

Fully Digital Conference System

User Manual

TS-0305/0305A

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.

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

2000m	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

The third-generation dual-channel touch-screen microphone features a brand-new solution architecture, as well as a compact design and beautiful appearance. It adopts the dual-port network cable hand-in-hand connection, instead of the traditional six-pin aviation cable, which greatly facilitates the construction and wiring.

2. Product Description

TS-0305/TS-0305A Third-generation dual-channel touch-screen chairman/delegate unit



2.1 Features

- 1. Adopt a 4.3-inch full-color touch screen.
- 2. Short microphone pickup design, long-distance pickup effect.
- 3. Adopt uncompressed audio transmission technology, 48K sampling rate, 80Hz-16KHz bandwidth, perfect sound quality.
- 4. Adopt 100M network transmission, and hand-in-hand network cable connection, convenient for wiring.
- 5. Adopt standard TCP/IP communication protocol, support ping packet function.
- 6. Support 63+1 channels of simultaneous interpretation, support dual-channel listening function to simultaneously listen to different interpreter channels.
- 7. Support PC software microphone control and voice control function.
- 8. The chairman unit has the priority to turn off the speaking delegate unit.

- 9. Built-in independent web server, support four language switching, and adjustment of microphone ID number, microphone sensitivity, microphone EQ and other parameters.
- 10. Support the function of speech countdown and speech timekeeping.
- 11. Support the internal feedback suppression function, voice control function, and adjustable sensitivity of the voice control.
- 12. Support the 5-band EQ adjustment function, adjust sound effects according to the voice characteristics of different speakers to achieve the perfect effect.
- 13. Support the sign-in function, and functions such as prohibiting unit sign-in and control unit sign-in through PC software.
- 14. Support voting function, multiple voting modes, and customized content of the options.
- 15. Support firmware upgrade function on the web page.
- 16. Support the IP address sniffing function; the ID number, IP address, MAC address and other parameters of the unknown unit can be found through the PC tool.

2.2 Product Interface Introduction

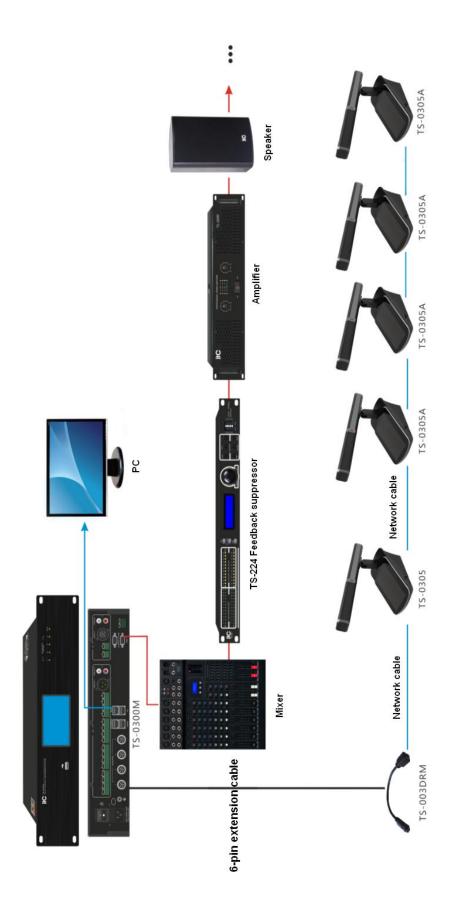


- 1. Network interface 1;
- 2. Network interface 2;
- 3. Left earphone jack;
- 4. Right earphone jack;
- 5. Microphone indicator.

2.3 Specification

Model	TS-0305/TS-0305A
Microphone type	Electret condenser microphone
Microphone directivity	Cardioid polar pattern
Frequency response	80Hz~16KHz
Input impedance	1ΚΩ
Sensitivity	-33±1.5dB(0dB=1V/Pa,at1KHz)
Max SPL	120dB(THD>3%)
SNR	>80dB(A)
Crosstalk	>70dB
Dynamic range	>80dB
THD	<0.3%
Max power consumption	3.0W
Standard	IEC60914
Power supply	Conference controller power supply
Color	Oxidized fine sand black
Installation method	Desktop
Size	240×99×125mm (L×W×H) (without microphone pole)
Weight	0.94Kg

3. Connection Diagram



4. TS-0305/TS-0305A Operating Instruction

4.1 Startup

(1) Startup picture: the application version number and kernel version number will be displayed on the startup picture.

4.2 Unit type

- (1) The chairman unit has a microphone button and a priority button, which can turn on/off the microphone, perform priority right, initiate sign-in and voting, sign-in, vote, etc.
- (2) The delegate unit has a microphone button but no priority button, which can turn on/off the microphone, sign in, etc.

4.3 Conference management

- (1) The microphone on/off is controlled by the conference management, and its permissions are configured by the conference controller. Refer to the conference mode description for the logic of use.
- (2) Press the priority button of the chairman unit to turn off all delegate microphones, and turn on the microphone of the chairman unit.

4.4 Sign in

- (1) Initiate sign-in through PC software. At this time, you can press the microphone button of the unit to sign in, and the result will be displayed on the local screen and the PC software.
- (2) The sign-in function of the unit can be disabled or enabled through the PC software.

4.5 Voting

- (1) Initiate voting through PC software. At this time, you can press the microphone button of the unit to vote, and the voting result will be displayed on the PC software.
- (2) The unit voting function can be disabled or enabled through PC software.

4.6 Fire alarm

When the controller sends out a fire alarm message, the red light on the microphone pole of the unit will flash until the fire alarm is canceled and then the unit resumes its previous state.

4.7 Speech countdown and speech timekeeping

This function is controlled by the conference PC software. For details, please refer to the PC user manual. For speech countdown, the PC will issue the time for the timed speech, the unit will count down and display the remaining speech time, and the microphone will be automatically turned off

when the time is up. The speech countdown function is only valid for the delegate unit but not the chairman unit. As for speech timekeeping, the PC-designated unit will perform the timekeeping, and the speech time will be displayed on the PC. At the same time, the upper right corner of the local screen will also display the time of speech countdown and speech timekeeping.

4.8 Audio settings and headphone output

TS-0305/TS-0305A has two left and right earphone channels, which can be used to listen to 63+1 channels. On the audio setting page, you can select the channel number of the left and right channels, and adjust the corresponding volume.

4.9 Language settings

TS-0305/TS-0305A supports four languages switching between Chinese, English, Russian and French.

4.10 System settings

On the system settings page, you can adjust the brightness, view the device type (chairman/delegate), local IP address, device ID number, voting permission, sign-in permission, application version number, and kernel version number.

4.11 Conference service

TS-0305/TS-0305A can initiate three services: tea, paper and pen, and service personnel. The service request is responded to on the PC side.

4.12 SMS and electronic nameplate

The PC can send short messages and electronic nameplate information. After receiving the short message, the device will display the short message in a pop-up window and automatically return to the LOGO page after 30 seconds. The device will display the electronic nameplate information on the top of the display screen after receiving it.

4.13 Conference PC software and PC audio adjustment

Voice control sensitivity setting, voice control off time setting, language switching, sign-in enabling setting, voting enabling setting, microphone sensitivity setting, 5-band EQ display and setting. Please refer to the PC software manual for specific instructions.

4.14 Unit ID number and related IP address description

(1) According to the current unit ID number, the unit IP address is obtained. The first two bytes of

the IP address are fixed at 172.16; the next two bytes will be the high 8 bits and the low 8 bits of the ID number.

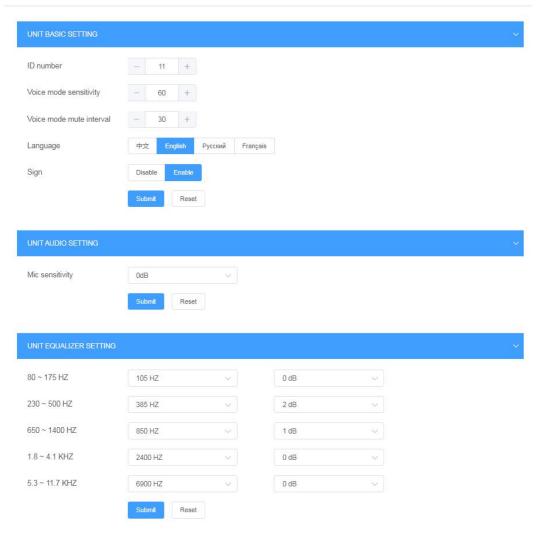
- (2) For example: if the ID number is 1, the IP address is 172.16.0.1; if the ID number is 100, the IP address is 172.16.0.100; if the ID number is 300, the IP address is 172.16.1.44; if the ID number is 4090, the IP address is 172.16.15.250.
- (3) If you forget the ID number, you can find the ID number and IP address of the current microphone through the provided PC View IP Address gadget.

4.15 The unit supports the ICMP protocol and can perform PING packet related operations

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

4.16 Unit web page login

- (1) Set the PC to the same network segment as the unit;
- (2) Please refer to the description in 4.12 for the unit IP address;
- (3) The subnet mask is 255.255.0.0;
- (4) All settings in the web page are effective after "Submit information".



4.17 Web setting of unit ID number

- (1) Reset the unit ID, and the IP address of the unit will change.
- (2) After setting, you need to log into the web page according to the IP address bound to the new ID to conduct parameter settings.

4.18 Web setting of voice control function

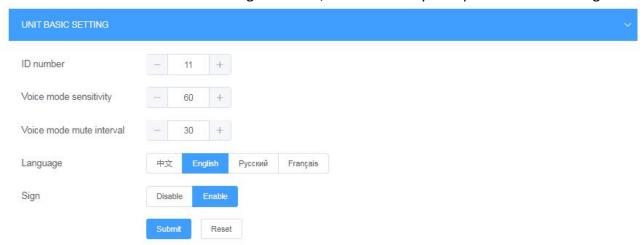
- (1) Set the microphone sensitivity in the voice control mode.
- (2) Set the no-signal off time in the voice control mode (the chairman unit will not be affected).

4.19 Web setting of language switching

Chinese, English, Russian and French switching.

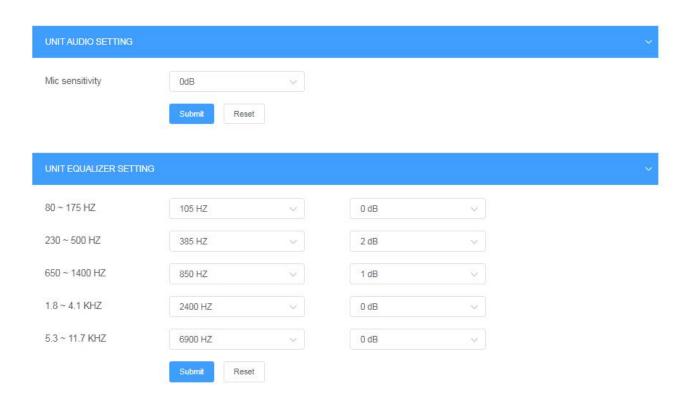
4.20 Web setting of sign-in function

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



4.21 Web setting of unit audio parameters

- (1) Microphone sensitivity.
- (2) Microphone EQ.



4.22 Web browsing of unit basic information

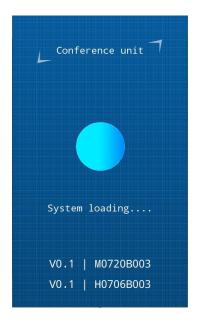
- (1) Version number.
- (2) MAC address.
- (3) Unit type.



5. TS-0305/TS-0305ADisplay Operation Instruction

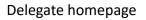
5.1 Startup

1. After the microphone is powered on, the unit screen displays "System is loading...", as well as the kernel software version number and application software version number. The startup picture is as follows:



2. After the boot is completed, enter the homepage, the interface is as follows:







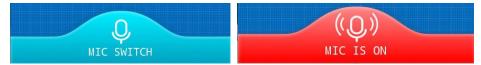
The headset icon is displayed when the headset is plugged in:



5.2 Microphone management

The microphone on/off is controlled by the conference management, and its permissions are configured by the conference controller. Please refer to the conference mode description of the controller for the logic of use.

1) Press the MIC power switch to power on/off the microphone, and the unit interface is as follows:



②In APPLY mode, when a delegate unit applies to turn on the microphone, the delegate interface is as follows:



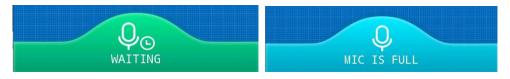
At this time, the chairman unit displays as follows:



③When the number of applicants is full, it will be displayed as follows:



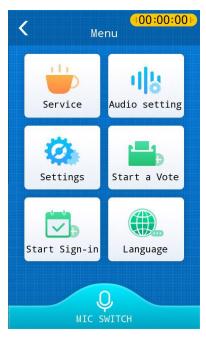
④In NOMAL mode, the delegate units that exceed the allowed number will enter the waiting state. When the number of waiting units is full, it will pop up a corresponding prompt, as shown below:

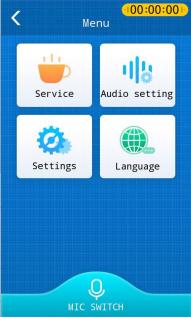


5.3 Menu interface

Chairman menu

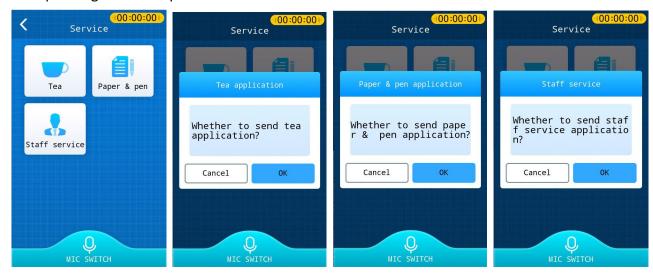
Delegate menu





5.4 Service interface

Click "Tea", "Paper and Pen", "Service personnel" to pop up the corresponding service windows, click Cancel to exit the pop-up window and return to the service interface; click OK to send the corresponding service request to the controller and return to the service interface.



5.5 System settings

Click to enter the system settings interface, you can view the current device type (chairman/delegate), IP address, ID number, voting permission, sign-in permission, application version number, kernel version number and other information. The slide bar below can slide to adjust the brightness of the screen.



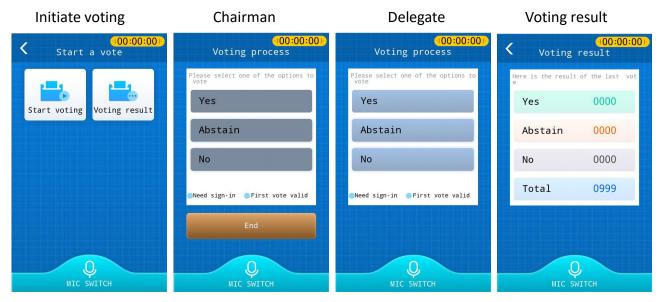
5.6 Audio settings

Click to enter the audio settings interface, you can swipe up and down to switch the simultaneous interpretation channels of the left and right earphones, which ranges from 0 to 63. And you can also adjust the volume of the left and right earphones, ranging from 0 to 16.



5.7 Initiate voting

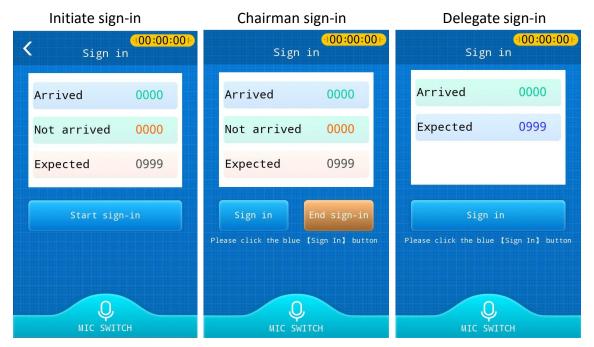
When the voting permission is enabled, click Start voting and all microphones enter the voting mode; click Voting result to display the previous voting result.



After the voting is completed, the voting result of this time will be updated.

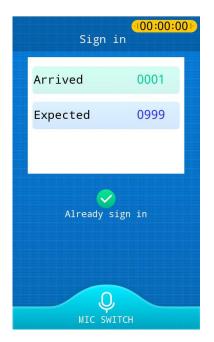
5.8 Initiate sign-in

When the sign-in permission is enabled, the chairman machine clicks Start sign-in and all online microphones enter the sign-in mode.



Click Sign in, and it will prompt that you have signed in successfully. The interface is as follows:





Chairman signed in successfully

Delegate signed in successfully

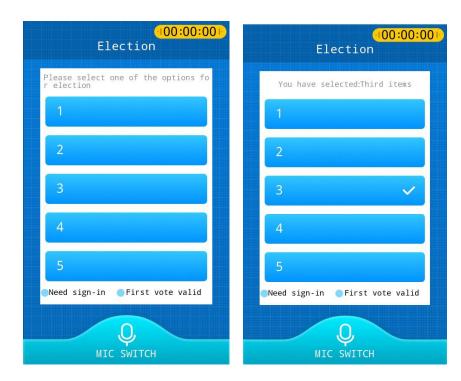
5.9 Language settings

Click Language settings to enter the language switching interface, click the corresponding language button, and it will switch to the corresponding language. It supports four languages switching between Chinese, English, Russian and French.



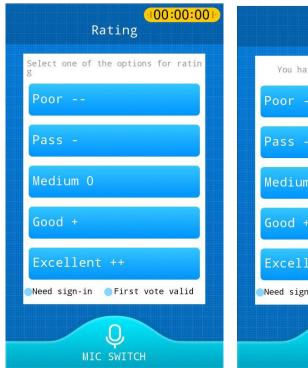
5.10 Regular voting initiated by the PC

Select an option, and a check mark will appear behind the option, and the item you have selected will be displayed in the prompt bar above the option.



5.11 Five-key ranking initiated by the PC

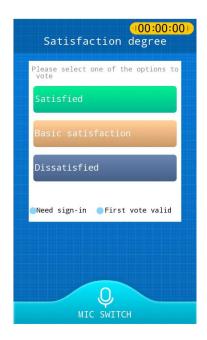
Click an option, and a check mark will appear behind the option, and the item you have selected will be displayed in the prompt bar above the option.



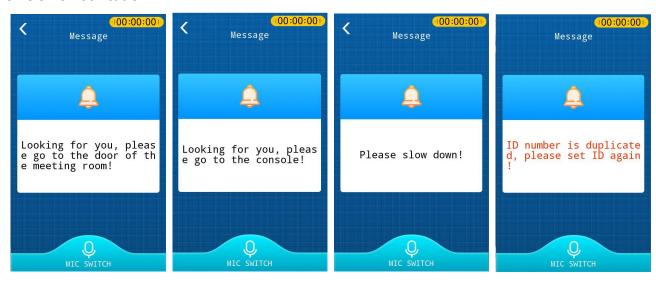


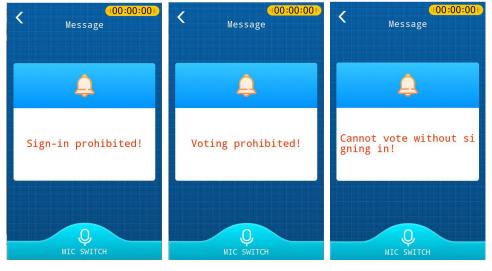
5.12 Evaluation function

The evaluation function initiated by the PC.



5.13 SMS notification





5.14 Fire alarm



5.15 Native ID

Click Set to modify the native ID; each time you press Set, the native ID will automatically +1.



6. Precautions for Use

Note:

When using the unit search scan tool to search for the device IP address and log in to the WEB management interface, pay attention to that the network port of the TS-0305 unit cannot be directly connected to the computer network port, which will cause the computer to burn.

The network port of the TS-0305 microphone unit does not support POE power supply, and it is forbidden to connect to a POE switch.

The two left and right network ports are different, and they are not fully adaptive. The microphone units are connected with different ports when cascading (network port 1 is connected to network port 2).

Disclaimer:

- 1. You must use the factory-equipped network cable for the connection between the TS-0305/TS-0305A microphones, otherwise all the consequences will be borne by yourself.
- 2. It is forbidden to connect other devices to the network port, otherwise all consequences will be borne by yourself.

7. Conference PC software

7.1 Software installation

1. Double click "Digital conference client", and then click "next" and "finish" as prompted.

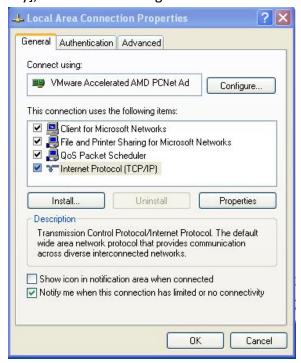


2. Server settings

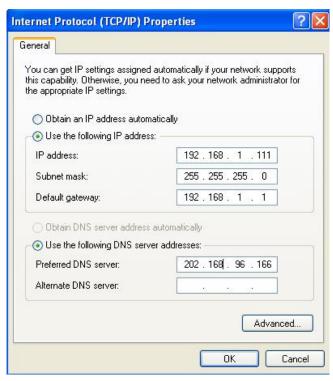
Before usage, it is required to finish some necessary settings of the fully digital conference system. The main settings are as follows:

① Set the IP address of the computer

Step 1: right-click [Network Neighborhood], choose [Property] and then open [Local Area Connection]; right-click [Property], as shown in the figure below.



Step 2: double click 【Internet protocol (TCP/IP)】, and enter the setting interface of the IP address. And then enter the related information of the computer IP according to the controller IP, as shown in the figure below.



Step 3: modify the IP address. The controller IP is based on the "System Configuration" item of the controller; the IP configuration and the IP network segment can be viewed. You have to make sure that the computer IP and controller IP are in the same network segment. For example: when the current controller IP is 192.168.168.168, the computer IP should be 192.168.168.xxx. As for the subnet mask, it is by default.

7.2 System operation

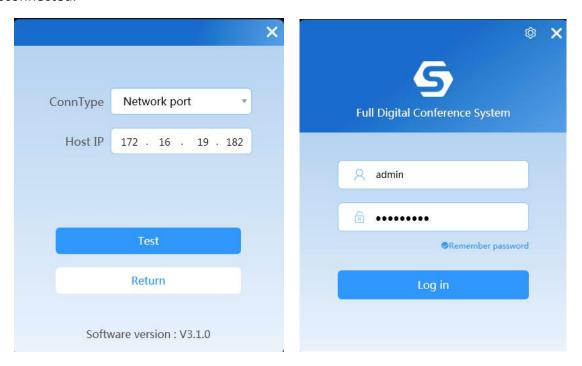
1. After finishing installation, there will be a shortcut icon on the desktop:



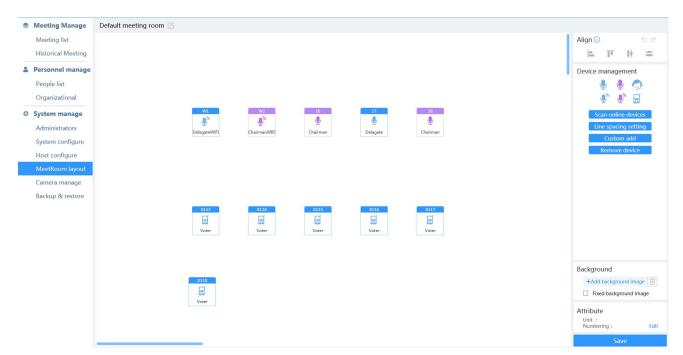
2. Log in to the software

- 2.1 Double-click the shortcut icon to enter the right picture;
- 2.2 Click the gear-shaped icon in the upper right corner to enter the left picture and set the controller IP; make sure that it is the same as the IP of the conference controller;
- 2.3 Click "Test", it will give a prompt that the connection is successful; click "Back" to enter the right picture again, and enter the account admin and the password admin8888 to log into the software;

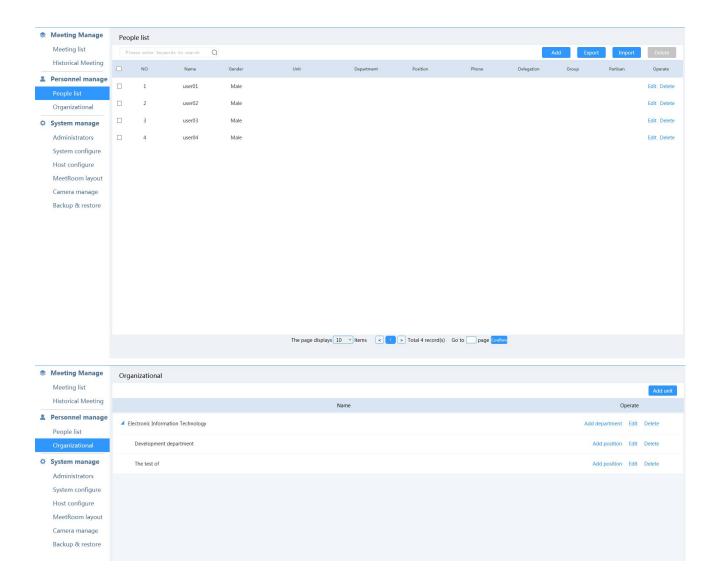
2.4 Click "Test", if it gives a prompt that the connection failed, please check whether the entered IP is the same as the IP of the conference controller and whether the network cable is disconnected.



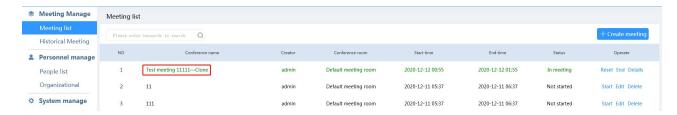
3. After logging in, enter "conference room layout", click "Scan online devices", and then click "Save".



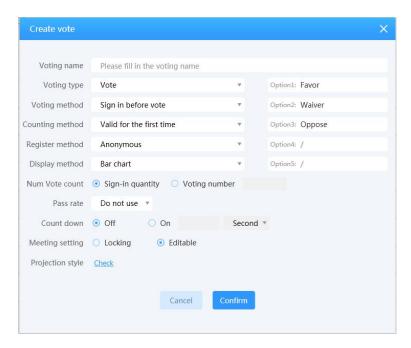
4. Click "Personnel management" to edit the organization structure and participants.



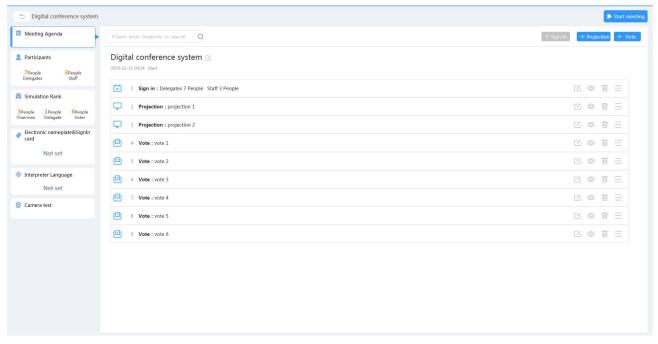
5. Click "conference list" to create a conference.

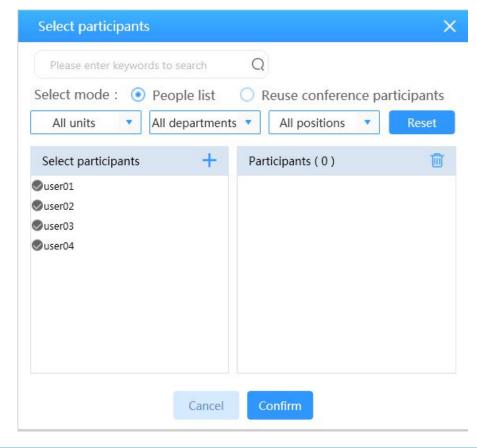


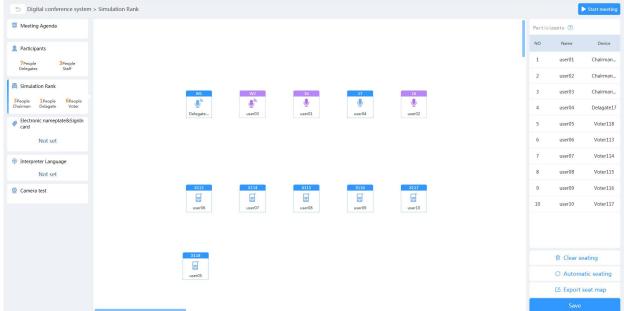
6. For the created conference, you can click "Edit" to create voting and sign-in.



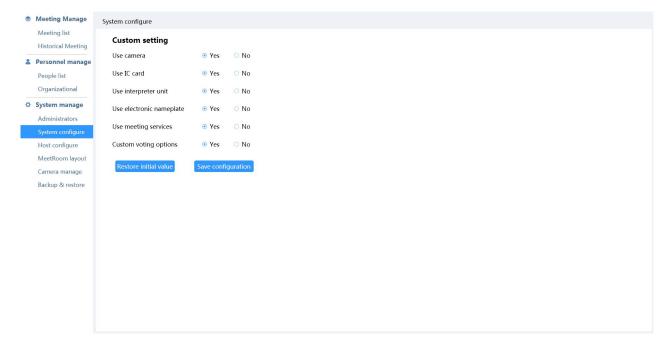
7. After the conference is created, click "Participant", select the participants, and then click "simulated seating" to arrange the seats of them. Finally, click "start the conference".



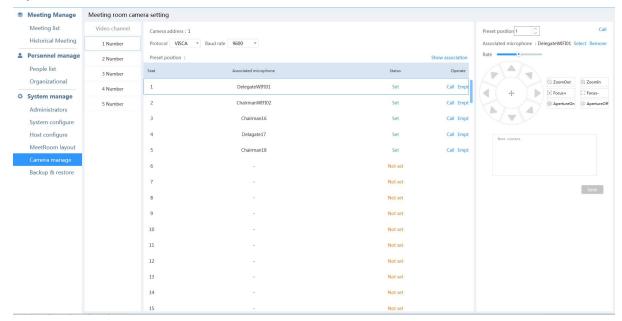




8. Click "system configuration", and you can set the configuration of the system, such as "use the camera". In this way can it support settings and using of video tracking.



9. Click "use the camera" in system configuration, and a camera management interface will pop up. And then select different video channels and the preset positions of the corresponding microphones.



10. As for more details about the PC software, please refer to the user manual.

Log into the conference software, click the help icon in the upper right corner and then the user manual will pop up

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