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# **Fully Digital Conference System**

## **User Manual**

**TS-0300M**

**Before using this system, please read this manual carefully**

# Notification



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:

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

## 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.

# CONTENT

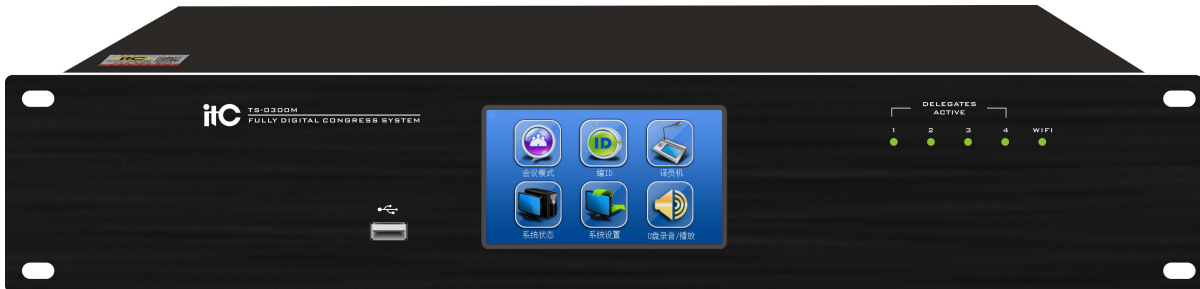
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# 1. System description

The fully digital conference system adopts the original network communication, digital transmission and processing technology, greatly connecting the digital technology and network technology with the conference system. In fact, the perfect combination of wireless WIFI system and wired fully digital system makes a new breakthrough in the field of conference system.

# 2. Introduction of TS-0300M

## TS-0300M Third-generation fully digital conference controller



### 2.1 Feature

- 1) Original clock synchronization and transmission technology, audio delay is less than 5ms, uncompressed audio transmission of sampling rate 48K; the Cat5e cable ensures long-distance and reliable transmission of conference information, and perfect sound quality.
- 2) Built-in high performance DSP processor, with the adjustment functions of audio matrix, howling suppression(optional), EQ, volume, delayer and others.
- 3) Audio input interfaces include 1 RCA,1 XLR, 2 Phoenix terminals. Audio output interfaces include 1 RCA,1XLR,16 Phoenix terminals.
- 4) Powerful 16-channel output function, support role separation output mode, simultaneous interpretation output mode and phase control out mode. Each output channel can adjust EQ, volume, delayer and so on.
- 5) 16-channel role separation output mode, support independent output of wired or wireless units according to ID number, support recording devices or speech-to-text transcription devices. And the output channels can be extended by external devices.
- 6) 16-channel simultaneous interpretation output mode, support independent output of simultaneous audio according to the channel number, support recording devices or speech-to-text transcription devices. And the output channels can be extended by external devices.
- 7) 16-channel phase control output mode, original conference matrix technology, built-in nx16

audio matrix processor, 16-channel grouped output function. Any input source (including all input sources and online microphones) can be output to any channel according to volume ratio.

8) Conference controller adopts TCP/IP network protocols, and supports C/S, B/S structures, controlled by PC software or browser.

9) Through WEB, it controls audio matrix setting(including EQ, volume, delay, microphone sensitivity), 16-channel output mode switching, microphone synchronization, language switching of Chinese, English, Russian and French, and role separation controller.

10) Large system capacity, a maximum of 4096 wired conference units and 300 wireless conference units; the maximum number of speaking units is 8 wired microphones and 6 wireless microphones.

11) The circular hand-in-hand function, the conference will not be affected when any one of the network cables is disconnected or the units gets a failure.

12) The WIFI network interface has POE power supply function, and can be directly connected to wireless AP; can also increase the number of wireless AP by connecting to a POE network switch, providing larger wireless coverage.

13) Support language switching of Chinese, English, Russian and French, etc.

14) The PC software supports checking the battery status of the online wireless units, WIFI signals and so on.

15) It can turn off all wireless units with one key.

16) Simultaneous interpretation function, support simultaneous transmission of 63+1 wired simultaneous interpretation maximum.

17) It has a fire alarm linkage trigger interface to provide fire alarm information and urge people to evacuate the venue immediately to ensure their safety.

18) PELCO-D and VISCA camera control protocols can work with the high-definition camera tracking controller to realize automatic camera tracking.

19) Four microphone management modes: FIFO(first in first out), NORMAL(normal mode), VOICE(voice control mode), and APPLY(application mode).

20) PC terminal supports functions of conference sign-in, voting, evaluating, satisfaction, and customized function, etc.

21) 4.3-inch full-color touch screen, support settings or viewing, and support touch control.

22) Powerful ID editing function, support ID editing of wired unit, wireless unit, interpreter machine, role separation controller.

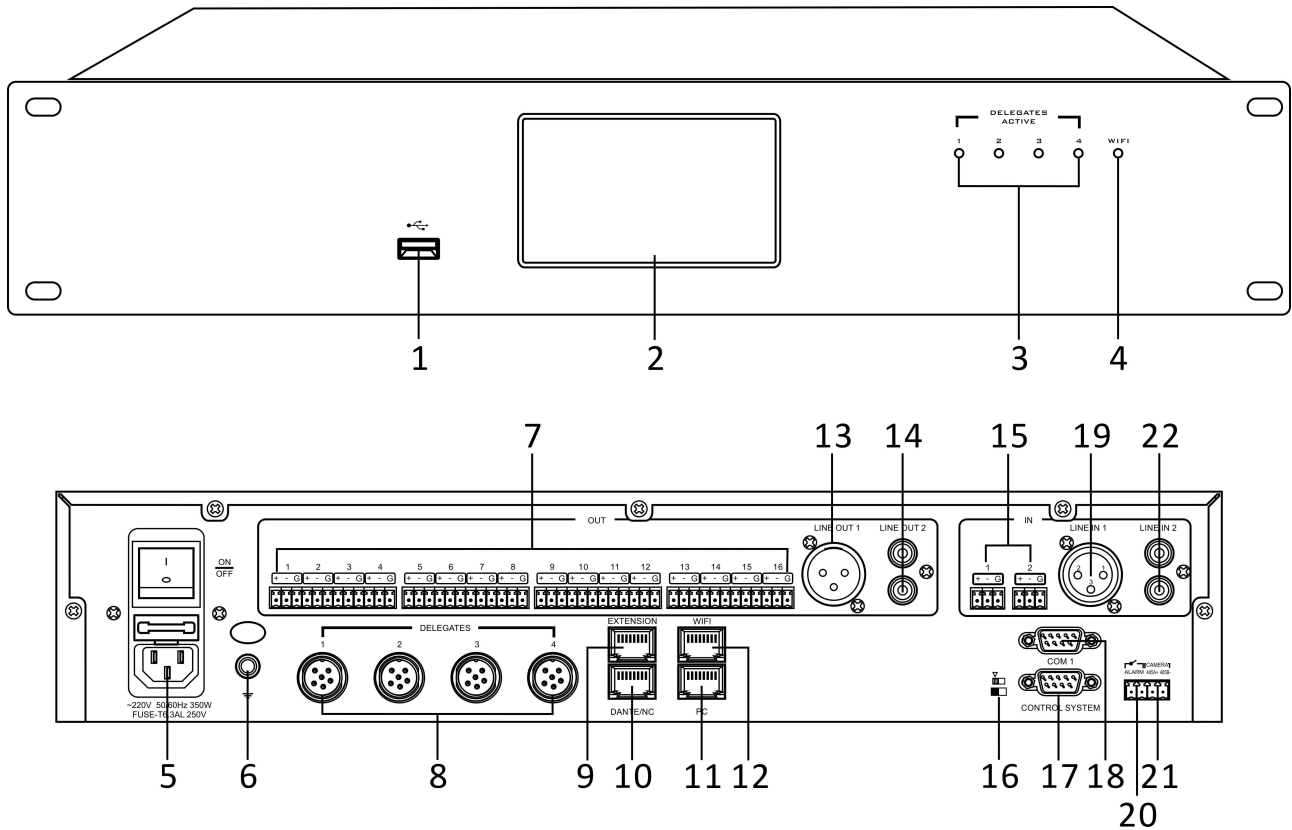
23) USB recording function, can record and play conference videos.

24) Conference controller has DANTE(optional) network interface, and can easily realize audio interaction with external devices of the DANTE protocol.

25) It can make all paperless lifting microphones go up/down with one key.

26) 16 multi-function output interfaces and 2 LINEOUT output interfaces have 10-band EQ adjustment function.

## 2.2 Introduction of interface



1. USB 2.0 interface, used for recording and playback audio with a U disk;
2. 4.3-inch full-color touch screen, used to control the conference controller and display the current working status;
3. Communication indicator of wired conference unit;
4. Communication indicator of wireless conference unit;
5. Power switch and power input socket, support 100-120V~7A 50/60Hz or 200-240V~4A 50/60Hz voltage input;
6. Ground terminal;
7. 16 multi-function output phoenix terminals, support phase control output mode, simultaneous interpretation mode, and role separation output mode;
8. DELEGATES 1~4 port, connected to the conference units;
9. EXTENSION port, connected to the conference system extension devices;
10. DANTE/NC port, support audio interaction with external devices of DANTE protocol;
11. WIFI network port, connected to wireless AP;
12. PC network port, connected to the network port of the computer controller;
13. Line audio XLR balanced output;

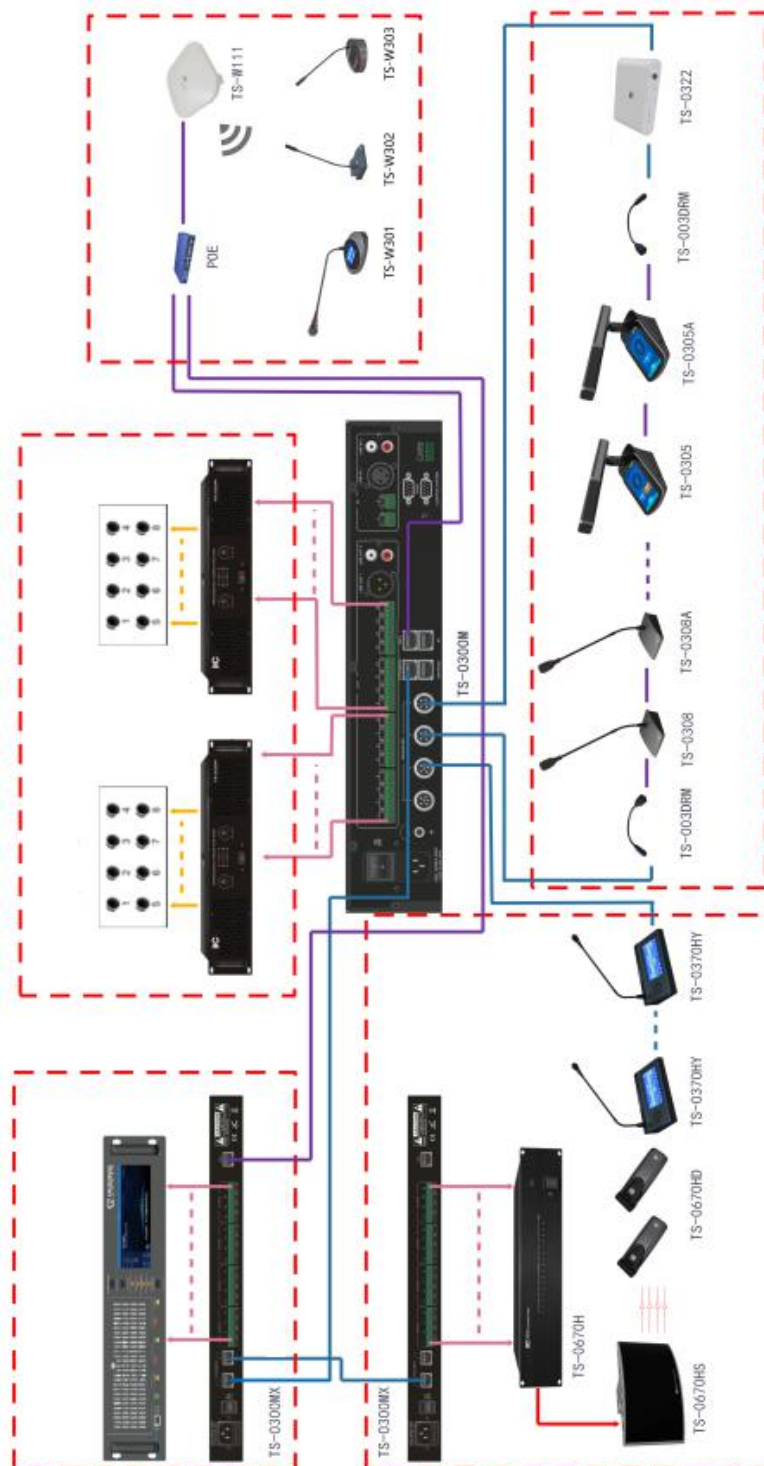


14. Line audio RCA unbalanced output;
15. Line audio Phoenix terminal input;
16. Debugging switch, turn it to the left in normal use;
17. Camera RS-232 communication interface;
18. RS-232 communication interface for connecting with external device;
19. Line audio XLR balanced input;
20. Short circuit triggering the fire alarm interface;
21. Camera 485 communication interface;
22. Line audio RCA unbalanced input.

## 2.3 Specification

Model	TS-0300M
Microphone capacity	Wired microphone $\leq 4096$ ; wireless microphone $\leq 300$
Channel	63+1 channels
Frequency response	80~16KHz
SNR	>76dB(A)
Dynamic range	>80dB
Total harmonic distortion	<0.05%
Main power supply	100-120VAC/200-240VAC by switch
Audio input	LINEIN1: 775mVrms balanced; 2 output Phoenix terminals: 775mVrms balanced; LINEIN2: 775mVrms unbalanced
Audio output	LINEOUT1: 1Vrms balanced; 16 multi-function output Phoenix terminals: 1Vrms balanced; LINEOUT2: 1Vrms unbalanced
Output load	>1K $\Omega$
EXTENSION port	Connect to conference system extension device
DANTE/NC port	Connect to external devices of DANTE protocol
WIFI network port	Connect to wireless AP
PC network port	Connect to the computer
Static power consumption	30W
Output power consumption	320W
Wired microphone connection	Dedicated cable (6 pins)
Standard	IEC-60914
Touch screen	4.3-inch full-color touch screen
Color	Black
Net weight	5.6Kg
Size	484×303×88mm
Installation	19-inch standard cabinet

### 3. System connection diagram



**Notice:**

1. The wireless AP transmitter supports directly connecting to WIFI network port of the conference controller, and also supports protocol communication of the POE switch.  
(Note: the switch needs a standard POE switch, protocol: IEEE802.3af/at)
2. The interpreter machine TS-0370HY can only be connected to the third-generation conference controller, but not the infrared transmitter controller.

## 4. TS-0300M Operation instruction

### 4.1 Conference management



Click “Conference mode” on the main interface, select from wired/wireless mode, and then enter the wired microphone management mode. It includes 4 microphone modes and you can choose one of them; the number of microphones means the current maximum allowable number of microphones  $N$  (wired  $N = 1/2/4/8$ ; wireless  $N = 1/2/4/6$ ), and you can choose one of them.

The wired and wireless units of the third-generation controller has same mode settings. For example, when the wired microphone mode selects the FIFO mode, the wireless microphone mode selects the FIFO mode too.

#### 4.1.1 First in first out mode (FIFO)

##### ① FIFO microphone management of opened delegate unit

FIFO: when the total number of microphones is less than  $N$ , the delegate unit directly turns on their own microphones; when the total number of microphones reaches  $N$  and there are some delegate units on, the delegate units will turn on the microphones in FIFO mode.

##### ② FIFO microphone management of opened chairman unit

Preemption mechanism: the chairman unit can preempt speaking right of the opened delegate microphone (when the total number of opened microphones reaches  $N$  and there are some delegate units, turn on the current chairman unit microphone to kick the earliest delegate out of the microphone queue);

Full microphone queue: the chairman units are not restricted by FIFO mechanism; when the total number of opened microphones reaches N and the microphones are all chairman units, it will display "full microphone queue" when turning on a new chairman unit;

Priority: press the priority key of the chairman unit to activate the priority function, which is to turn off all the delegate units immediately. If the chairman microphone has not been turned on before, it will be turned on (when the microphone queue is full and the microphones are all chairman units, it will not be turned on).

#### 4.1.2 Normal mode (NORMAL)

##### ① NORMAL microphone management of opened delegate unit

Waiting mechanism: when the number of opened microphones reaches N, it will enter waiting state when turning on a new delegate unit, and the maximum number of waiting units is also N. The delegate unit can exit the waiting state by pressing the microphone button. When a certain opened microphone is turned off, the first microphone in waiting state will be automatically turned on.

##### ② NORMAL microphone management of opened chairman unit

Preemption mechanism: the chairman unit can preempt speaking right of the opened delegate microphone (when the total number of opened microphones reaches N and there are some delegate units, turn on the current chairman microphone to kick the earliest delegate out of the microphone queue);

Full microphone queue: the chairman units are not restricted by waiting mechanism; when the total number of opened microphones reaches N and the microphones are all chairman units, it will display "full microphone queue" when turning on a new chairman unit;

Priority: press the priority key of the chairman unit to activate the priority function, which is to turn off all the opened or waiting delegate units immediately. If the chairman microphone has not been turned on before, it will be turned on (when the microphone queue is full and the microphones are all chairman units, it will not be turned on).

#### 4.1.3 Voice control mode (VOICE)

##### ① VOICE microphone management of opened delegate unit

Waiting mechanism: when the number of opened microphones reaches N, it will enter waiting state when turning on a new delegate unit, and the maximum number of waiting units is also N. The delegate unit can exit the waiting state by pressing the microphone button. When a certain opened microphone is turned off, the first microphone in waiting state will be automatically turned on.

##### ② VOICE microphone management of opened chairman unit

Voice control mechanism: the chairman microphone can automatically detect the current speech, and the microphone can be automatically turned on by speaking to it.

Preemption mechanism: the chairman unit can preempt speaking right of the opened delegate

microphone (when the total number of opened microphones reaches N and there are some delegate units, turn on the current chairman microphone to kick the earliest delegate out of the microphone queue);

Full microphone queue: the chairman units are not restricted by waiting mechanism; when the total number of opened microphones reaches N and the microphones are all chairman units, it will display "full microphone queue" when turning on a new chairman unit;

Priority: press the priority key of the chairman unit to activate the priority function, which is to turn off all the opened or waiting delegate units immediately. If the chairman microphone has not been turned on before, it will be turned on (when the microphone queue is full and the microphones are all chairman units, it will not be turned on).

#### 4.1.4 Application mode (APPLY)

##### ① APPLY microphone management of opened delegate unit

Application mechanism: press the microphone button on the delegate unit to apply to the chairman unit for turning on the microphone. At this time, the button number 3 of the chairman unit will flash and the screen will display "delegate unit applies for turning on the microphone" (press number 3 on the chairman unit to "agree", and then turn on the applied delegate microphones orderly). The maximum number of applied delegate microphones is N, and it will display "full microphone queue" when exceeding the number. The delegate unit can exit the application state by pressing the microphone button.

Automatic cancellation mechanism: the delegate unit will automatically cancel the application and exit the application state when the chairman unit does not agree within 15 seconds.

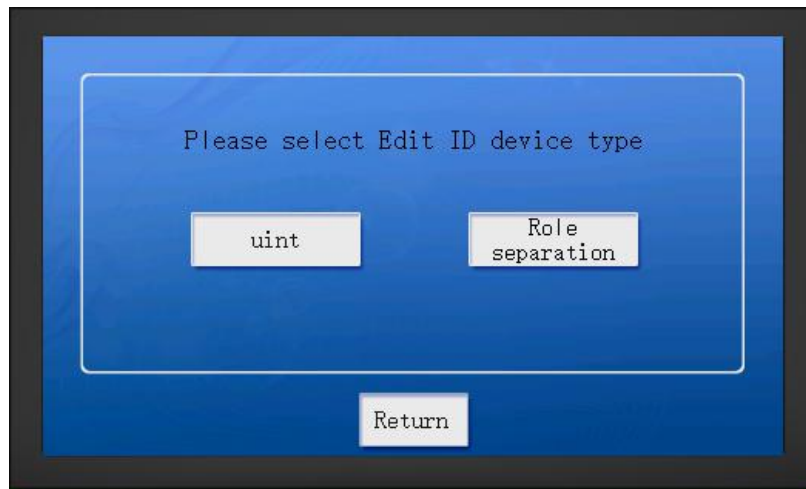
##### ② APPLY microphone management of opened chairman unit

Preemption mechanism: the chairman unit can preempt speaking right of the opened delegate microphone (when the total number of opened microphones reaches N and there are some delegate units, turn on the current chairman microphone to kick the earliest delegate out of the microphone queue);

Full microphone queue: the chairman units are not restricted by APPLY mechanism; when the total number of opened microphones reaches N and the microphones are all chairman units, it will display "full microphone queue" when turning on a new chairman unit;

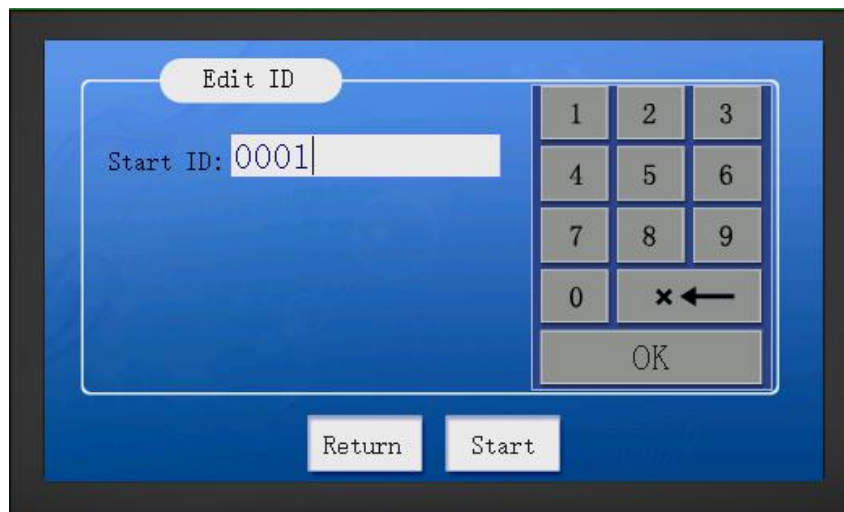
Priority: press the priority key of the chairman unit to activate the priority function, which is to turn off all the opened or waiting delegate units immediately. If the chairman microphone has not been turned on before, it will be turned on (when the microphone queue is full and the microphones are all chairman units, it will not be turned on).

## 4.2 Edit ID



Start editing ID on the main interface, and then choose the editing device.

### (1) Edit ID on unit device

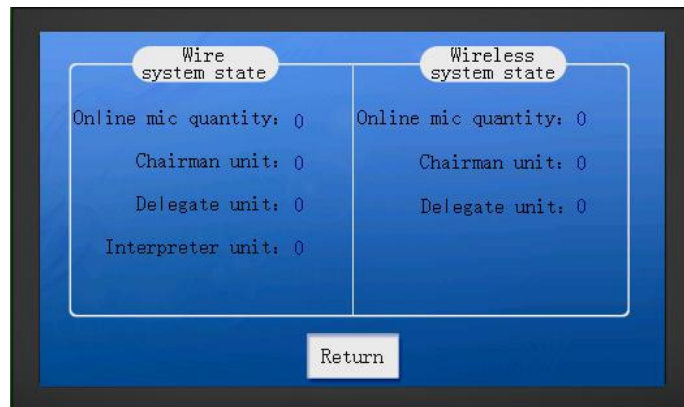


Change initial ID number: select the initial ID number box, and then click the keyboard to edit the ID number (range 1~4096). When the initial ID number is greater than 300, the initial ID number of wireless unit will start from 1 by default, because there are only 300 wireless units at most. After finishing editing, click "Confirm" to save the edited number; click "Start" to start editing the next ID and you can manually start editing ID numbers of all unit devices by pressing the Microphone buttons(it will display the unit ID and the available ID on the unit screen); the red light on the unit indicates that the operation is effective(the current ID is successfully set as the unit ID). And click "End" to exit editing status of the software.

### (2) Edit ID on role separation controller

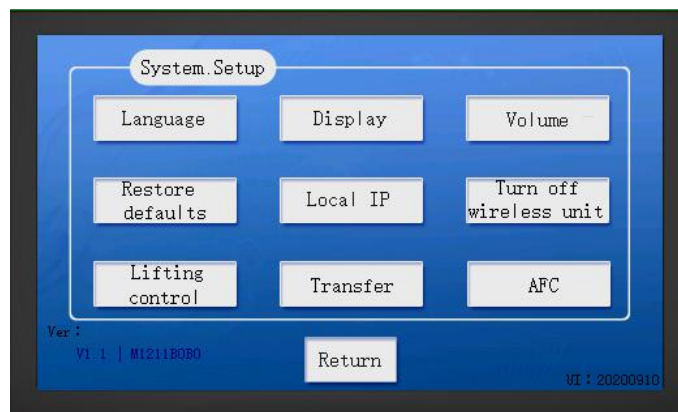
Click "Edit ID" to enter the editing mode, and click "SET" to start editing, and then click "End" to exit editing status of the software.

### 4.3 System status



Enter the system status interface from the main interface, you can view the number and classification of all online units. The current system includes chairman unit, delegate unit and interpreter unit only. The actual situation of the system status can be checked by plugging and unplugging the current chairman unit and delegate unit (the detection time of the controller for unplugging is 1 minute at most when the machine is idle. Please wait up patiently when the display is not updated immediately. And do not frequently plug and unplug the delegate unit during usage).

### 4.4 System setting



Enter the system settings interface from the main interface, and you can see 9 sub-items. In addition, the current version number will be displayed in the lower left corner, and the UI version number in the lower right corner.

#### 4.4.1 Language switching





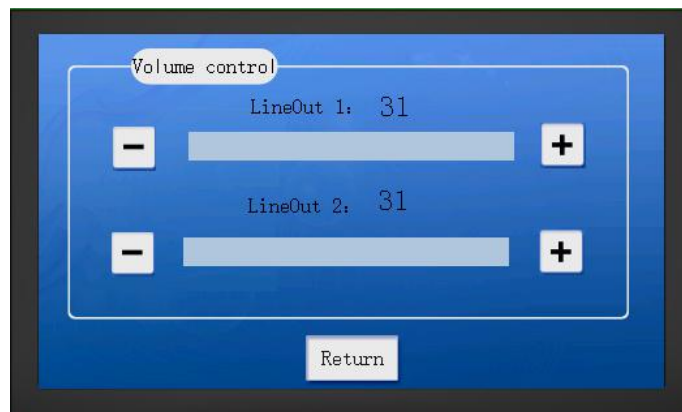
It supports language switching of Chinese, English, Russian and French.

#### 4.4.2 Display setting



Both clicking button(+/-) and sliding the bar can adjust the screen brightness, and the adjustable range is 1~64.

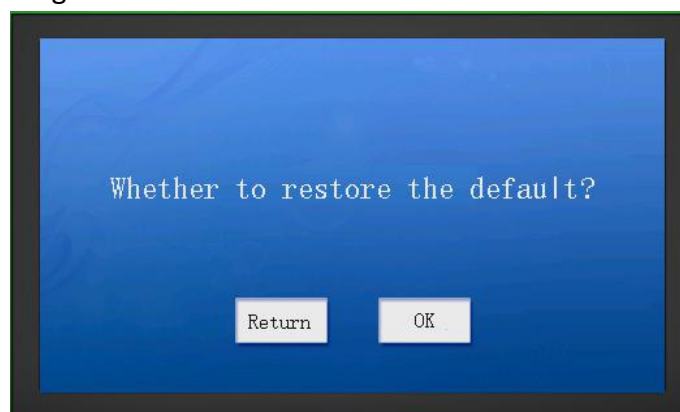
#### 4.4.3 Volume adjustment



Hardware wiring method: connect the external audio source to the BGM input port LINE IN1/2, and then connect LINE OUT1/2 port to the power amplifier speaker.

Enter the system settings interface from the main interface, and then click the volume adjustment to enter the volume adjustment interface. Click button(+/-) to adjust the volume and the adjustable range is 0~31; 0 means muted sound.

#### 4.4.4 Restore default setting



Enter the restore default settings interface and confirm it. To restore the default means to restore the factory settings. The default settings are as follows:

The conference mode is FIFO, the number of wired microphones is 8, and the number of wireless microphones is 6;

Initial ID number is 0001;

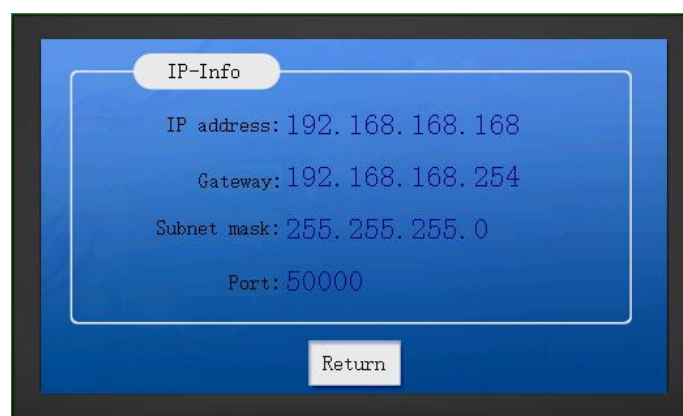
The default language is English;

Initial brightness is 64;

Initial volume of LINE OUT1/2 is 31;

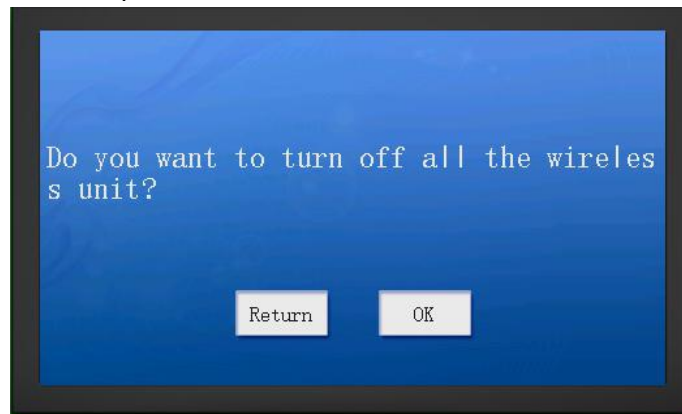
Local IP address is 192.168.168.168, Subnet mask is 255.255.255.0, the network gateway is 192.168.168.1, and the port number is 50000.

#### 4.4.5 Local IP



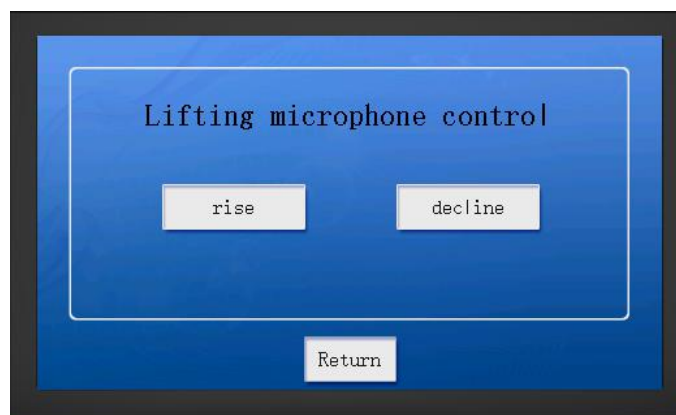
Enter the local IP interface, and you can view local IP address, gateway, subnet mask, and port number.

#### 4.4.6 Turn off the wireless microphone



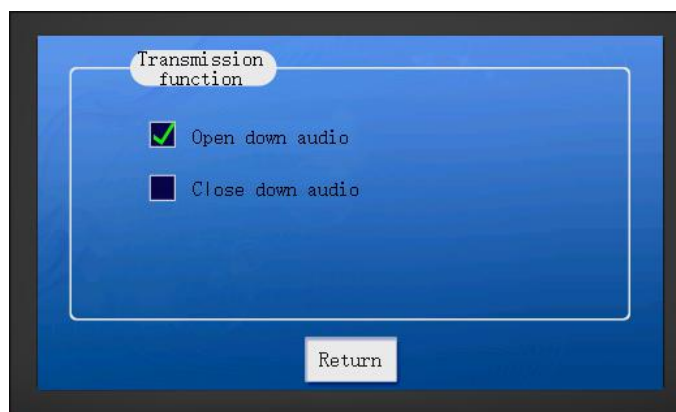
Enter the wireless unit shutdown interface and then confirm it to turn off all wireless units.

#### 4.4.7 Lift the microphone



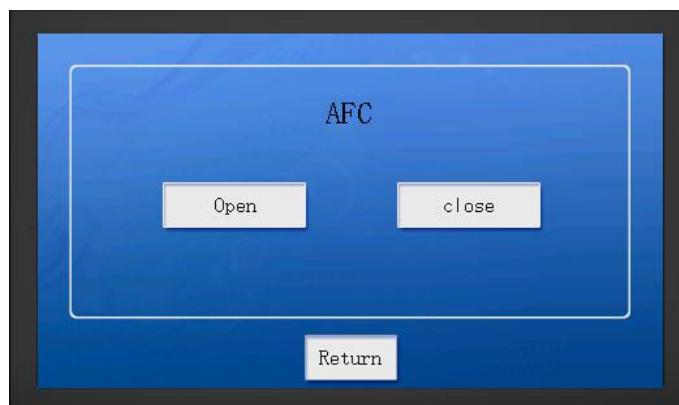
Control the wireless system to lift the microphones.

#### 4.4.8 Download function



Enter the download function interface, and you can open or close the audio download function of the wireless unit; it is not opened generally.

#### 4.4.9 AFC



To turn on AFC can realize howling suppression.

#### 4.5 Recording and playback of U disk



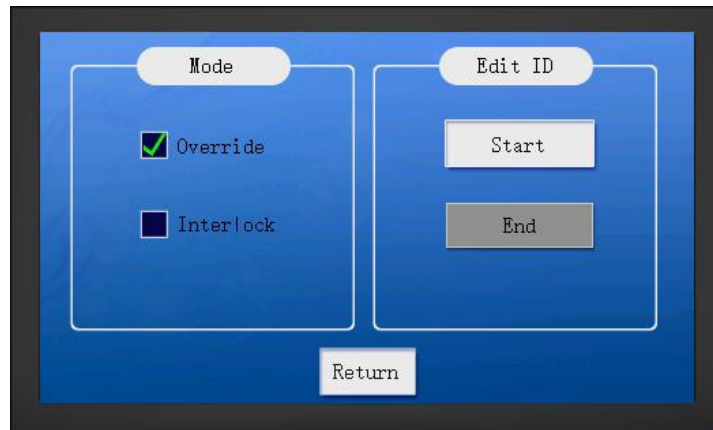
Enter the recording interface, insert a U disk, and you can play BGM or record the mixing audio of LINE IN and microphone. If there is not inserted a U disk, the interface will prompt "Please insert a U disk".

Note: 1) Please use the matched U disk.

2) Audio files can only be stored in the designated AUDIO folder.

3) A maximum of 128 files (including recording files and non-recording files) can be stored in the AUDIO folder of U disk.

## 4.6 Interpreter unit



## 4.7 Camera control

The conference controller supports the VISCA/PELCD\_D camera protocol. Users can directly connect a single camera through 232/485 methods, and connect multiple cameras through a camera tracking controller. The PC software is required to set up the camera. The latest controller works with the PC software to support camera tracking of wired unit and wireless microphone.

### 4.7.1 Camera connection and configuration

485 mode---Users can directly connect the CAMERA-485 port on the back of the controller to the ports 3 and 4 of the camera. And operate the VISCA/PELCD\_D protocol camera through the steps of “Conference preparation of the PC software-> Camera control”. After finishing setting the corresponding preset position, save it. And save the preset positions of all the unit machines in turn; then edit the panoramic position and save it(you must follow in this order). Users can invoke the preset position to check whether it is correct, and can turn on/off the microphone to check whether degrading mechanism of the camera is correct.

232 mode---Users can directly connect the CONTROL SYSTEM interface of the conference controller using the 232 serial cable of the camera. In this way, they can operate the camera like the 422 mode.

Connect the CONTROL SYSTEM interface to the CONTROL interface of the camera tracking controller through the 232 cable, and connect the T/R+ and T/R- ports of the CAMERA NET of the tracking controller to the 3 and 4 ports of the camera. In this way, you can control camera with VISCA/PELCD-D protocol as above.

### 4.7.2 Camera tracking instructions

Upgrade: turn on a microphone, and the camera will automatically track the position of the newly opened microphone.

Degrade: turn off a microphone, and the camera will automatically turn back to the position of last opened microphone.

Midway status switching: if a microphone is turned off midway, the position of the microphone will be automatically cleared, and the upgrade/degrade mechanism remains unchanged.

Non-microphone status: the camera will turn to the panoramic position.

Example: there are cameras No. 1, 2, 3, and 4 now. When microphones No. 1, 2, 3, 4 are turned on in turn, the cameras will track the positions of microphones in turn. If microphone No. 2 is turned off at this time, the camera does not change. If microphone No. 4 is turned off, the camera will turn to position 3. Turn off microphone 3 and the camera will turn to position 1. Turn off microphone 1 and the camera will turn to the panoramic position.

## 4.8 Fire alarm



By short-circuiting the two signal pins of the ALARM output on the back of the conference controller(simulating sending a fire alarm signal to the controller), the touch screen of the conference controller and the unit device are shielded, and other functions cannot be used. When the signal pin of this interface detects that the fire alarm is canceled (the circuit is opened), it will automatically return to normal.

## 4.9 WEB side

4.9.1 It can achieve switching of 16-channel output modes and adjust the settings of each mode.

### Switch output mode ×

*Tip: If you switch the multi-channel output mode of the host, the mode will be different. Please choose carefully*

Host multi-channel output mode:

- Wired role separation mode
- Phased mode
- Simultaneous interpretation mode
- Wireless role separation mode

Cancel OK

### (1) Wired role separation mode

OUT1 ~ OUT16		Wired role separation mode <span>Switch</span>						
Output	Input	IN1	IN2	LINE IN1	LINE IN2	USB playback	DANTE IN	All microphones MIX
<span>OUT1</span>								Wired microphone ID1
<span>OUT2</span>								Wired microphone ID2
<span>OUT3</span>								Wired microphone ID3
<span>OUT4</span>								Wired microphone ID4
<span>OUT5</span>								Wired microphone ID5
<span>OUT6</span>								Wired microphone ID6
<span>OUT7</span>								Wired microphone ID7
<span>OUT8</span>								Wired microphone ID8
<span>OUT9</span>								Wired microphone ID9
<span>OUT10</span>								Wired microphone ID10
<span>OUT11</span>								Wired microphone ID11
<span>OUT12</span>								Wired microphone ID12
<span>OUT13</span>								Wired microphone ID13
<span>OUT14</span>								Wired microphone ID14
<span>OUT15</span>								Wired microphone ID15
<span>OUT16</span>								Wired microphone ID16

### (2) Phase control mode

OUT1 ~ OUT16 ⓘ **Phased mode** Switch All configurations: 0db Reset

Output	Input	IN1	IN2	LINE IN1	LINE IN2	USB playback	DANTE IN
OUT1		0db	0db	0db	0db	0db	0db
OUT2		0db	0db	0db	0db	0db	0db
OUT3		0db	0db	0db	0db	0db	0db
OUT4		0db	0db	0db	0db	0db	0db
OUT5		0db	0db	0db	0db	0db	0db
OUT6		0db	0db	0db	0db	0db	0db
OUT7		0db	0db	0db	0db	0db	0db
OUT8		0db	0db	0db	0db	0db	0db
OUT9		0db	0db	0db	0db	0db	0db
OUT10		0db	0db	0db	0db	0db	0db
OUT11		0db	0db	0db	0db	0db	0db
OUT12		0db	0db	0db	0db	0db	0db
OUT13		0db	0db	0db	0db	0db	0db
OUT14		0db	0db	0db	0db	0db	0db
OUT15		0db	0db	0db	0db	0db	0db
OUT16		0db	0db	0db	0db	0db	0db

(3) Simultaneous interpretation mode

OUT1 ~ OUT16 **Simultaneous interpretation mode** Switch

Output	Input	IN1	IN2	LINE IN1	LINE IN2	USB playback	DANTE IN	All microphones MIX
OUT1		0db	0db	0db	0db	0db	0db	0db
OUT2								Interpretation channel1
OUT3								Interpretation channel2
OUT4								Interpretation channel3
OUT5								Interpretation channel4
OUT6								Interpretation channel5
OUT7								Interpretation channel6
OUT8								Interpretation channel7
OUT9								Interpretation channel8
OUT10								Interpretation channel9
OUT11								Interpretation channel10
OUT12								Interpretation channel11
OUT13								Interpretation channel12
OUT14								Interpretation channel13
OUT15								Interpretation channel14
OUT16								Interpretation channel15

(4) Wireless role separation mode



OUT1 ~ OUT16 Wireless role separation mode

Output	Input	IN1	IN2	LINE IN1	LINE IN2	USB playback	DANTE IN	All microphones MIX
OUT1								WiFi microphone ID1
OUT2								WiFi microphone ID2
OUT3								WiFi microphone ID3
OUT4								WiFi microphone ID4
OUT5								WiFi microphone ID5
OUT6								WiFi microphone ID6
OUT7								WiFi microphone ID7
OUT8								WiFi microphone ID8
OUT9								WiFi microphone ID9
OUT10								WiFi microphone ID10
OUT11								WiFi microphone ID11
OUT12								WiFi microphone ID12
OUT13								WiFi microphone ID13
OUT14								WiFi microphone ID14
OUT15								WiFi microphone ID15
OUT16								WiFi microphone ID16

(5) Output configuration

### OUT1 Configuration ✕

Volume:   Mute  
 Tip: range -30dB ~ 0dB, step value is 1dB

EQ:



Delay:   
 Tip: The range is 0 ~ 100ms, the step value is 1ms

## 4.9.2 Each microphone unit

(1) It supports settings of microphone EQ, sensitivity and others.

The screenshot shows a dialog box titled "Basic configuration" with a sub-tab "Phased mode". The "Microphone ID" is set to 4. Under "EQ adjustment", there are five rows for EQ1 through EQ5. Each row has a frequency dropdown (105 HZ, 300 HZ, 850 HZ, 2400 HZ, 6900 HZ) and a gain dropdown (0db). The "Sensitivity" is set to 0 db. A tip indicates the range is -6dB to +6dB with a 1.5dB step. Buttons for "Cancel", "Reset", and "OK" are at the bottom.

EQ	Frequency (HZ)	Gain (db)
EQ1	105	0
EQ2	300	0
EQ3	850	0
EQ4	2400	0
EQ5	6900	0

Sensitivity: 0 db  
Tip: range -6dB ~ +6dB, step value is 1.5dB

(2) It can adjust the volume ratio of each output channel under phase control mode.

The screenshot shows a dialog box titled "Basic configuration" with a sub-tab "Phased mode". At the top, "All channels" is set to 0 db with a "Mute" checkbox and an "OK" button. A tip indicates the range is -30dB to 0dB with a 1dB step. Below is a grid of 16 channels, each with a volume ratio dropdown (0 db) and a "Mute" checkbox. Buttons for "Cancel" and "OK" are at the bottom.

Channel	Volume Ratio (db)	Mute
Channel1	0	<input type="checkbox"/>
Channel2	0	<input type="checkbox"/>
Channel3	0	<input type="checkbox"/>
Channel4	0	<input type="checkbox"/>
Channel5	0	<input type="checkbox"/>
Channel6	0	<input type="checkbox"/>
Channel7	0	<input type="checkbox"/>
Channel8	0	<input type="checkbox"/>
Channel9	0	<input type="checkbox"/>
Channel10	0	<input type="checkbox"/>
Channel11	0	<input type="checkbox"/>
Channel12	0	<input type="checkbox"/>
Channel13	0	<input type="checkbox"/>
Channel14	0	<input type="checkbox"/>
Channel15	0	<input type="checkbox"/>
Channel16	0	<input type="checkbox"/>

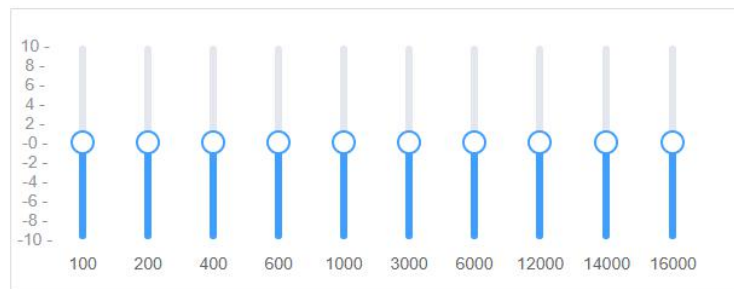
4.9.3 It supports the input and output settings of all conventional output channels.

Other outputs		All configurations: 0db <span>Reset</span>						
Output	Input	IN1	IN2	LINE IN1	LINE IN2	USB playback	DANTE IN	All microphones MIX
<b>LINE OUT1</b>		0db	0db	0db	0db	0db	0db	0db
<b>LINE OUT2</b>		0db	0db	0db	0db	0db	0db	0db
<b>USB recording</b>		0db	0db	0db	0db	Mute	0db	0db
<b>DANTE OUT</b>		0db	0db	0db	0db	0db	Mute	0db
<b>Download wired mic</b>		0db	0db	0db	0db	0db	0db	0db
<b>Download wireless m</b>		0db	0db	0db	0db	0db	0db	0db

**LINE OUT1 Configuration** ×

Volume:  ↑ ↓  Mute  
 Tip: range -30dB ~ 0dB, step value is 1dB

EQ:



Cancel Reset OK

4.9.4 It supports settings of the microphone mode, number of speakers, and the volume of main channel.

Microphone mode: FIFO Normal **Voice control** Application

Number of wired microphones: 1 2 4 **8**

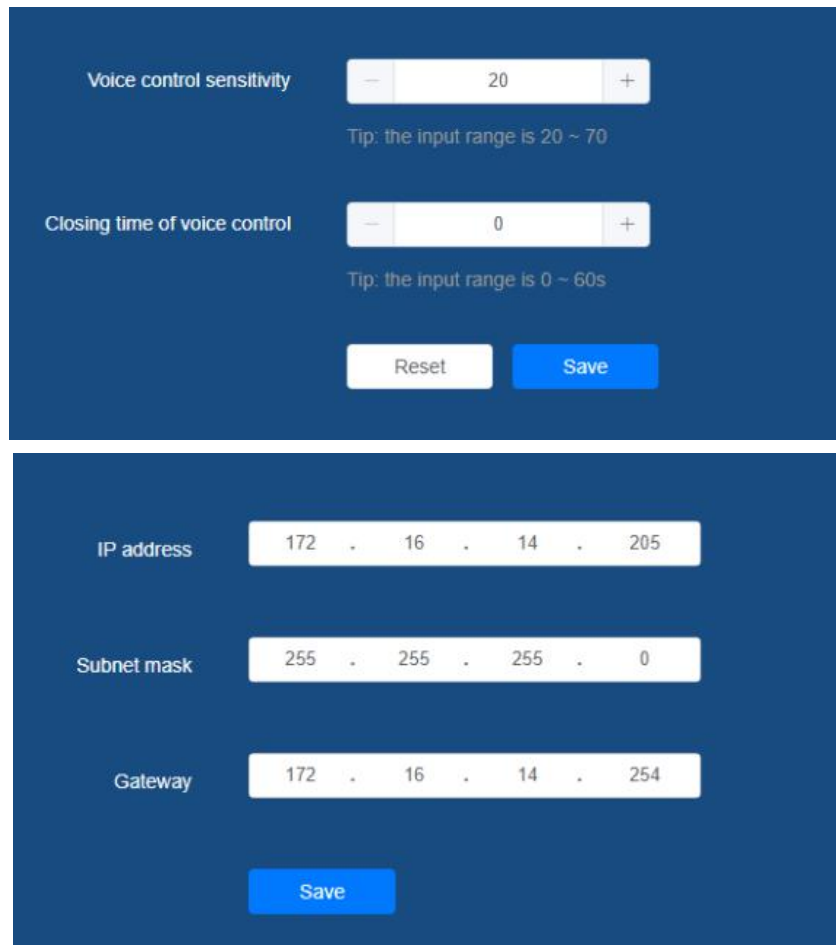
Number of wireless microphones: 1 2 4 **6**

LINE OUT1 volume:  ↑ ↓ db  Mute  
 Tip: range -30dB ~ 0dB, step value is 1dB

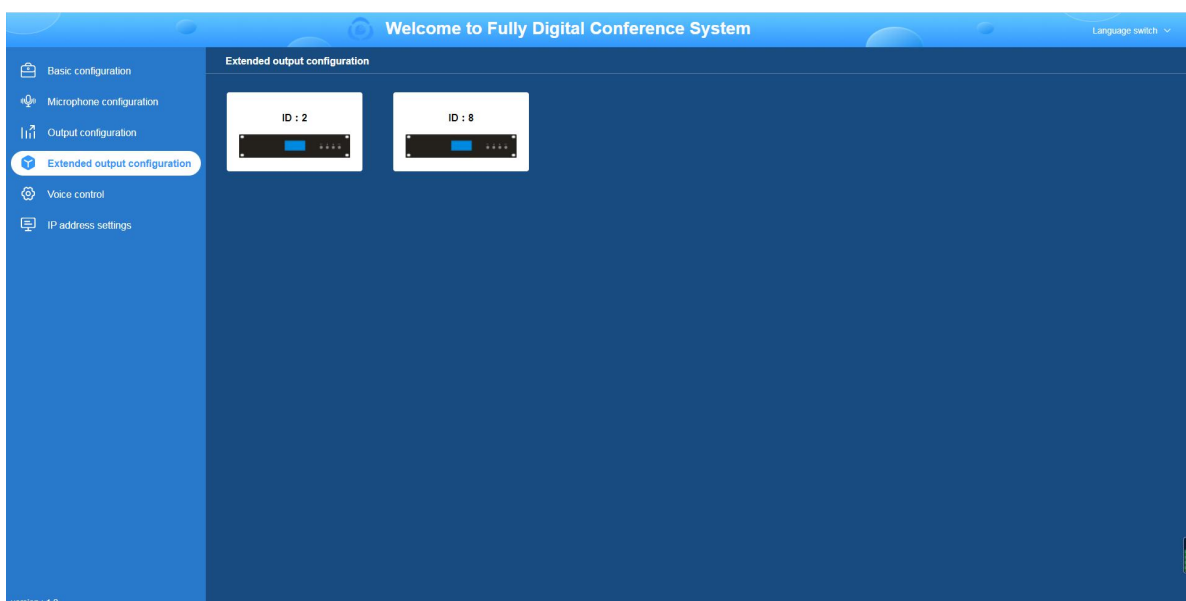
LINE OUT2 volume:  ↑ ↓ db  Mute  
 Tip: range -30dB ~ 0dB, step value is 1dB

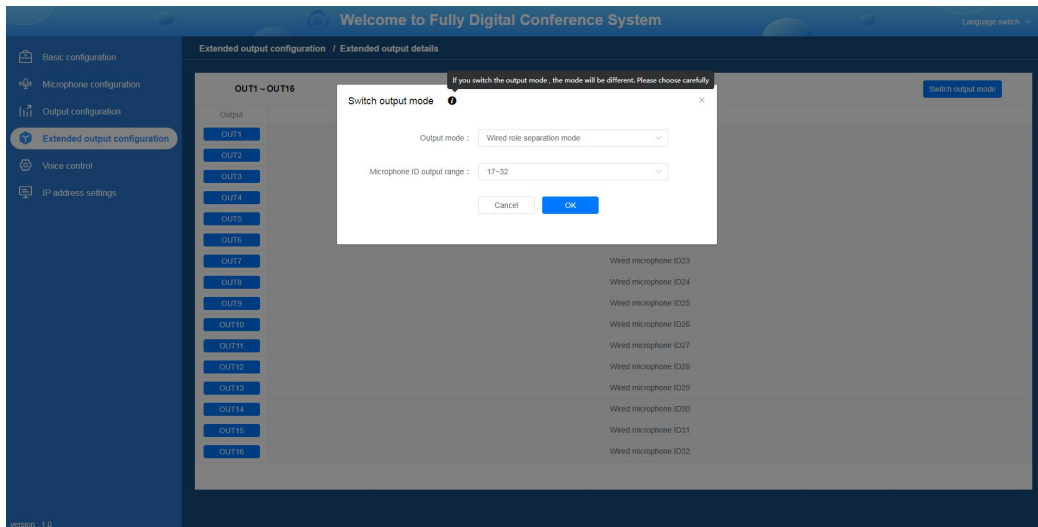
Reset Save

4.9.5 It supports settings of the sensitivity of voice control and the closing time; IP information can be changed and become effective immediately.



4.9.6 In the interface of extended output configuration, you can view and set the role separation controller configuration.





## 4.10 Other function

### 4.10.1 Usage of COM1 port

COM1 port on the rear panel of the controller is used to connect to the camera tracking controller.

### 4.10.2 Usage of 485 interface

485 port on the rear panel of the controller is used to connect to a camera.

#### 4.10.3. PC terminal function (refer to the user manual of PC software for more details)

It has functions such as sign-in, voting, evaluating, and customized function.

It can freely switch the microphone mode, and adjust the output volume.

It supports settings of the sensitivity of voice control and the closing time; IP information can be changed and become effective immediately.

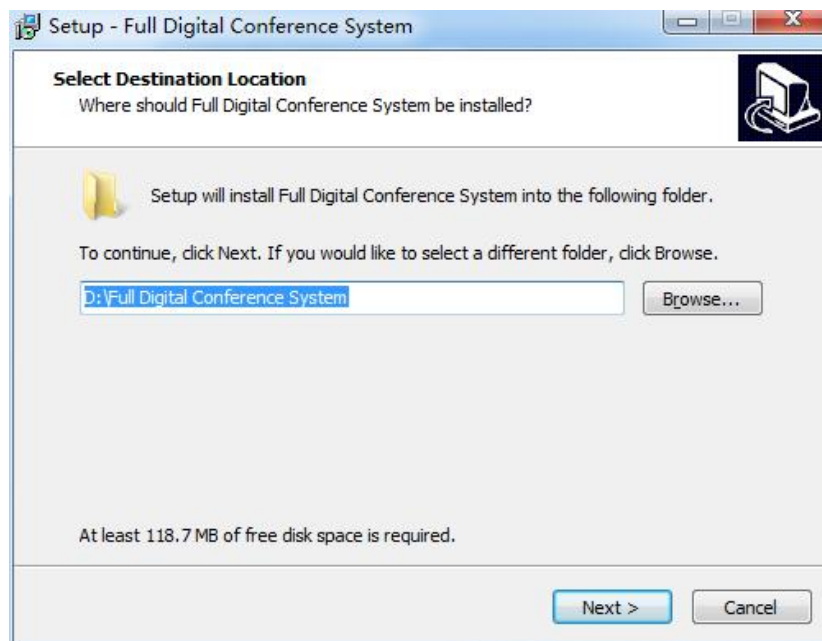
It supports settings of the preset position of the camera.

It supports settings of the speech stopwatch and speech timer, etc.

## 5. Conference PC software

### 5.1 Software installation

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

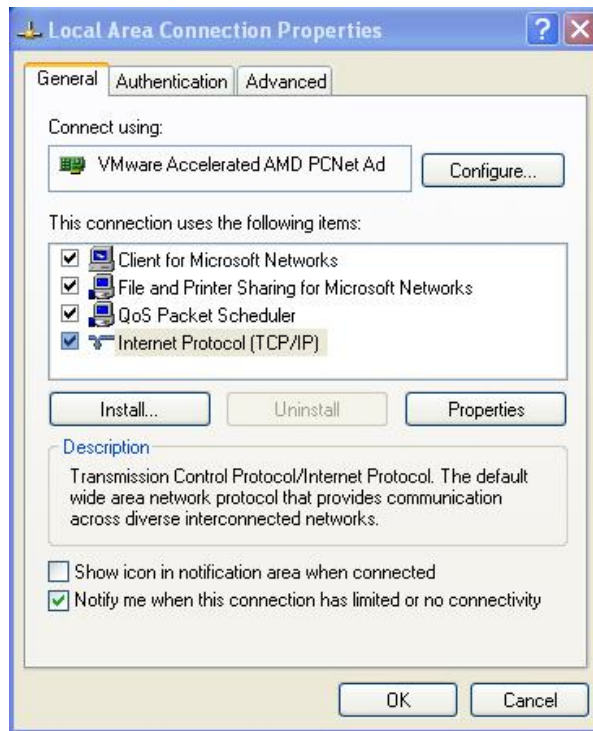


#### 2. Server settings

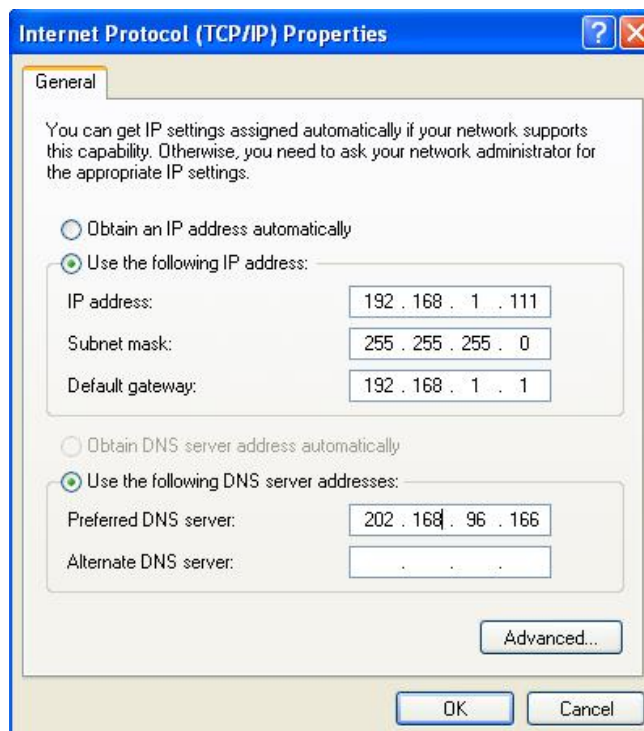
Before usage, it is required to finish some necessary settings of the fully digital conference system. The main settings are as follows:

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.

## 5.2 System operation

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



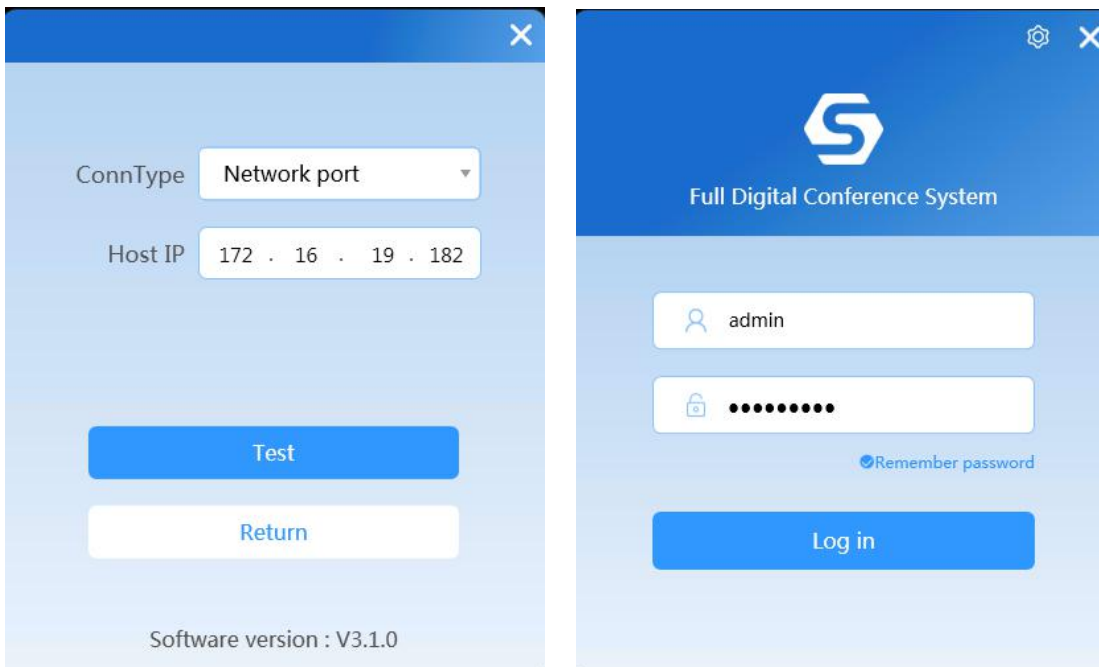
2. Log in to the software

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".



**Meeting Manage** Default meeting room [🔗](#)

- Meeting list
- Historical Meeting

**Personnel manage**

- People list
- Organizational

**System manage**

- Administrators
- System configure
- Host configure
- MeetRoom layout**
- Camera manage
- Backup & restore

W1  
DelegateWiFi

W2  
ChairmanWiFi

16  
Chairman

17  
Delagate

18  
Chairman

X113  
Voter

X114  
Voter

X115  
Voter

X116  
Voter

X117  
Voter

X118  
Voter

Align 🔍 ↺ ↻

Device management

- 
- 
- 

[Scan online devices](#)  
[Line spacing setting](#)  
[Custom add](#)  
[Remove device](#)

---

Background

[+Add background image](#)

Fixed background image

---

Attribute

Unit :

Numbering :  [Edit](#)

[Save](#)

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

**Meeting Manage** People list

- Meeting list
- Historical Meeting

**Personnel manage**

- People list**
- Organizational

**System manage**

- Administrators
- System configure
- Host configure
- MeetRoom layout
- Camera manage
- Backup & restore

Please enter keywords to search

[Add](#) [Export](#) [Import](#) [Delete](#)

<input type="checkbox"/>	NO	Name	Gender	Unit	Department	Position	Phone	Delegation	Group	Partisan	Operate
<input type="checkbox"/>	1	user01	Male								<a href="#">Edit</a> <a href="#">Delete</a>
<input type="checkbox"/>	2	user02	Male								<a href="#">Edit</a> <a href="#">Delete</a>
<input type="checkbox"/>	3	user03	Male								<a href="#">Edit</a> <a href="#">Delete</a>
<input type="checkbox"/>	4	user04	Male								<a href="#">Edit</a> <a href="#">Delete</a>

The page displays  items < > Total 4 record(s) Go to  page [Confirm](#)

**Meeting Manage** Organizational

- Meeting list
- Historical Meeting

**Personnel manage**

- People list
- Organizational**

**System manage**

- Administrators
- System configure
- Host configure
- MeetRoom layout
- Camera manage
- Backup & restore

Please enter keywords to search

[Add unit](#)

Name	Operate
<ul style="list-style-type: none"> <li>Electronic Information Technology</li> </ul>	<a href="#">Add department</a> <a href="#">Edit</a> <a href="#">Delete</a>
<ul style="list-style-type: none"> <li>Development department</li> </ul>	<a href="#">Add position</a> <a href="#">Edit</a> <a href="#">Delete</a>
<ul style="list-style-type: none"> <li>The test of</li> </ul>	<a href="#">Add position</a> <a href="#">Edit</a> <a href="#">Delete</a>

5. Click “conference list” to create a conference.

The screenshot shows the 'Meeting Manage' interface with a 'Meeting list' table. The table has columns for NO, Conference name, Creator, Conference room, Start time, End time, Status, and Operate. A search bar is at the top right with a '+ Create meeting' button. The first row is highlighted with a red box around the conference name 'Test meeting 11111—Clone'.

NO	Conference name	Creator	Conference room	Start time	End time	Status	Operate
1	<b>Test meeting 11111—Clone</b>	admin	Default meeting room	2020-12-12 00:55	2020-12-12 01:55	In meeting	Reset End Details
2	11	admin	Default meeting room	2020-12-11 05:37	2020-12-11 06:37	Not started	Start Edit Delete
3	111	admin	Default meeting room	2020-12-11 05:37	2020-12-11 06:37	Not started	Start Edit Delete

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

The 'Create vote' dialog box contains the following settings:

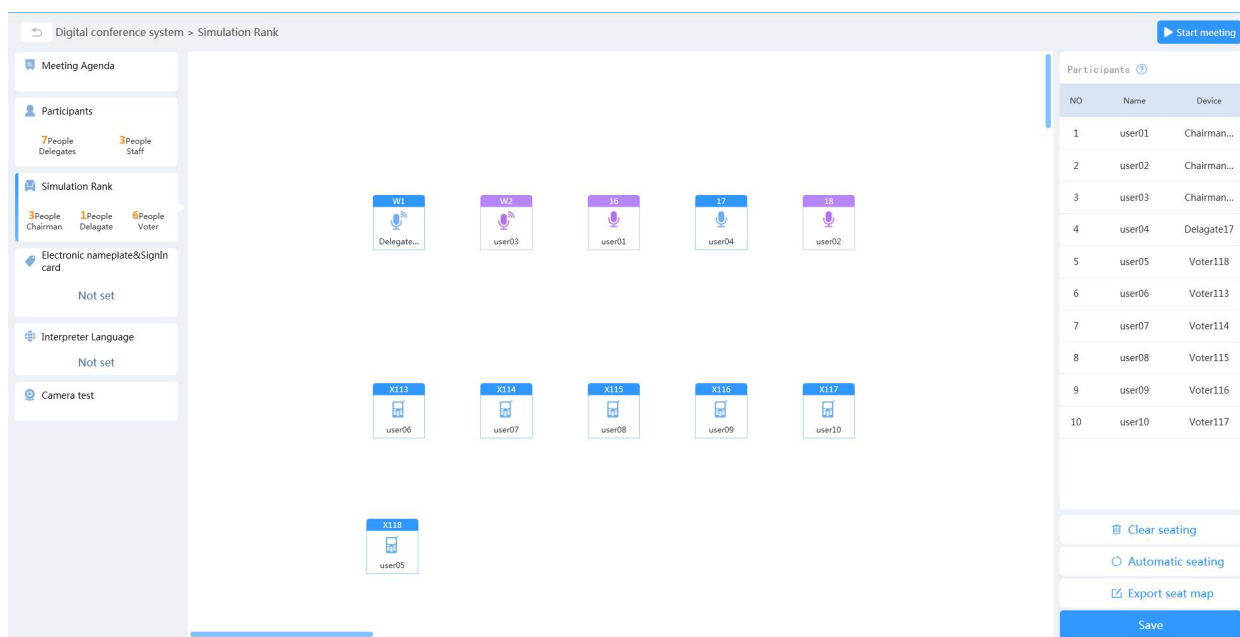
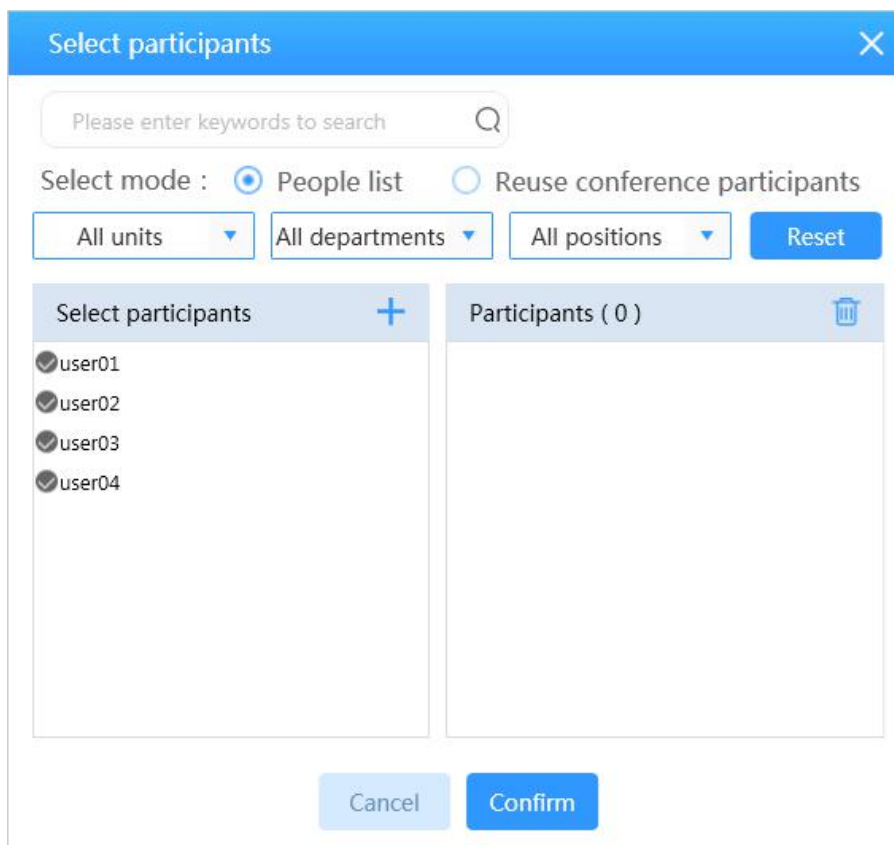
- Voting name: Please fill in the voting name
- Voting type: Vote
- Voting method: Sign in before vote
- Counting method: Valid for the first time
- Register method: Anonymous
- Display method: Bar chart
- Num Vote count:  Sign-in quantity  Voting number
- Pass rate: Do not use
- Count down:  Off  On (Second)
- Meeting setting:  Locking  Editable
- Projection style: [Check](#)

Buttons: Cancel, Confirm

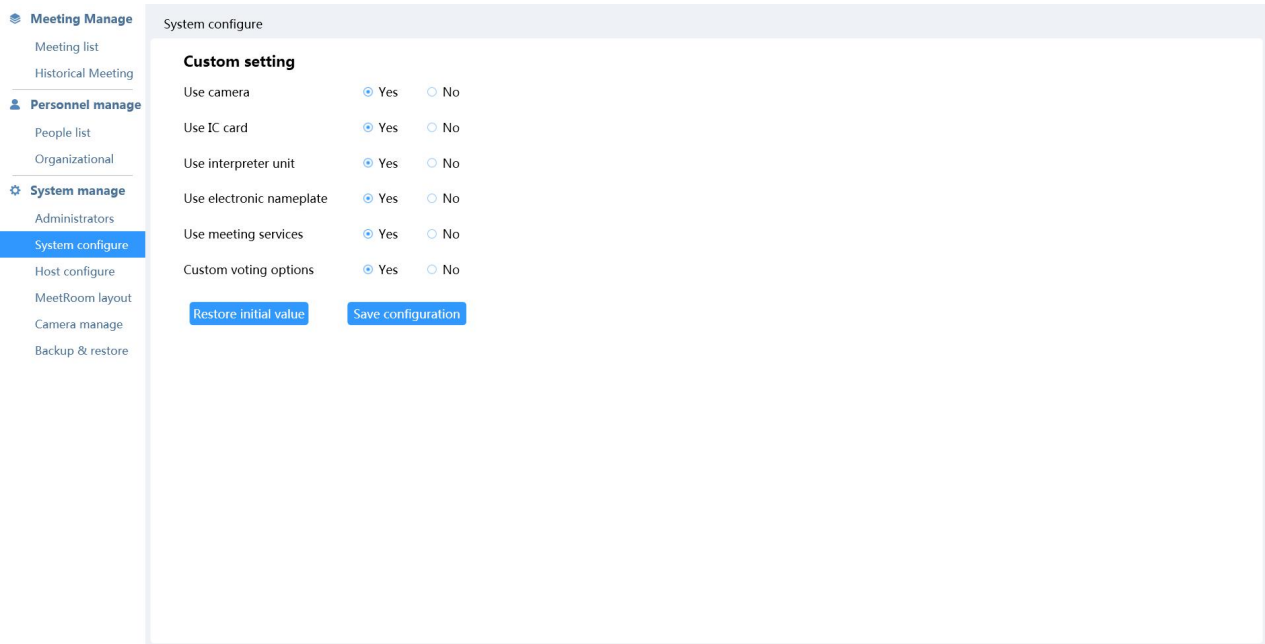
7. After the conference is created, click “Participant”, select the participants, and then click “simulated seating” to arrange the seats of them. Finally, click “start the conference”.

The screenshot shows the 'Digital conference system' interface. On the left, there are sections for Meeting Agenda, Participants (7 Delegates, 3 Staff), Simulation Rank (3 Chairman, 1 Delegate, 6 Voter), Electronic nameplate&Signin card (Not set), Interpreter Language (Not set), and Camera test. The main area shows a list of actions:

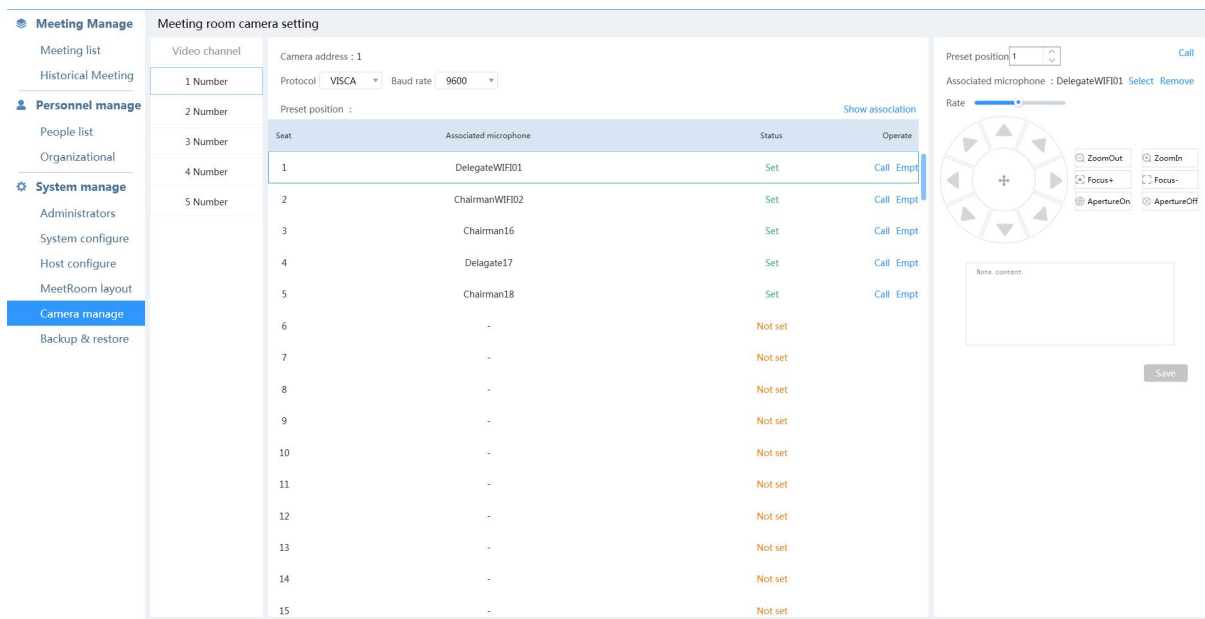
NO	Action	Delegates	Staff	People	Operate
1	Sign in	7	3	10	Copy Hide Delete
2	Projection			1	Copy Hide Delete
3	Projection			2	Copy Hide Delete
4	Vote			1	Copy Hide Delete
5	Vote			2	Copy Hide Delete
6	Vote			3	Copy Hide Delete
7	Vote			4	Copy Hide Delete
8	Vote			5	Copy Hide Delete
9	Vote			6	Copy Hide Delete



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.

# Fully Digital Conference System

