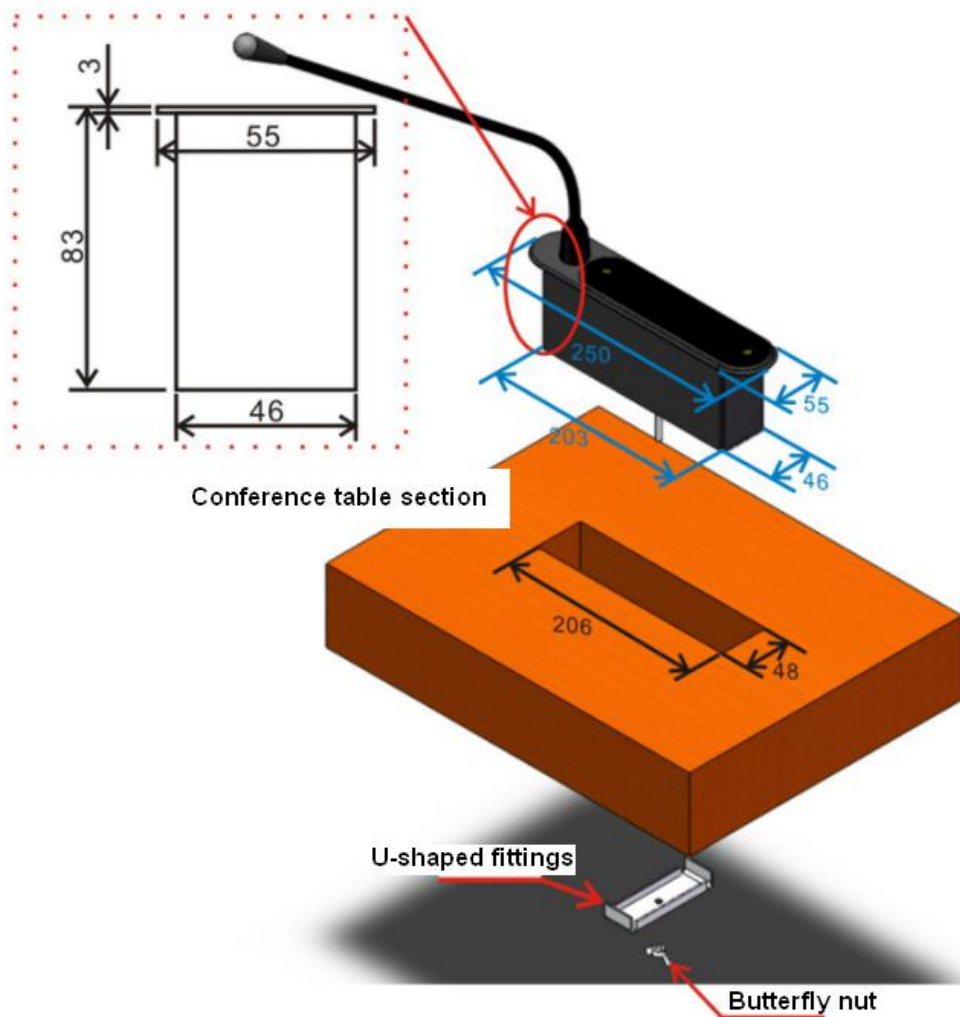
Due to the limited space of this user manual, the specific operation instructions of the new conference system software will not be introduced in detail here. For details, please refer to the "New Conference System Software User Manual".

7. Installation opening diagram

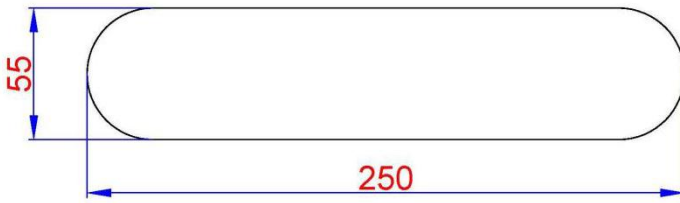
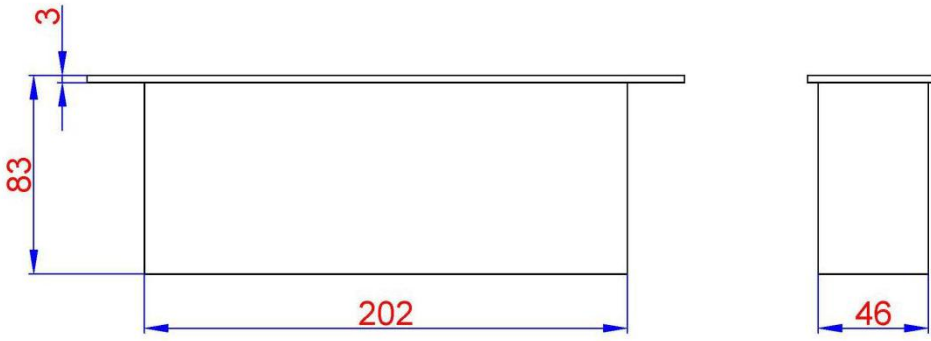
Taking a conference table with a length of 500cm and a width of 180cm as an example, 14 conference units can be installed on the entire conference table.

Conference table opening size description:

- (1) In order to ensure the aesthetic effect of the conference room, the conference table needs to be specially customized according to the appearance size of the conference unit in advance;
- (2) The distance between the installation holes of each conference unit is 60cm, and the distance from the edge of the conference table is 40cm, and they are installed one by one in a symmetrical arrangement;
- (3) When installing, first place the conference unit into the opening of the conference table in the correct direction, and then insert the U-shaped fitting into the screw and tighten it with a butterfly nut. When screwing the butterfly nut, you should be careful not to damage the conference units. As long as the conference unit does not shake.

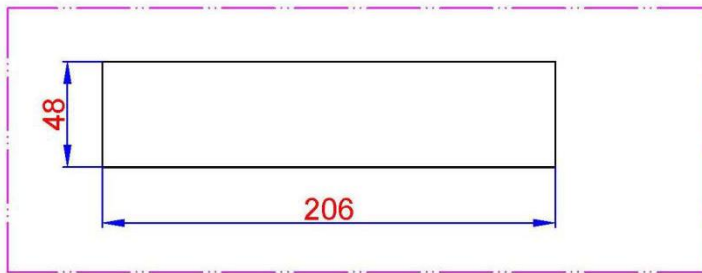
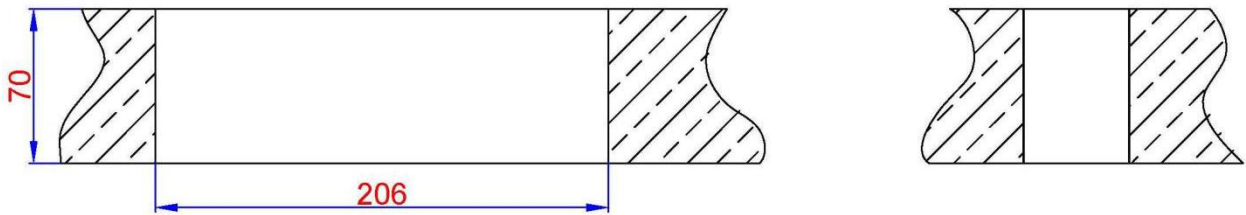


Unit: mm



Product size

Unit: mm



Conference table opening size

Unit: mm

Fully Digital Conference System

